Pinellas County ACS/ARES® Emergency Communications Plan and Standard Operating Procedure

15 February 2022 Revision (A)

Abstract

This document defines the comprehensive emergency communications plan and standard operating procedure to be used by all members of Pinellas County ACS/ARES® during training exercises and activation events.

Michael Drake
WA1RYQ

Pinellas County ACS/ARES® Emergency Communications Plan

Rev (A)

15 February 2022

FOREWORD

This document defines the comprehensive emergency communications plan and standard operating procedure (SOP) to be used by all members of the Pinellas County Auxiliary Communications Service (ACS) / Amateur Radio Emergency Service® (ARES®) during training exercises and activation events. The document defines the organizational structure of the Pinellas County ACS, the roles and responsibilities of each ACS office holder, the detailed steps required by all members to activate and deactivate ACS/ARES®, the operational requirements for processing message traffic, and the requirements for record keeping during an activation event.

A detailed description of the networks, frequencies, modes, and contingency plans are also included. Eight event specific deployment scenarios are described in detail.

The completion of the training requirements defined in section seven of this document do not by themself signify that an individual is qualified to support an activation exercise or emergency. Readers should refer to the *Pinellas County ACS/ARES® Winlink Training Plan* and the *Florida ARRL® Tri-Section ARES® Standardized Training Plan Emergency Communicator Individual Position Task Book* for a complete set of training requirements.

The document is divided into seven sections and six appendices.

Section 1. Scope
Section 2. Applicable Documents
Section 3. Organizational Structure
Section 4. Activation and Deactivation
Section 5. Operations
Section 6. Training Requirements
Section 7. Bibliography
Appendix A – Acronyms, Abbreviations, and Definitions

Comments, suggestions, or questions on this document should be addressed to Michael Drake, WA1RYQ, email: WA1RYQ@arrl.net.

Record of Changes

REVISION	DESCRIPTION	DATE
REV (-)	Initial Release	01/30/2022
REV (A)	• Corrected minor formatting and spelling issues. • Updated Version number and date of NIFOG in Section 2.2. • Added EOC Shift Supervisors to Table II. • Updated Table IV to incorporate ICS 213 Incident Name into radiogram. • Updated Figure 8, Figure 9, and Figure 13 to incorporate ICS 213 Incident name. • Corrected error with figure reference, Figure 17, in section 5.2.2. • Updated Section 5.2.1, Site Activity Log, to add additional items to the list of significant events. • Updated description for the ICS 205 Function, Channel Name, and Assignment fields in TABLE C- I. The descriptions now align with the COML and AUXCOMM training material. • Updated Figure C- 4, Sample ICS 205, to align with new definitions in TABLE C- I. • Corrected TX frequency errors in TABLE F- II, W4AFC, and TABLE F- IV, NI4CE. • Deleted Obsolete Repeater, KJ4ZWW, from TABLE F- IV. • Added F-DARN Repeaters to TABLE F- II and TABLE F- IV. • Added TABLE F- V, F-DARN DMR Talkgroup designations. • Added CSQ to Tx Tone/NAC column of APRS Digipeater TABLE F- IX. • Added Daytime Hurricane Watch Net Frequency to TABLE F- XII. • Added COML to list of Abbreviations, Section A.2.	02/15/2022

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1 SCOPE

This document defines the comprehensive emergency communications plan and standard operating procedure (SOP) to be used by all members of the Pinellas County Auxiliary Communications Service (ACS) / Amateur Radio Emergency Service® (ARES®) during training exercises and activation events.

This plan will be distributed throughout the Pinellas County Amateur Radio community, adjacent counties, the ARES® West Central Florida Section, and selectively the southeast United States.

2 APPLICABLE DOCUMENTS

2.1 RELATED DOCUMENTS

The *Pinellas County ACS/ARES® Emergency Communications Plan and Standard Operating Procedure* was developed to support the communication plans listed below.

a. ARRL® ARES® Plan; January 2019
b. Pinellas SKYWARN® Operational Guidelines Policy and Procedures, November 2017
c. West Central Florida Section ARES® Communications Plan, March 2011

2.2 REFERENCE DOCUMENTS

Additional information about ARES® and Emergency Communications can be found in the following documents.

a. Air Force MARS National Training Manual; 21 April 2016; Revision A
b. Amateur Radio Emergency Service® Manual; March 2015
c. ARES® Field Resources Manual; August 2019

d. ARRL® Emergency Coordinators Manual; March 1997
e. Auxiliary Communications Field Operations Guide (AUXFOG); Version 1.1, June 2016
f. Cybersecurity and Infrastructure Security Agency (CISA) National Emergency Communications Plan; September 2019
g. IARU Emergency Telecommunications Guide; September 2016
h. National Incident Management System; Third Edition; October 2017
i. National Interoperability Field Operations Guide; Version 2.0; August 2021
j. NTS™ Methods and Practices Guidelines (NTS™ MPG); 2014
k. RRI National Emergency Communications Response Guideline 2020
l. State of Florida 2020 Comprehensive Emergency Management Plan

Training plans that support ACS/ARES® and emergency communication are listed below.

a. ARES® Standardized Training Plan, Version 2.1.1
b. Florida ARRL® Tri-Section ARES® Standardized Training Plan Emergency Communicator Individual Position Task Book; January 2020
c. Pinellas County ACS/ARES® Training Plan; Rev (-)
d. Pinellas County ACS/ARES® Winlink Training Plan; Rev (-)
e. Pinellas County ACS PodRunner® / SatRunner® Training Plan
f. Position Task Book (PTB) for the Position of Auxiliary Communicator (AUXC); Version 1.2; October 2020

3 ORGANIZATIONAL STRUCTURE

This section displays the organizational structure for the ARES® West Central Florida (WCF) Section and provides a detailed description of the organizational structure for Pinellas County ACS. The roles and responsibilities of each ACS staff position is also detailed.

3.1 ARES® WEST CENTRAL FLORIDA SECTION

The organizational structure of the ARES® WCF section is shown in Figure 1. A detailed description of each position and the identity of each individual currently holding each position is documented in the *Emergency Communications Plan for the West Central Florida Section*.

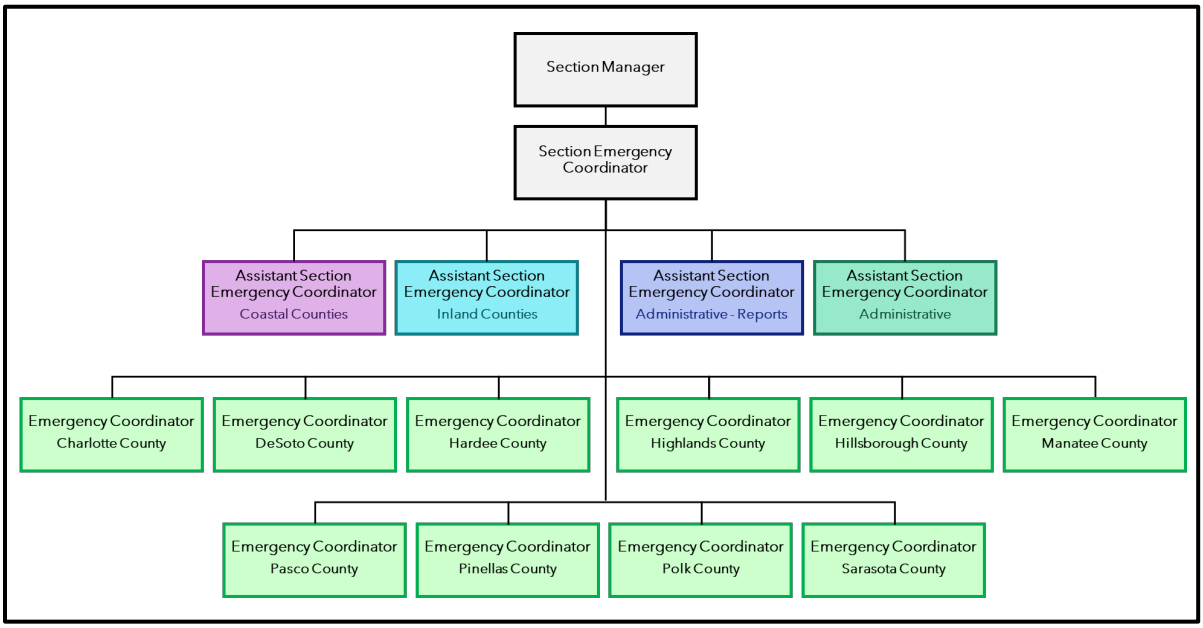


Figure 1. West Central Florida Section Organization

Contact information for each county Emergency Operations Center (EOC) located within the WCF ARES Section is listed in Table I.

Table I. WCF ACS/ARES EOC Contact Information					
	EOC Radio Room		EOC Winlink		
County	Phone Number	Email Address	Email Address	Tactical Address	SHARES Call Sign
Charlotte					
DeSoto					
Hardee	(863) 245-9923	kt4wx@arrl.net	N/A		N/A
Highlands					N/A
Hillsborough					
Manatee	(941) 749-3500 ext. 1674	KM4EC@MCESG.ORG	KM4EC		N/A
Pasco	(727) 834-3749	sallshouse@pascocountyfl.net	W4PEM		NNA6PC
Pinellas	(727) 464-3708	eochamops@pinellascounty.org	W4ACS	PACS-EOC	NCS728
Polk		N/A	WC4PEM		
Sarasota		N/A	WC4EM		NNF4FL

Note: Primary Very High Frequency (VHF) and Ultra-high Frequency (UHF) repeater frequencies used by each County EOC are recorded in the Incident Command System (ICS) 217 TABLE F- VI and TABLE F- VII.

3.2 PINELLAS COUNTY ACS ORGANIZATION AND STAFF POSITIONS.

The organizational structure of the Pinellas County ACS (PACS) is shown in Figure 2. A list of ACS staff positions and the contact information for everyone currently holding a staff position is documented in Table II. A detailed description of each staff position is contained within the following paragraphs.

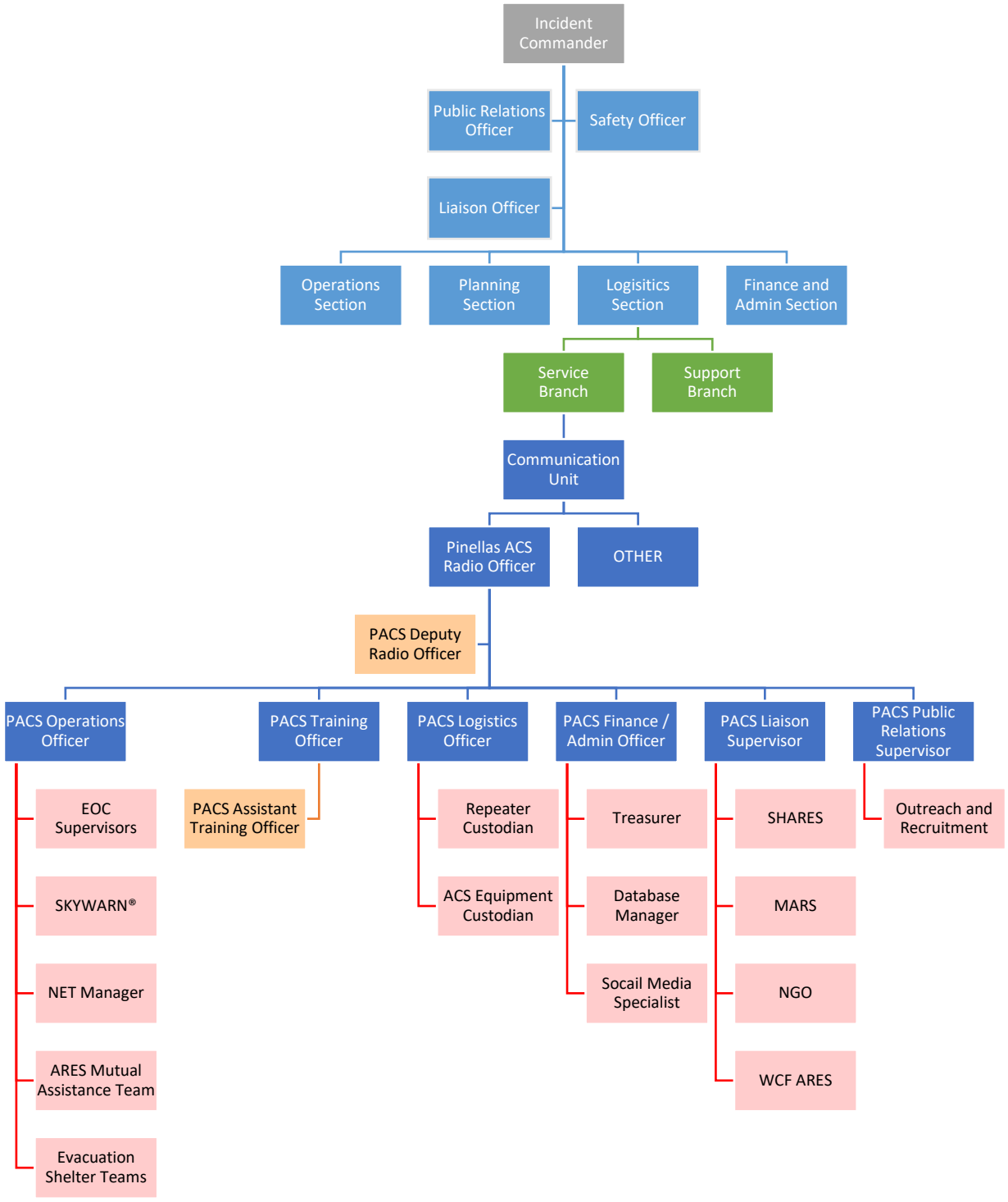


Figure 2. Pinellas County ACS/ARES® Organization

Table II. Pinellas County ACS Staff Positions			
Position	**Name**	**Call Sign**	**Email**
PACS Radio Officer / Emergency Coordinator	Clayton Parrott	KJ4RUS	clayton_parrott@yahoo.com
PACS Deputy Radio Officer	Dave Byrum	KA4EBX	dbyrum@tampabay.rr.com
PACS Operations Officer	Dave Byrum	KA4EBX	dbyrum@tampabay.rr.com
EOC Supervisors			
EOC Supervisor – Shift 1	Bruce Kreutzer	N4BCK	n4bck@arrl.net
EOC Supervisor – Shift 2	Dave Rockwell	W4PXE	dave@daverockwell.com
SKYWARN® Coordinator	Tim Talbert	KJ4REX	kj4rex@gmail.com
Net Manager	Mark Boyle	W8QFV	
ARES Mutual Assistance Team			
ARES Mutual Assistance Team Lead 1			
ARES Mutual Assistance Team Lead 2			
Evacuation Shelter Teams			
PACS Training Officer	Mike Drake	WA1RYQ	WA1RYQ@arrl.net
PACS Assistant Training Officer			
PACS Logistics Officer			
Repeater Custodian			
ACS Equipment Custodian			

Table II. Pinellas County ACS Staff Positions			
Position	**Name**	**Call Sign**	**Email**
PACS Finance / Admin Officer	Vern Betlack	K4VEB	vbetlach@gmail.com
Treasurer			
Database Manager			
Social Media Specialist			
PACS Liaison Supervisor			
SHARES Liaison			
MARS Liaison			
NGO Liaison			
ARES WCF Liaison			
PACS Public Relations Supervisor			
Outreach and Recruitment			

3.2.1 Radio Officer / Emergency Coordinator.

The county Emergency Coordinator (EC) is the key official within ARES®. Within the Pinellas ACS organization it is the Radio Officer (RO). The ACS RO is the appointee of the Pinellas County Division of Emergency Management (DEM). One person holds both positions. The EC/RO is responsible for administering and coordinating Amateur Radio communications among the served agencies and fellow citizens of his/her jurisdiction. The duties and responsibilities of the ACS RO / ARES® ECs include but are not limited to the following.

a. Appoint as many Deputy Radio Officers (DRO)/Assistant Emergency Coordinators (AEC) as he or she deems necessary and assign specific responsibilities to each.
b. Promote and enhance the activities of the ACS/ARES® as a voluntary and non-commercial communications service.
c. Coordinate the training, organization, and participation of the amateur fraternity in support of the community agencies, Section Emergency Coordinator (SEC), and Section Manager (SM).
d. Establish a written emergency communications plan for his/her jurisdiction encompassing all served agencies.
e. Maintain a resource list of all participating amateur radio operators in his/her jurisdiction. This list should contain information such as class of license and equipment, capabilities, and any auxiliary training.
f. Establish a viable working relationship with federal, state, county, and city government agencies within his/her jurisdiction. This should include, where possible, a memorandum of understanding between ACS/ARES® and the agency.
g. Establish local and inter-district communications networks on whatever frequencies are necessary to maintain good communications. These networks should be updated and tested on a regular basis by realistic drills involving the served agencies and the public.

h. Establish liaison with the National Traffic System (NTS™) and designate dedicated amateur radio stations (Gateway stations) to liaison between NTS™ and local nets. Establish a workable call up procedure and update periodically.

i. Establish a means of identification for each member such as an Identification (ID) card; some type of visible external identification, such as a shirt, jacket, vest, or cap, so that each communicator is easily recognized.

j. Do everything possible to further the favorable image of the Amateur Radio Service by dedication of purpose and a thorough understanding of our mission.

3.2.1.1 PACS Deputy Radio Officer / Emergency Coordinator.

The duties and responsibilities of the PACS Deputy RO / ARES® EC include but are not limited to the following.

a. Assist the PACS RO / ARES® EC with each of the tasks defined in paragraph 3.2.1.

b. Assume the duties and responsibilities of PACS RO / ARES® EC whenever the assigned RO / ARES® EC is unable to perform his/her duties (e.g., vacation, deployment, etc.).

3.2.2 PACS Operations Officer.

The duties and responsibilities of the PACS Operations Officer include but are not limited to the following.

a. Execute the *Pinellas County ACS/ARES® Emergency Communications Plan* in accordance with the instructions received from the Radio Officer or Deputy Radio Officer.

b. During each activation event and training activity:

(1) Provide the operational instructions that are needed by each subordinate staff member to meet mission requirements.

(2) Collect status and resolve issues that are reported by subordinate staff members.

(3) Notify the Pinellas County Radio Officer and Deputy Radio Officer of significant events and issues that require additional assistance to resolve.

(4) Evaluate equipment / staffing requirements and determine if operational assistance from outside the county is required. Notify the Radio Officer and Deputy Radio Officer if external assistance is required.

c. Recruit the necessary personnel to fulfill the following operations staff positions.

(1) EOC Supervisors

(2) Net Manager

(3) SKYWARN® Coordinator

(4) ARES® Mutual Assistance Team Leads

(5) Evacuation Shelter Teams

d. Provide for High Frequency (HF) operations as indicated in the *Pinellas County ACS/ARES® Emergency Communication Plan*.

e. Work to update and improve all plans for ACS/ARES® operations; this includes plans provided by served agencies.

f. Utilize operations staff to verify ACS/ARES® registrations and interview applicants for assignments for disaster operations. All data obtained will be relayed to Administration for database management.

g. Create and implement plans for digital communications (e.g., Winlink, D-STAR, Fusion, Digital Mobile Radio (DMR), etc.) operations.

3.2.2.1 EOC Supervisors.

The duties and responsibilities of each Pinellas EOC Supervisor include but are not limited to the following.

a. During each activation event and training activity:

(1) Execute the *Pinellas County ACS/ARES® Emergency Communications Plan*, in accordance with the instructions received from the Operations Manager.

(2) Supervise the operation of the Pinellas County EOC radio room.

(3) Notify the Operations Manager of significant events and issues that require additional assistance to resolve.

b. Recruit and train EOC operators in accordance with the *Pinellas County ACS/ARES® Training Plan*.

c. Maintain a list of trained EOC operators. This list should specify the level of training each EOC operator has achieved and quantify each operator's experience.

3.2.2.2 SKYWARN® Coordinator.

The duties and responsibilities of the Pinellas SKYWARN® Coordinator include but are not limited to the following.

a. Serve as the primary Pinellas ACS point of contact and liaison with the National Weather Service.

b. Create and maintain the *Pinellas County SKYWARN® Operational Procedures Plan*.

c. During each activation event and training activity:

(1) Execute the *Pinellas County ACS/ARES® Emergency Communications Plan*, and the *Pinellas County SKYWARN® Operational Procedures Plan* in accordance with the instructions received from the Operations Manager.

(2) Notify the Operations Manager of significant events and issues that require additional assistance to resolve.

d. Recruit and oversee the training of SKYWARN® operators in accordance with the *Pinellas County ACS/ARES® Training Plan*.

e. Maintain a list of trained SKYWARN® operators. This list should specify the level of training each SKYWARN® operator has achieved and quantify each operator's experience.

3.2.2.3 Net Manager.

The Net Manager is supported by VHF, UHF, and HF operators in club or home emergency stations and has the responsibilities listed below.

a. Execute the *Pinellas County ACS/ARES® Emergency Communications Plan* in accordance with the instructions received from the Operations Manager.

b. Notify the Operations Manager of significant events and issues that require additional assistance to resolve.

c. Recruit and train Net Control Station (NCS) operators and net liaison stations in accordance with the Pinellas County ACS/ARES® Training Plan.

d. During each activation event and training activity:

(1) Schedule and assign an NCS and Alternate NCS to the ACS/ARES® Tactical-Resource Net, the ACS/ARES® Shelter Net, and the VHF Traffic net. The NCS schedule will contain the following information and be distributed to all assigned stations.

(a) Start time and date for each NCS shift (local 24-hour time)

(b) End time and date for each NCS shift.

(c) Call sign and name assigned to each NCS and Alternate NCS shift.

(2) Create an event specific ICS 205, Incident Radio Communications Plan. Once complete, the net manager will make the plan available to the ACS/ARES® membership.

(3) Coordinate with the Logistics Manager to select the best location for the emplacement of each portable repeater and digipeater.

e. Maintain a list of trained NCS operators. This list should specify the level of training each NCS operator has achieved and quantify each operator's experience.

f. Monitor nets to be sure proper procedures and message formats are being used.

g. Coordinate VHF and HF operations and maintain contact with the following nets.

(1) WCF HF net

(2) South Florida ARES® Net

(3) North Florida ARES® Net

(4) Hurricane Watch Net (Voice over Internet Protocol (VOIP) or HF)

(5) NTS™ Traffic Nets

(6) Radio Relay International (RRI) Traffic Nets

(7) Other nets as the Net Manager deems necessary and resources permit

h. Coordinate Health and Welfare traffic with agencies served in Pinellas County.

3.2.2.4 ARES® Mutual Assistance Team (ARESMAT) Lead.

The purpose of each Pinellas ARESMAT is to assist an ARES®, ACS, or Radio Amateur Civil Emergency Service (RACES) organization that is located outside of Pinellas County when an emergency overwhelms that organization's ability to respond. The duties and responsibilities of the Pinellas ARESMAT Lead includes but are not limited to the following.

a. Once deployed outside of Pinellas County:

(1) Execute the applicable *Emergency Communications Plan* in accordance with the instructions received from the local Operations Manager.

(2) During an activation event or training activity, notify the local Operations Manager of significant events and issues that require additional assistance to resolve.

b. Maintain communications with the Pinellas County ACS/ARES® Operations Manager.

c. Recruit, train, and equip one or more ARES® Mutual Assistance Teams in accordance with the *Pinellas County ACS/ARES® Training Plan*.

d. Maintain a current listing of each of the ARESMAT members, their contact information, and ACS qualification status.

e. Maintain contact with the ARESMAT leads in each adjacent county and develop a written emergency mutual assistance response plan.

3.2.2.4.1 Pinellas ARESMAT.

The duties and responsibilities of each Pinellas ARESMAT member include but are not limited to the following.

a. Once deployed outside of Pinellas County:

(1) Execute the applicable *Emergency Communications Plan* in accordance with the instructions received from the local Operations Manager.

b. Maintain a 72-hour go-kit.

c. Participate in a training exercise as an integrated team at least once per year.

d. Complete the Remote ACS communicator training tasks documented in the *Pinellas ACS/ARES® Training Plan*.

3.2.2.5 Evacuation Shelter Teams.

The duties and responsibilities of each Pinellas Evacuation Shelter Team member include but are not limited to the following.

a. Execute the *Pinellas County ACS/ARES® Emergency Communications Plan*, and the *Pinellas County ACS/ARES® Emergency Shelter Plan* in accordance with the instructions received from the Operations Manager.

b. Create and maintain a 72-hour go-kit.

c. Complete the Local ACS VHF/UHF communicator training tasks documented in the *Pinellas ACS/ARES® Training Plan*.

3.2.3 PACS Training Officer.

The duties and responsibilities of the ACS Training Officer include but are not limited to the following.

a. Create and maintain the *Pinellas ACS/ARES® Emergency Communications Plan and Standard Operating Procedures* Document.
b. Create and maintain the *Pinellas ACS/ARES® Emergency Shelter Plan and Standard Operating Procedures* Document.
c. Create and maintain the *Pinellas ACS/ARES® Winlink Training Plan*.
d. Create and maintain the *Pinellas ACS/ARES® Training Plan*.
e. Create and provide training to the membership during each weekly Pinellas County ACS-ARES® and SKYWARN® Training and Information net.
f. Create and provide training to the membership during each bi-weekly Winlink Training net.
g. Create and provide training to the membership during each Pinellas ACS monthly meetings.
h. In conjunction with the Pinellas ACS staff, create plans and procedures for monthly training drills and semi-annual exercises.
i. Generate an After-Action Report for each ACS/ARES® drill and exercise. Provide each completed report to the ACS/ARES® Radio Officer for approval.

3.2.3.1 PACS Assistant Training Officer.

The duties and responsibilities of the Assistant ACS Training Officer include but are not limited to the following.

a. Assist the PACS Training Officer with each of the tasks defined in paragraph 3.2.3.
b. Assume the duties and responsibilities of PACS Training Officer whenever the assigned Training Officer is unable to perform his/her duties (e.g., vacation, deployment, etc.).

3.2.4 PACS Logistics Officer.

The duties and responsibilities of the ACS Logistics Officer include but are not limited to the following.

a. Execute the *Pinellas County ACS/ARES® Emergency Communications Plan* in accordance with the instructions received from the Radio Officer or Deputy Radio Officer.

b. During each activation event and training activity:

   (1) Provide the operational instructions that are needed by each subordinate staff member to meet mission requirements.

   (2) Collect status and resolve issues that are reported by subordinate staff members.

   (3) Notify the Pinellas County Radio Officer and Deputy Radio Officer of significant events and issues that require additional assistance to resolve.

   (4) Coordinate equipment repair and replacement using local crews and outside assistance.

   (5) Evaluate equipment / staffing requirements and determine if assistance with logistics from outside the county is required. Notify the Radio Officer and Deputy Radio Officer if external assistance is required.

c. Define equipment requirements and identify shortfalls. Provide recommendations to resolve issues to the Pinellas ACS Radio Officer.

d. Make recommendations on usage of equipment obtained for the county.

e. Supervise the modification and repair equipment donated to Pinellas ACS/ARES®.

f. Create plans and prepare for the equipment repair and replacement that may be required during hurricane recovery operations.

3.2.4.1 Repeater Custodian.

The duties and responsibilities of each Pinellas ACS Repeater Custodian include but are not limited to the following.

a. Assign and train repeater and digipeater control operators.

b. Identify and resolve operational issues with Pinellas ACS repeaters and digipeaters.

c. Notify the Logistics Manager and Operations Officer of any change in ACS repeater or digipeater status. As a minimum, the report should include:

   (1) Impacts to operational availability and performance.

   (2) Estimated time to repair.

d. During an activation event:

   (1) Coordinate with the Net Manager to select the best location for the emplacement of each portable repeater and digipeater.

   (2) Coordinate the installation of portable repeaters and digipeaters.

e. Notify the Logistics Manager of significant events and issues that require additional assistance to resolve.

3.2.4.2 ACS Equipment Custodian.

The duties and responsibilities of the Pinellas ACS Equipment Custodian include but are not limited to the following.

a. During each activation event and training activity, manage the distribution of Pinellas ACS equipment to the membership and its return to the logistics department.

b. Maintain an inventory of all ACS/ARES® equipment in logistics department control.

c. Establish a periodic maintenance schedule for all ACS/ARES® equipment. As a minimum, the program will perform the following tasks.

(1) Determine the operational status of each Pinellas ACS/ARES® equipment item at least once every calendar year.

(2) Create a master radio programming plan and verify that each radio is programmed correctly.

(3) Verify that each Software Programmable Radio is operating with the most current version of software.

(4) Verify that each computer used to support ACS/ARES® is operating with the most current version of application software (e.g., Winlink, etc.).

d. Notify the Logistics Manager of any significant issue identified during an equipment inventory or preventive maintenance action.

e. Generate an annual report detailing the status of all ACS/ARES® equipment. Provide a copy of the report to the Logistics Officer, Deputy Radio Officer, Radio Officer, and Pinellas Admin Officer.

3.2.5 PACS Finance / Admin Officer.

The duties and responsibilities of the ACS Administrative Officer include but are not limited to the following.

a. Complete and maintain all ARRL® paperwork and information requests.

b. Receive registrations and process them.

c. Create/provide a county wide system of recruiting for the ACS/ARES® program.

d. Collect, manage, and archive the data set created during an activation event. This data set will include copies of all station logs (ICS 214 and ICS 309), formal message traffic exchanged (voice and digital), NCS logs, and all applicable ICS information distributed to ACS (e.g., ICS 201, ICS 202, ICS 205, etc.).

3.2.5.1 Treasurer.

The duties and responsibilities of the Pinellas ACS Treasurer include but are not limited to the following.

a. Deposit received funds.

b. Write outgoing checks and approve on-line expenditures.

c. Document all financial transactions.

d. Manage formal reports and bank statement.

e. Oversee and approve all financial plans or revisions to plans.

f. Ensure the protection of funds from any potential misuse.

3.2.5.2 Database Manager.

The duties and responsibilities of the Pinellas ACS Database Manager include but are not limited to the following.

a. Maintain an information database on all amateur radio operators in Pinellas County that have registered or been interviewed.

3.2.5.3 Social Media Specialist.

The duties and responsibilities of the ACS Social Media Specialist include but are not limited to the following.

a. Create and administer content on all social media platforms, to build an audience and ensure PACS membership and customer engagement.

   (1) Pinellas ACS Website

   (2) Pinellas ACS Facebook, Instagram, and Twitter accounts.

b. Monitor site metrics, respond to reader comments, and oversee creative design.

3.2.6 PACS Liaison Supervisor.

The duties and responsibilities of the Pinellas ACS Liaison Officer include but are not limited to the following.

a. Coordinate and maintain liaison with the served agencies listed below.

(1) Pinellas County Emergency Management
(2) Salvation Army
(3) American Red Cross (ARC)
(4) Local Hospitals
(5) Military Auxiliary Radio Service (MARS)
(6) Civil Air Patrol (CAP)
(7) Disaster Animal Recovery
(8) US Coast Guard
(9) Search and Rescue (SAR) Teams
(10) Military and Disaster Medical Assistance Team (DMAT) operations

b. Be a channel of communications between the individual liaisons and the ACS/ARES® staff including exchange of disaster plans and agency needs.

c. Communicate agency needs to operations and administration.

3.2.7 PACS Public Relations Supervisor.

The duties and responsibilities of the Pinellas ACS Public Relations Supervisor include but are not limited to the following.

a. Insure a viable and active Public Service presence in Pinellas County.
b. Makes contacts with the media and keeps them informed on Amateur Radio related events in Pinellas County
c. Creates/distributes information and materials to the general public as needed.
d. Works with Administration for recruitment purposes.
e. Provides and makes news releases for ACS/ARES® activities.

3.2.7.1 Outreach and Recruitment.

The duties and responsibilities of the Pinellas ACS Outreach and Recruitment Supervisor include but are not limited to the following.

a. ***TBD***

4 ACTIVATION AND DEACTIVATION

This section lists the events that may cause ACS/ARES® to be activated, describes the four levels of ACS/ARES® activation, and details the steps to be performed during activation and deactivation.

4.1 ACTIVATION OF ACS/ARES® WITHIN PINELLAS COUNTY.

The Pinellas County ACS/ARES® mission is to provide effective temporary communication links for agencies providing for the public welfare. This occurs when existing communication services become damaged or over-loaded due to disasters, emergencies, or other unusual events. Where no existing communication channels exist, ACS/ARES® will create them, and maintain them until permanent facilities can be established. When Pinellas County activates ACS, some ARES® ongoing operations may come under ACS command and control.

The RO/EC or his designee is responsible for the activation of ACS/ARES® within Pinellas County. Reasons for activation include but are not limited to the following.

a. A Loss of internal or external communications, (phone or radio), in any facility that contributes to the public safety or welfare, (e.g., phone cable cuts, hospital Private Branch Exchange (PBX) outages, etc.).

b. Backup communications due to the overloading of the communications in any facility that contributes to the public safety or welfare.

c. Providing communications capability for a served agency to augment their existing facilities or to provide interfaces to other agencies during emergencies or special events.

    (1) Very Important Person (VIP) visits

    (2) SAR operations

    (3) Weather events (e.g., Severe thunderstorms, tornados, flash floods, tropical storms, and hurricanes)

(4) Industrial accidents, hazardous material spills, major fires

(5) Widespread power outages

(6) Cyber-attacks and acts of terror

(7) Acts of War

d. Providing communications for non-emergency events that support public safety and train both members and served agency partners. (e.g., parades, bicycle races, runs, walk-a-thons, etc.).

e. Providing relief or support for ARES®, ACS, or RACES organizations outside of Pinellas County.

Any served agency can request assistance from ACS/ARES® by contacting any member of the ACS staff listed in Table II. The Pinellas County ACS/ARES® EC/RO or his/her assistants, shall have the responsibility for activating all, or any portion, of the membership within their jurisdiction, depending on the circumstances and communications needed.

4.1.1 Activation Levels

During hurricane season, the time between initial formation of a tropical depression and the potential landfall of a tropical storm or hurricane will normally provide ACS/ARES® members with several days or even a week of advanced notice that a local activation will occur. For this scenario, ACS/ARES® activation will progress orderly from Level 4 upwards through Level 3, Level 2, and Level 1 as the storm track and landfall location solidifies. This orderly progression of ACS/ARES® activation, unfortunately, should be viewed as an exception rather than the rule. Severe thunderstorms, tornados, flash floods, industrial accidents, widespread power outages, cyber-attacks, and acts of terror can occur with little or no warning and ACS/ARES® may need to transition from Normal operation, level 4, to Full Activation, level 1, immediately. Depending on the event, cell service and internet access may not be available to notify members about activation. Therefore, it is imperative that all members begin monitoring the ACS/ARES® repeater, W4ACS, for activation announcements as soon as they become aware of a potential activation event.

The four ACS/ARES® activation levels are identified in Table III. The actions to be performed by ACS/ARES® during each activation level are documented in the following paragraphs.

Table III. Activation Levels

Level	Description	Color Code
1	Activation	**RED**
2	Standby	**ORANGE**
3	Alert	**YELLOW**
4	Normal	**GREEN**

4.1.1.1 Activation Level 4 (NORMAL).

Normal amateur radio operations. No specific action required.

ACTIVATION LEVEL 3

ALERT

4.1.1.2 Activation Level 3 (ALERT).

ACS/ARES® officials have been notified by one or more served agencies that Amateur Radio Communicators may be needed soon. No specific timeframe for activation is normally associated with this notification.

4.1.1.2.1 Radio Officer.

The EC/RO or his/her designee will perform the following actions.

a. Notify the Pinellas County ACS/ARES® membership that activation level 3 has been established. The announcement should describe the reason for any potential activation.

   (1) Issue an ALERT PINELLAS notification to all ACS/ARES® members.
   (2) Send an email to all ACS/ARES® members.
   (3) Text and/or call critical ACS/ARES® members. Critical members will notify the entire team using a calling tree structure.

b. Notify the WCF ARES® Section Manager that activation level 3 has been set.

4.1.1.2.2 Net Manager.

The Net Manager will perform the following actions.

a. Create an NCS operational schedule for the ACS/ARES® Tactical-Resource Net, the ACS/ARES® Shelter Net, and the VHF Traffic net. Distribute the NCS operational schedule to all assigned stations and confirm each station can support the plan. Update the plan as required.
b. Direct the assigned NCS to activate the ACS/ARES® Tactical-Resource net.

c. Based on the nature and scope of the potential activation, create an event specific ICS 205, Incident Radio Communications Plan.

(1) Select the communication channels appropriate for the activation from the current ICS 217A documented in appendix F.

(2) Post a copy of the event specific ICS 205 on the Pinellas ACS Web site.

(3) Email a copy of the event specific ICS 205 to the Pinellas ACS membership.

4.1.1.2.3 Logistics Manager.

The logistics manager will perform the following actions.

a. No Action Required.

4.1.1.2.4 Net Control Stations.

The assigned NCS for the ACS/ARES® Tactical-Resource net will perform the following actions.

a. Establish the ACS/ARES® Tactical-Resource net. Net Control procedures for level 3 activation are documented in paragraph E.1.1.1.

b. Announce that activation level 3 has been established. The announcement should be repeated once every hour.

4.1.1.2.5 General Membership.

Members should perform the following steps when ACS/ARES® activation level 3 is announced.

a. Use telephone, text, or email to notify the EC/RO about your ability to support activation.

b. Review this plan and obtain a copy of the event specific ICS 205.

c. Inventory and check radio equipment and go-kit. Winlink users should verify that software and forms are up to date.

d. Charge Hand-Held Transceiver (HT), computer, and emergency batteries.

e. Test emergency generator and top-off fuel supply.

f. Top-off fuel for car/truck.

g. Monitor email for ACS/ARES® activation notifications and ICS 205 updates.

h. Monitor the ACS/ARES® Tactical-Resource net for updates.

i. Monitor local news reports.

ACTIVATION LEVEL 2

4.1.1.3 Activation Level 2 (STANDBY)

For Level 2, there is a high probability that ACS/ARES® will be activated. This level of activation will occur when ACS/ARES® officials are notified by one or more served agencies that a need for assistance is imminent.

4.1.1.3.1 Radio Officer

The EC/RO or his/her designee will perform the following actions.

a. Notify the Pinellas County ACS/ARES® membership that activation level 2 has been established. The announcement should describe the reason for any potential activation, the scope of the activation, and provide an approximate time frame for the activation.

   (1) Issue an ALERT PINELLAS notification to all ACS/ARES® members.
   (2) Send an email to all ACS/ARES® members.
   (3) Text and/or call critical ACS/ARES® members. Critical members will notify the entire membership using a calling tree structure.

b. Notify the WCF ARES® Section Manager that activation level 2 has been set.

4.1.1.3.2 Net Manager

The Net Manager will perform the following actions.

a. Update or create an NCS operational schedule for the ACS/ARES® Tactical-Resource Net, the ACS/ARES® Shelter Net, and the VHF Traffic net. Distribute the NCS operational schedule to all assigned stations and confirm each station can support the plan. Update the plan as required.
b. Direct the assigned NCS to activate the ACS/ARES® Tactical-Resource net.

c. Based on the nature and scope of the potential emergency activation, update/create an event specific ICS 205, Incident Radio Communications Plan.

(1) Select the communication channels appropriate for the activation from the current ICS 217A documented in appendix F.

(2) Post a copy of the event specific ICS 205 on the Pinellas ACS Web site.

(3) Email a copy of the event specific ICS 205 to the Pinellas ACS membership.

4.1.1.3.3 Logistics Manager

The Logistics Manager will perform the following actions.

a. Proceed to the Pinellas County EOC and prepare emergency equipment for distribution.

4.1.1.3.4 Net Control Stations

The assigned NCS for the ACS/ARES® Tactical-Resource net will perform the following actions.

a. If not already active, establish the ACS/ARES® Tactical-Resource net. Net Control procedures for activation level 2 are documented in paragraph E.2.1.1.

b. Announce that activation level 2 has been established. The announcement should be repeated once every 30-minutes.

4.1.1.3.5 General Membership

In addition to the steps documented in paragraph 4.1.1.2.5 for level 3 activation, members should perform the following steps when ACS/ARES® activation level 2 is announced.

a. ***Ensure that family and property are safe.***

b. Use telephone, text, or email to notify/update the EC/RO about your ability to support activation. If cell and internet service are unavailable, provide activation status via the ACS/ARES® Tactical-Resource net.

c. Emergency Go-kit should be packed and ready for immediate deployment. If ACS/ARES® transitions to level 1, members should be ready to deploy within approximately 15 minutes.

d. Review this plan and obtain a copy of the event specific ICS 205.

e. ***Do-Not Self-Deploy.***

NOTE: *Individuals who deploy without an assignment from the EC/RO, his/her designee, or the NCS will not be covered by worker's compensation.*

f. Check-in to the ACS/ARES® Tactical-Resource net. Emergency net procedures are documented in paragraph E.5.4

ACTIVATION LEVEL 1

4.1.1.4 Activation Level 1 (ACTIVATE)

This level of activation will occur when ACS/ARES® officials are notified by one or more served agencies that a need for assistance is immediate.

This level of activation will be used for all hurricanes, for some tropical storms, and for any major technological disaster.

4.1.1.4.1 Radio Officer

The EC/RO or his/her designee will perform the following operations.

a. Notify the Pinellas County ACS/ARES® membership that activation level 1 has been established. The announcement should describe the reason for any activation, the scope of the activation, and provide an approximate time frame for the activation.

(1) Issue an ALERT PINELLAS notification to all ACS/ARES® members.

(2) Send an email to all ACS/ARES® members.

(3) Text and/or call critical ACS/ARES® members. Critical members will notify the entire membership using a calling tree structure.

b. Notify the WCF ARES® Section Manager that activation level 1 has been set. Provide the Section Manager with situation reports every 4 hours.

4.1.1.4.2 Net Manager

The Net Manager will perform the following actions.

a. Update or create an NCS operational schedule for the ACS/ARES® Tactical-Resource Net, the ACS/ARES® Shelter Net, and the VHF Traffic net. Distribute the

NCS operational schedule to all assigned stations and confirm each station can support the plan. Update the plan as required.

b. Direct the assigned NCS to activate the ACS/ARES® Tactical-Resource net.

c. If notified by the EC/RO that evacuation shelters are currently open or scheduled to be open, direct the assigned NCS to activate the ACS/ARES® Shelter Net.

d. Based on the nature and scope of the potential emergency activation, update/create an event specific ICS 205, Incident Radio Communications Plan.

(1) Select the communication channels appropriate for the activation from the current ICS 217A documented in appendix F.

(2) Post a copy of the event specific ICS 205 on the Pinellas ACS Web site.

(3) Email a copy of the event specific ICS 205 to the Pinellas ACS membership.

4.1.1.4.3 Logistics Manager

The logistics manager will perform the following actions.

a. Proceed to the Pinellas County EOC and prepare emergency equipment for distribution.

b. Distribute equipment to ACS/ARES® users, as required, to support assignments. Maintain an accurate record of all equipment distributed to the membership.

4.1.1.4.4 Net Control Stations

The assigned NCS for the ACS/ARES® Tactical-Resource net will perform the following actions.

a. If not previously activated, establish the ACS/ARES® Tactical-Resource net. Net Control procedures for activation level 1 are documented in paragraph E.3.1.1.

b. Announce that activation level 1 has been established. The announcement should be repeated once every 30-minutes.

c. Provide assignment instructions to the membership as appropriate.

(1) Maintain an up-to-date list of each deployed asset. The list should include the deployment location, when the asset was deployed, when the asset arrived at its destination, and the operational status of each deployment site.

If notified by the net manager that evacuation shelters are currently open or scheduled to be open, the assigned NCS for the ACS/ARES® Shelter Net will establish the ACS/ARES® Shelter Net. Net Control procedures are documented in paragraph E.4.1.1.

4.1.1.4.5 General Membership

In addition to the steps documented in paragraph 4.1.1.2.5 for level 3 activation and the steps documented in paragraph 4.1.1.3.5 for level 2 activation, members should perform the following steps when ACS/ARES® activation level 1 is announced.

a. ***Ensure that family and property are safe.***
b. Use telephone, text, or email to notify/update the EC/RO about your ability to support activation. If cell and internet service are unavailable, provide activation status via the ACS/ARES® Tactical-Resource net.
c. Emergency Go-kit should be packed and ready for immediate deployment.
d. ***Do-Not Self-Deploy.***

NOTE: *Individuals who deploy without an assignment from the EC/RO, his/her designee, or the NCS will not be covered by worker's compensation.*

e. Check-in to the ACS/ARES® Tactical-Resource net. Emergency net procedures are documented in paragraph E.5.4.
f. If notified of an assignment by the EC/RO, his/her designee, or the NCS, perform the following actions.

(1) Notify the NCS when you leave your current location and are in route to your assignment.

NOTE: *Each ACS member who is deployed in response to an approved activation event will be covered by worker's compensation for volunteers. The coverage starts when the ACS member responds to a deployment request (sent to him/her via text, phone call, or NCS message) indicating that the member is leaving his/her home and is now in route to a deployment location. The time of this response message is recorded by the NCS and used to start the clock for worker's comp.*

(2) If you require additional equipment to support the assignment, contact the logistics officer and then proceed to the EOC to obtain the equipment. A map of the EOC location is shown in Figure 3. Once you have the equipment in hand, proceed to the specified location or staging area. Notify the NCS upon your arrival at the destination.

(3) If you do not require additional equipment, proceed directly to the specified location or staging area. Notify the NCS upon arrival.

NOTE: *When someone calls in to report travel, the Tactical Net Control in the radio room of the EOC will make a note stating that the person is in route to a specific location. When the traveler reports that they have arrived, the EOC will close out the associated travel monitor. If the EOC does not hear back from the traveler, the EOC will call them in approximately 30 minutes to find out where they are located or, if necessary, send someone to look for them.*

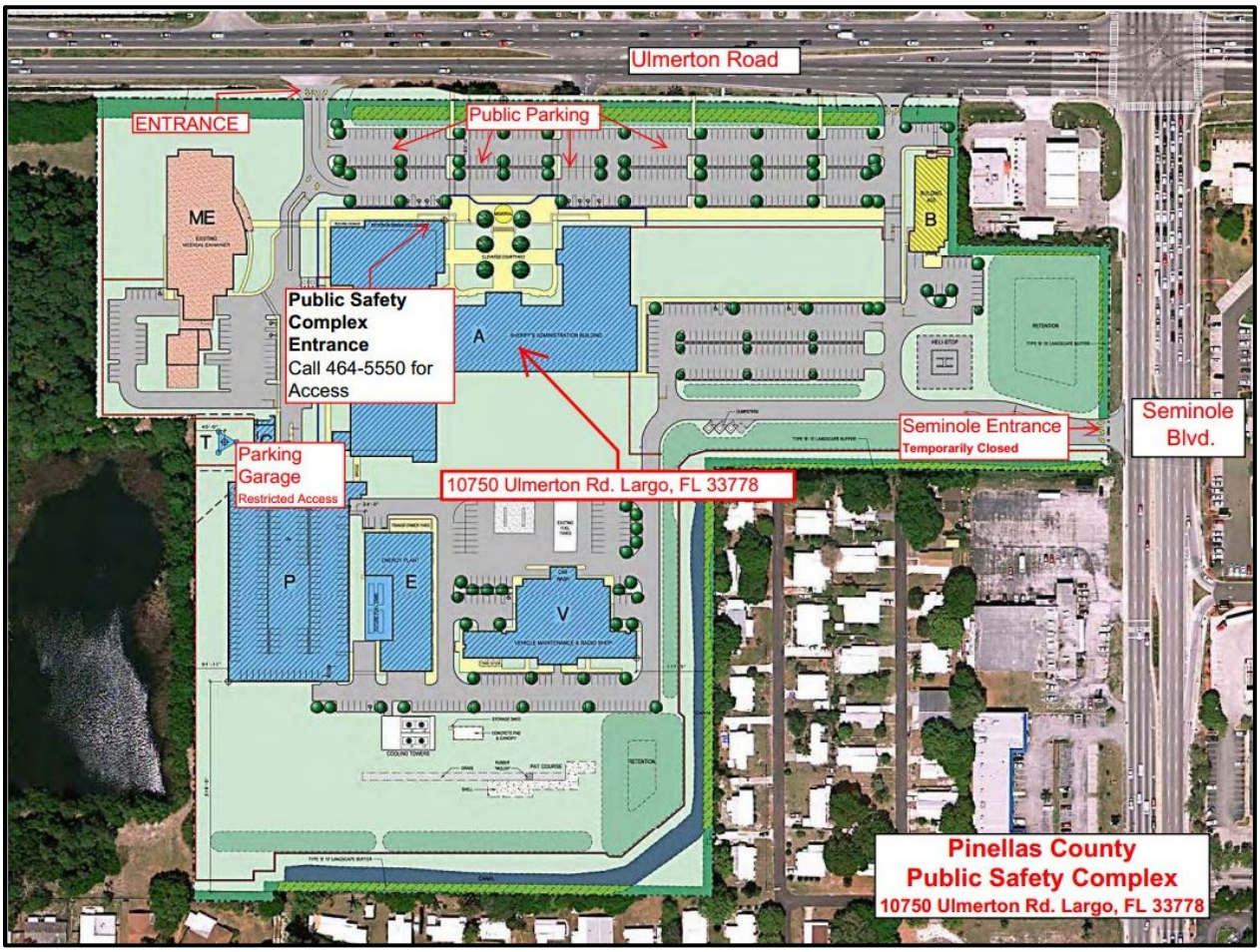


Figure 3. Pinellas County Emergency Operations Center

4.1.2 Exercise Activation

Functional Exercises, Full Scale Exercises, and Simulated Emergency Tests will be used by ACS/ARES® to evaluate equipment capabilities and ACS readiness to respond to an activation event. Each exercise will require participants to perform a variety of skills that are associated with VHF/UHF and HF deployments.

Each exercise scenario will be designed to closely resemble the real-world events Pinellas ACS/ARES® is likely to encounter. To optimize training, each exercise will use the activation, operations, and deactivation steps documented within this plan. This approach will enable members to practice the skills and procedures they will need to implement during a real-world activation. The only exceptions to this rule are listed below.

a. All announcements broadcast during the exercise will clearly state that an exercise is taking place.
b. All tactical message traffic will clearly state that the traffic is in support of an exercise.
c. All formal message traffic will be formatted in accordance with the requirements documented in paragraph 5.1.6, Exercise Messages.

4.1.3 Deactivation

Pinellas ACS/ARES® will be activated when an official of ACS/ARES® is notified by a served agency partner, WCF ARES® leadership, or the Pinellas County DEM that communications support is required. Deactivation will occur when the organization requesting ACS/ARES® support notifies ACS/ARES® that its assistance is no longer required. If more than one organization has requested support from ACS/ARES®, full deactivation will not take place until all requesting organizations indicate that support is no longer required.

4.1.3.1 Radio Officer

The EC/RO or his/her designee will perform the following actions.

a. Notify the ACS DRO for Logistics, the ACS DRO for Administration, and the ACS Net Manager that ACS/ARES® is being deactivated.

b. Notify the membership that ACS/ARES® is being deactivated.

   (1) Issue an ALERT PINELLAS notification to all ACS/ARES® members.

   (2) Send an email to all ACS/ARES® members.

c. Notify the WCF ARES® Section Manager that Pinellas ACS/ARES® is being deactivated.

d. Upon receipt of the activation event dataset from the Admin Officer, deliver the data set to the Pinellas County DEM.

4.1.3.2 Net Manager

The Net Manager will perform the following actions.

a. Notify the NCS for each active network that ACS/ARES® is being deactivated.

4.1.3.3 Logistics Manager

The ACS DRO for Logistics will perform the following actions.

a. Proceed to the Pinellas County EOC and prepare to receive the emergency equipment that was issued in support of the activation event.

b. Maintain a record of all discrepancies reported by members returning equipment to the EOC.

4.1.3.4 Net Control Stations

When notified by the Net Manager that ACS/ARES® is being deactivated, the assigned NCS for the ACS/ARES® Tactical-Resource net will perform the following actions.

a. Announce to the net that ACS/ARES® is being deactivated. Net Control procedures for ACS/ARES® deactivation are documented in section E.
b. Complete the processing of any remaining message traffic.
c. The ACS/ARES® Tactical-Resource net will remain active to assist deployed units through the demobilization period.
d. Once all deployed units have returned from deployment or indicate that they no longer need assistance, the NCS will secure the Tactical Resource net.
e. Deliver a copy of all NCS logs and records to the ACS Admin Officer.

When notified by the Net Manager that ACS/ARES® is being deactivated, the assigned NCS for the ACS Shelter and traffic nets (if activated), will perform the following actions.

a. Announce to the net that ACS/ARES® is being deactivated. Net Control procedures for ACS/ARES® deactivation are documented in Appendix E.
b. Complete the processing of any remaining message traffic.
c. Secure the net.
d. Deliver a copy of all NCS logs and records to the ACS Admin Officer.

4.1.3.5 ACS Admin Officer

The ACS DRO for Administration will perform the following actions.

a. Obtain the station records and NCS logs from each ACS/ARES® unit that took part in the activation event.
b. Download from the Winlink Radio Message Server (RMS) a copy of all Winlink messages exchanged during the activation event.

c. Create a copy of the data set obtained from all stations and the Winlink RMS. This copy will be used by the ACS/ARES® leadership to create an after-action report.

d. Deliver the original data set for the activation event to the EC/RO.

4.1.3.6 General Membership

When notified by the NCS that ACS/ARES® is being deactivated, members should perform the following steps.

a. If deployed, notify your served agency partner that you have been directed to deactivate.

b. Secure station equipment and if deployed pack equipment for transport.

c. Station Records

(1) Finalize the site activity (ICS 214) and site communications (ICS 309) logs.

(2) Secure a copy of all formal messages exchanged during the activation event and a copy of the event's ICS documentation package (e.g., ICS 201, ICS 205, ICS 217A, etc.).

(3) Deliver station records to the Pinellas ACS Admin Officer.

d. If you received emergency equipment from the Pinellas County EOC, perform the following actions.

(1) Inventory the emergency equipment and document any discrepancies. Documentation should include inventory shortfalls and equipment failures.

(2) Return emergency equipment to the logistics officer at the Pinellas County EOC. A map of the EOC location is shown in Figure 3.

e. If deployed, notify the Tactical-Resource NCS when your station is secured, when you are in route back to base, when you arrive safely home, and any time you need any additional assistance.

NOTE: *When an individual arrives home from a deployment location, he or she should notify the NCS, or the individual tracking them, that he or she has arrived home safely. This will enable the ACS leadership to ensure that everyone who was deployed has been properly demobilized, accounted for, and safely home.*

5 OPERATIONS

This section of the document addresses the operational activities that occur once ACS/ARES® has been activated.

5.1 MESSAGE TRAFFIC

ACS/ARES® was created to support and augment local government communications during periods of local, regional, or national emergencies. At the heart of its mission is the accurate and timely exchange of information between served agency partners. To perform this mission, ACS/ARES® members must correctly format, prioritize, and exchange information using the best communication channel at their disposal. This section will provide members with the information needed to properly prioritize and format messages during an ACS/ARES® activation event.

5.1.1 Message Content and Security

Since Part 97 prohibits the use of encryption or any other method that would obscure the meaning of an amateur radio transmission, ACS/ARES® operators cannot guarantee that the information they exchange will not be intercepted by individuals other than the intended recipient. Users and served agencies should assume that the public and various news organizations may be monitoring amateur radio frequencies during an activation event. With this in mind, the following types of information should not be transmitted by amateur radio.

a. Personally Identifying Information (PII) – Example, death of a named individual, social security number, passport number, driver's license number, patient identification number, etc.
b. Health Insurance Portability and Accountability Act (HIPAA) data – Example, any part of an individual’s medical record.

Although it is not the responsibility of the ACS/ARES® operator to determine if the information contained in a served agency message contains PII or if the information is compliant with

HIPAA, the operator should remind the message originator that information exchange by amateur radio may be monitored by others and that they should have no expectation of privacy.

5.1.2 Message Precedence

During an activation event, prioritizing the flow of information is a critical component of network management. Precedence is the message attribute that enables the NCS to prioritize messages properly. All message traffic whether informal or written should be assigned a message precedence.

The ARRL® NTS™ defines four levels of message precedence. The definitions listed below are sourced from various ARRL® NTS™ and RRI documents and are listed in highest to lowest priority order.

a. **EMERGENCY**: Any message having life and death urgency to any person or group of persons, that is transmitted by Amateur Radio in the absence of regular commercial facilities. The use of this precedence should generally be limited to traffic originated and signed by authorized partner officials. This includes official messages of welfare agencies during emergencies requesting supplies, materials, or instructions vital to relief efforts for the stricken populace in emergency areas. Due to the lack of privacy on radio, EMERGENCY messages should only be sent via Amateur Radio when regular communication facilities are unavailable. ***When in doubt, do not use it***. Valid uses of the EMERGENCY precedence include but are not limited to the following events.

(1) Requests for Emergency Medical Services (EMS) or Ambulance

(2) Requests for Police assistance

(3) Requests for Fire assistance

b. ***PRIORITY***: Any official message having a specific time limit, or any emergency-related message not covered by the EMERGENCY precedence. This precedence is usually only associated with official traffic to, from, or related to a disaster area.

c. ***WELFARE:*** Any message concerning the whereabouts or health and welfare of an individual in the disaster area, or a message from the disaster area that indicates all is well. Welfare traffic is handled *only* after all EMERGENCY and PRIORITY traffic is cleared. Welfare Traffic is normally only tolerated outbound (e.g., Individuals giving their welfare status) for the first 72-hours after a disaster. And then after that, the network would consider inbound Welfare Traffic/queries. The Red Cross equivalent to an incoming Welfare message is a Disaster Welfare Inquiry (DWI).

d. ***ROUTINE***: Messages unrelated to any emergency. As a general rule, during activation events ROUTINE messages *will not* be sent or received by Pinellas ACS/ARES®.

5.1.3 Tactical Call Signs and Winlink Tactical Addresses

Tactical call signs are used to identify a specific location or function that may be staffed by different operators during an exercise or activation event. Examples include but are not limited to EOCs, evacuation shelters, government agencies, and Non-Governmental Organization (NGOs). ACS/ARES® members do not need to know the specific Federal Communication Commission (FCC) call sign of the individual staffing a specific location, they only need to know the tactical call sign. Even if the operator at a specific location changes, the tactical call sign does not.

During exercise periods and activation events, ACS/ARES® will use the tactical call signs listed in Appendix D. If members are deployed to a location that is not listed in Appendix D, the NCS will assign the new location a tactical call sign in real-time. Individuals operating from home will continue to use their FCC call sign when exchanging information on the net.

***NOTE*:** *The FCC, Part 97.119, requires all stations to identify themselves at least once every 10-minutes and at the end of the station's last transmission. When using tactical call signs, users should end their last transmission by stating their tactical call sign followed by their FCC call sign.*

5.1.3.1 Winlink Tactical Addresses

A Winlink tactical address performs the same function within Winlink that a tactical call sign performs on a voice net. And, as with tactical call signs, during exercise periods and activation events, ACS/ARES® will use the Winlink tactical addresses listed in Appendix D. Each listed Winlink tactical address and its corresponding password was created by the ACS Net Manager. Therefore, the need to create a new Winlink tactical address should be limited to only those occasions when ACS/ARES® must deploy to a location not listed in Appendix D.

If the Winlink tactical address associated with your deployed location is already listed on the *Winlink Express Setup* menu, use the *Auxiliary Callsigns and Tactical Address Edit Entry* function to Enable the tactical address. Use the *Edit Entry* function to disable all other Tactical Addresses. Only one Pinellas ACS Winlink tactical address should be enabled per deployment location.

If the Winlink tactical address associated with your deployment location is not listed on the *Winlink Express Setup* menu, use the *Auxiliary Callsigns and Tactical Address Add Entry* function to add the appropriate Winlink Tactical Address from Appendix D. Refer to Figure 4 for an example of the Winlink *Tactical Address Add Entry* function.

When entering the tactical address into the *Add Entry* window, ensure that the address is an *exact* match to the desired Winlink address listed in Appendix D. Each Winlink tactical address used by Pinellas ACS has been assigned a password. The ACS Net Manager will provide Winlink tactical address passwords to users on an as needed basis. Once the address and password have been entered, check the *Enabled* box, and then save the address. Use the *Edit Entry* function to disable all other Tactical Addresses. Only one Pinellas ACS Winlink tactical address should be enabled per deployment location.

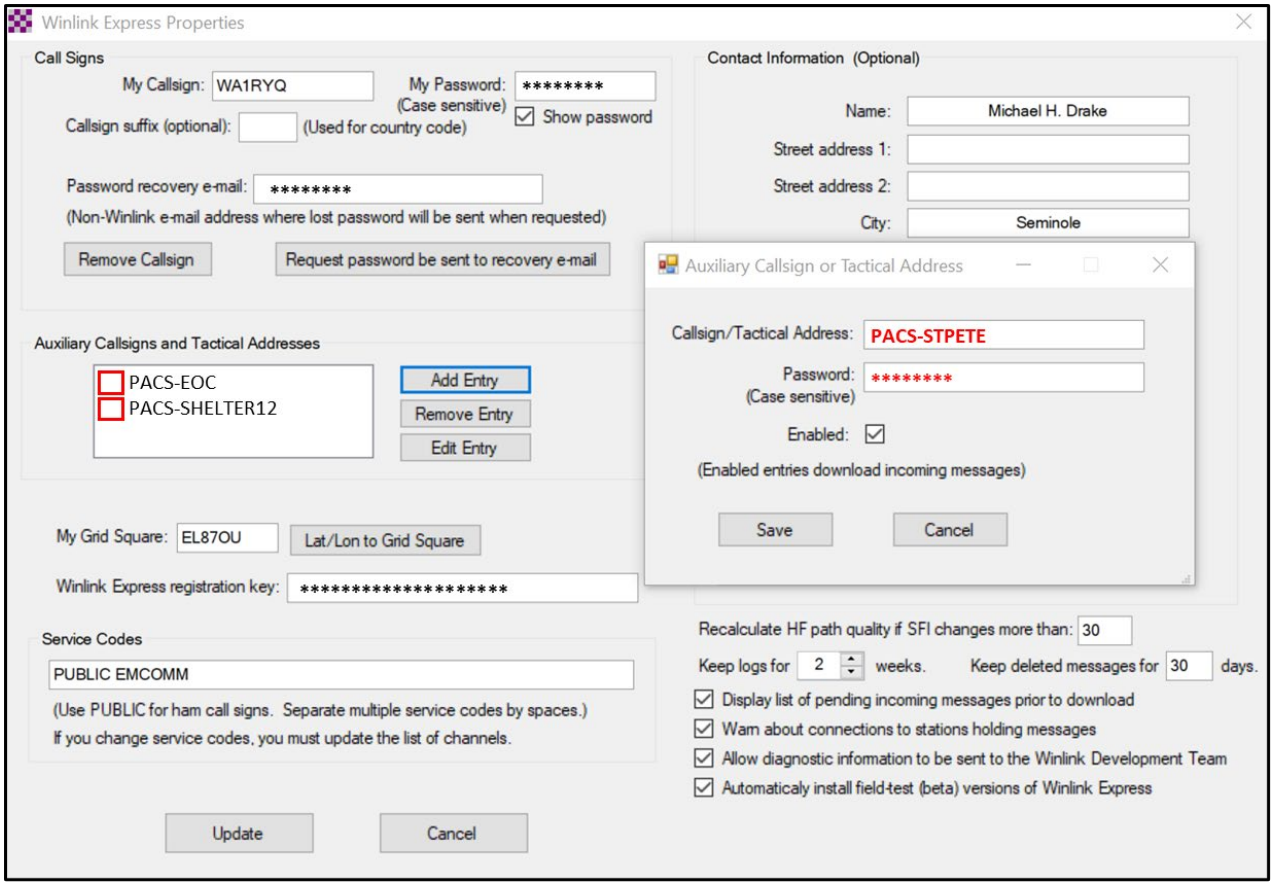


Figure 4. Winlink Tactical Address Menu

Once a tactical address is created, messages can be sent from, and to, the tactical address's mailbox. To select the Winlink tactical address as the sending station address (From), select the *From address pulldown menu* and highlight the Winlink tactical address. Refer to Figure 5 for an example of Winlink tactical address selection.

NOTE: *Although a tactical address can be used in most Winlink network topographies, a tactical address cannot be used when exchanging information in a Peer-to-Peer (P2P) network.*

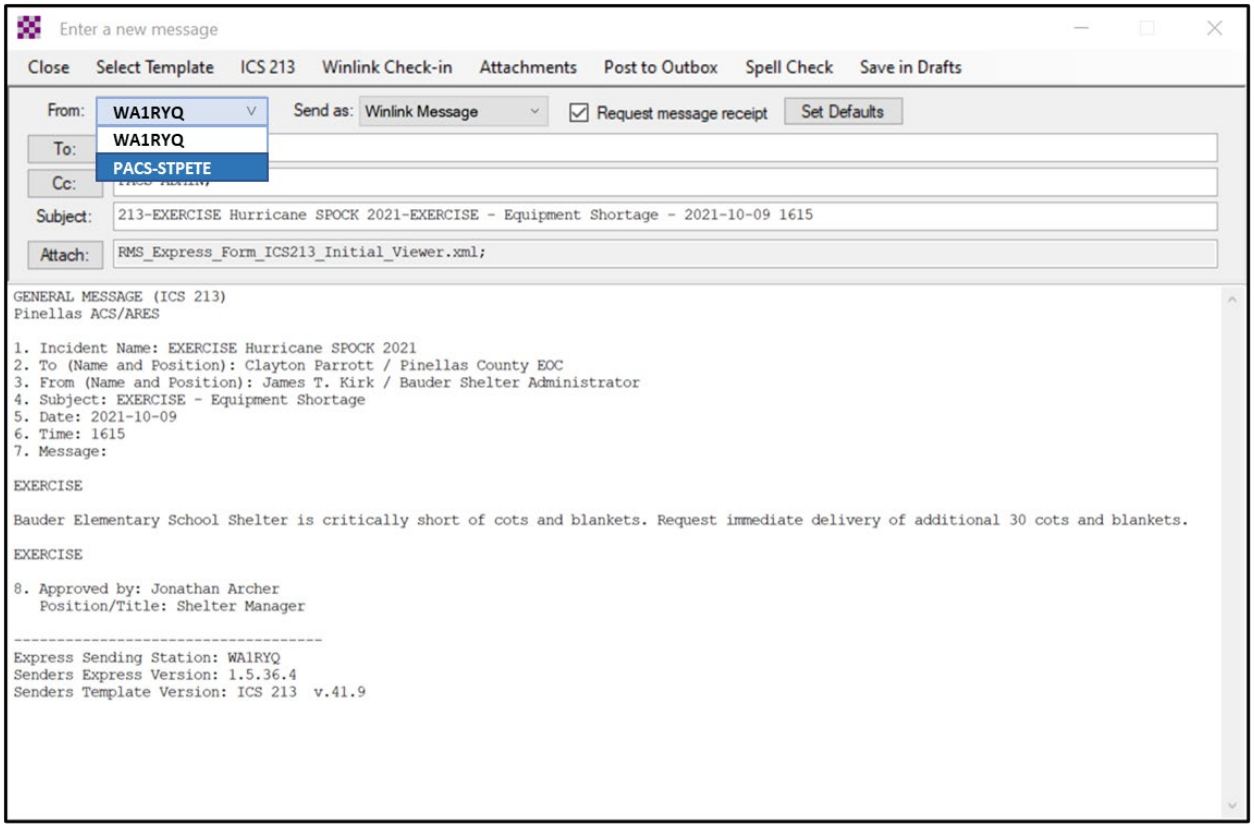


Figure 5. Winlink Tactical Address Selection

5.1.4 Tactical Radio Messages.

Tactical radio messages are informal unstructured messages that are normally voiced directly from the originator to the intended recipient. They are best used to support either non-critical simple messages or messages that require immediate action from the recipient. Examples of the appropriate use of tactical radio messages are listed below.

a. Command communications

b. Life-safety matters when timing is critical (e.g., Fire, Ambulance, Police)

c. Search and rescue operations

d. Direct conversations between third parties

e. Task assignments and completions

f. Resource coordination

g. Weather status

5.1.5 Formal Radio Messages.

Formal messages are structured written messages used to create a permanent record of the message traffic exchanged during an activation event. The use of a formal written message format also reduces the likelihood that an error will be introduced into the message during transport. Most formal message traffic will be authored by the served agency partners being supported by ACS/ARES®.

Examples of the appropriate use of formal messages are listed below.

a. Station activation and closure
b. Damage assessments
c. Shelter and EOC status
d. Situation report updates
e. Declarations and bulletins
f. Resource and logistic requests

Although many of the served agencies ACS/ARES® is likely to support have agency specific forms, the two formal message formats used most often during an activation event are the Radiogram and the National Incident Management System (NIMS) ICS 213.

5.1.5.1 Radiograms

The radiogram is the standard message format used for exchanging written traffic via amateur radio. Detailed instructions for the creation, transfer, and delivery of radiograms are documented in the *NTS™ Methods and Practices Guidelines (NTS™ MPG)*. When creating messages addressed to individuals or institutions that are not active participants in the ACS/ARES® network (e.g., Health and Welfare messages), user should closely follow the instructions in the NTS™ MPG.

However, when exchanging messages with other ACS/ARES® stations during an activation event, the content of some radiogram fields may need to be modified. Information that may be

unique to the radiograms generated during ACS/ARES® activation is contained in the following paragraphs. A sample radiogram designed to exchange information between ACS/ARES® users is shown in Figure 6.

a. Message Preamble

(1) Number – The message number is a unique numeric value (i.e., *no* letters or special symbols) that is assigned by the station originating the message. The assigned number follows the message from source to destination and is never changed in route.

(2) Precedence – Refer to paragraph 5.1.2 for detailed information about the use of precedence.

(3) Handling Instructions (HX) – During ACS/ARES® activation, this optional field should only be used if the originating station is requesting that the addressee reply to or acknowledge receipt of the message. When a reply is requested, the HX code "**E**" should be entered into the field. If receipt acknowledgement is requested, the HX code "**C**" should be entered into the field. No other codes should be used.

(4) Station of Origin – The amateur radio call sign of the station that originated the message. *Do not* use tactical call signs in this field during ACS/ARES® deployments.

(5) Check – The number of word groups contained within the text section of the message.

(6) Place of Origin – During an ACS/ARES® activation, this field is used to identify the deployment location of the station originating the message. If in use, the tactical call signs listed in Appendix D may be used in this field.

(7) Time Field – Enter the time, in 24-hour format (local time), that the message was created.

(8) Date – Enter the date that the message was created.

b. Message Addressee - This section should include the name and location of the intended message recipient. If in use, the tactical call signs listed in Appendix D may be used in this field. Whenever possible, always include a phone number and email address.

c. Message Text – This section contains the message information generated by the individual identified in the message signature. Even though during activation events the number of word groups is unlimited, users should request that message authors use concise language and limit the size whenever possible.

d. Message Signature – This section includes the name and title of the individual originating the message. In most cases, this will be a member of the served agency that the station is supporting.

e. Relay and Delivery Records – This section identifies the amateur radio callsign of the station to whom the user directly sent the message or the call sign of the station that directly sent the message to the local user. The time and date of each transaction must also be included. The ICS 309, Communications Log, cannot be properly maintained without this information.

Refer to Figure C- 2 and Figure C- 3, Traffic Operations Aid, for additional information about message formatting and processing.

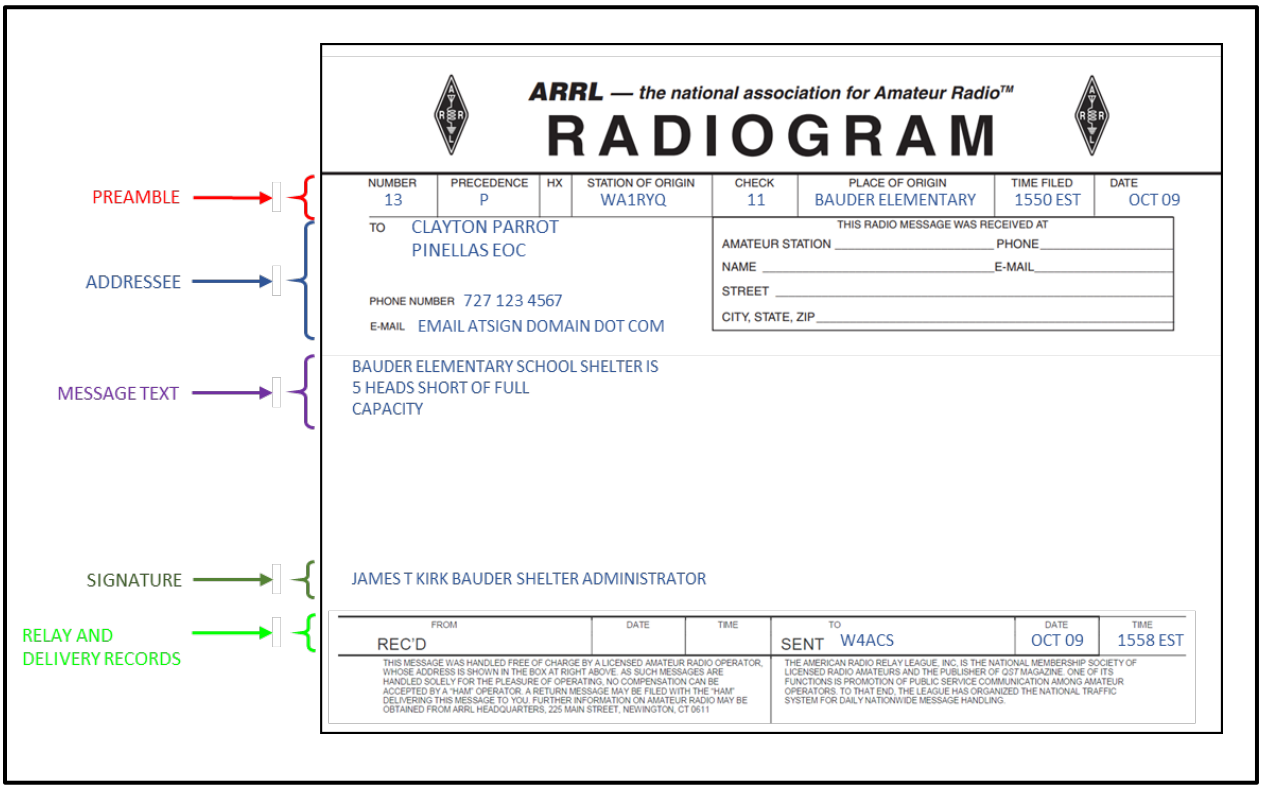


Figure 6. Sample Radiogram

5.1.5.2 General Message Form ICS 213

When ACS/ARES® is operating under the direction of Pinellas County Emergency Management, members will use the ICS 213 General Message form to record and transfer formal written message traffic. Portable Document Format (PDF) fillable copies of ICS 213 and a booklet containing all ICS forms are located at the Federal Emergency Management Agency (FEMA) ICS Resource Center Web site. Refer to Appendix B for website information. Detailed instructions for completing the form are listed in Appendix C. A sample ICS 213 designed to exchange information between ACS/ARES® users is shown in Figure 7.

Winlink users should refer to paragraph 5.1.5.3 for detailed information about Winlink versions of the ICS 213.

GENERAL MESSAGE (ICS 213)

1. Incident Name (Optional): EXERCISE Hurricane SPOCK 2021		
2. To (Name and Position): Clayton Parrott, Pinellas County EOC, 727-123-4567, email@domain.com		
3. From (Name and Position): James T. Kirk / Bauder Shelter Administrator		
4. Subject: EXERCISE – Equipment Shortage	**5. Date:** 2021-10-09	**6. Time** 1615 EST
7. Message: EXERCISE Bauder Elementary School Shelter is critically short of cots and blankets. Request immediate Delivery of additional 30 cots and blankets. EXERCISE		
8. Approved by: Name: Jonathan Archer Signature: _____ Position/Title: Shelter Manager		
9. Reply:		
10. Replied by: Name: _____ Position/Title: _____ Signature: _____		
ICS 213	Date/Time: _____	

Figure 7. Sample ICS 213 General Message

5.1.5.2.1 Convert Original ICS 213 to Radiogram

The ACS/ARES® membership will be required to transmit and receive messages that are generated using the ICS 213 general message form. These message forms do not, however, contain the network management fields needed by radio operators to send or receive messages via voice or Continuous Wave (CW). Therefore, it will be necessary for users, upon receipt of an ICS 213 message from a served agency partner, to convert the ICS 213 into a standard radiogram prior to transmission. When users receive a standard radiogram containing an ICS 213 message, users can convert the radiogram back into an ICS 213 prior to delivery.

The information contained in each field of the ICS 213 should be transferred to the corresponding radiogram field identified in Table IV. Figure 8 displays the mapping between the two forms.

Table IV. ICS 213 Radiogram Field Conversion

No	ICS 213 Field Name	Radiogram Field
1	Incident Name	First Line in the Text section of the radiogram.
2	To (Name and Position)	Addressee of radiogram.
3	From (Name and Position)	Signature of radiogram.
4	Subject	Addressee OP NOTE. Include indicator that radiogram contains an ICS 213.
5	Date	Preamble Date.
6	Time	Preamble Time. Use 24-hour format (Local Time).
7	Message	Text section of radiogram.
8	Approved by (Name/Position/Title)	Normally, this will be the same as the data in the “From” field of the ICS 213; however, if a different individual is listed in the approved by field; then, enter as a signature OP NOTE.

The remaining fields of the radiogram should be completed in accordance with the information shown in Table V. Once message conversion is complete, the user should send the message using standard voice or CW procedures.

Table V. Radiogram Fields	
Radiogram Field	**Instructions**
Message Number	The message number is a unique numeric value (i.e., *no* letters or special symbols) that is assigned by the station originating the message. The assigned number follows the message from source to destination and is never changed in route.
Precedence	Refer to paragraph 5.1.1 for detailed information about the use of precedence.
Handling Instructions (HX)	During ACS/ARES® activation, this optional field should only be used if the originating station is requesting that the addressee reply to or acknowledge receipt of the message. When a reply is requested, the HX code "**E**" should be entered into the field. If receipt acknowledgement is requested, the HX code "**C**" should be entered into the field. No other codes should be used.
Station of Origin	The amateur radio call sign of the station that originated the message. *Do not* use tactical call signs in this field during ACS/ARES® deployments.
Place of Origin	During an ACS/ARES® activation, this field is used to identify the deployment location of the station originating the message. If in use, the tactical call signs listed in Appendix D may be used in this field.
Addressee OP NOTE	Enter an OP NOTE that contains the phrase "**ICS 213 MESSAGE**". If the ICS 213 contains a ***Subject***, then, add the subject text to the OP NOTE. The OP NOTE must be included even if no ***Subject*** was entered onto the original ICS 213. **EXAMPLE:** OP NOTE ICS 213 MESSAGE SUBJECT EXERCISE EQUIPMENT SHORTAGE
Signature OP NOTE	An OP NOTE is required only if the individual listed in the **A*pproved by*** field of the ICS 213 is not the same individual that is listed in the ***From*** field of the ICS 213. **EXAMPLE:** OP NOTE APPROVED BY JONATHAN ARCHER SHELTER MANAGER

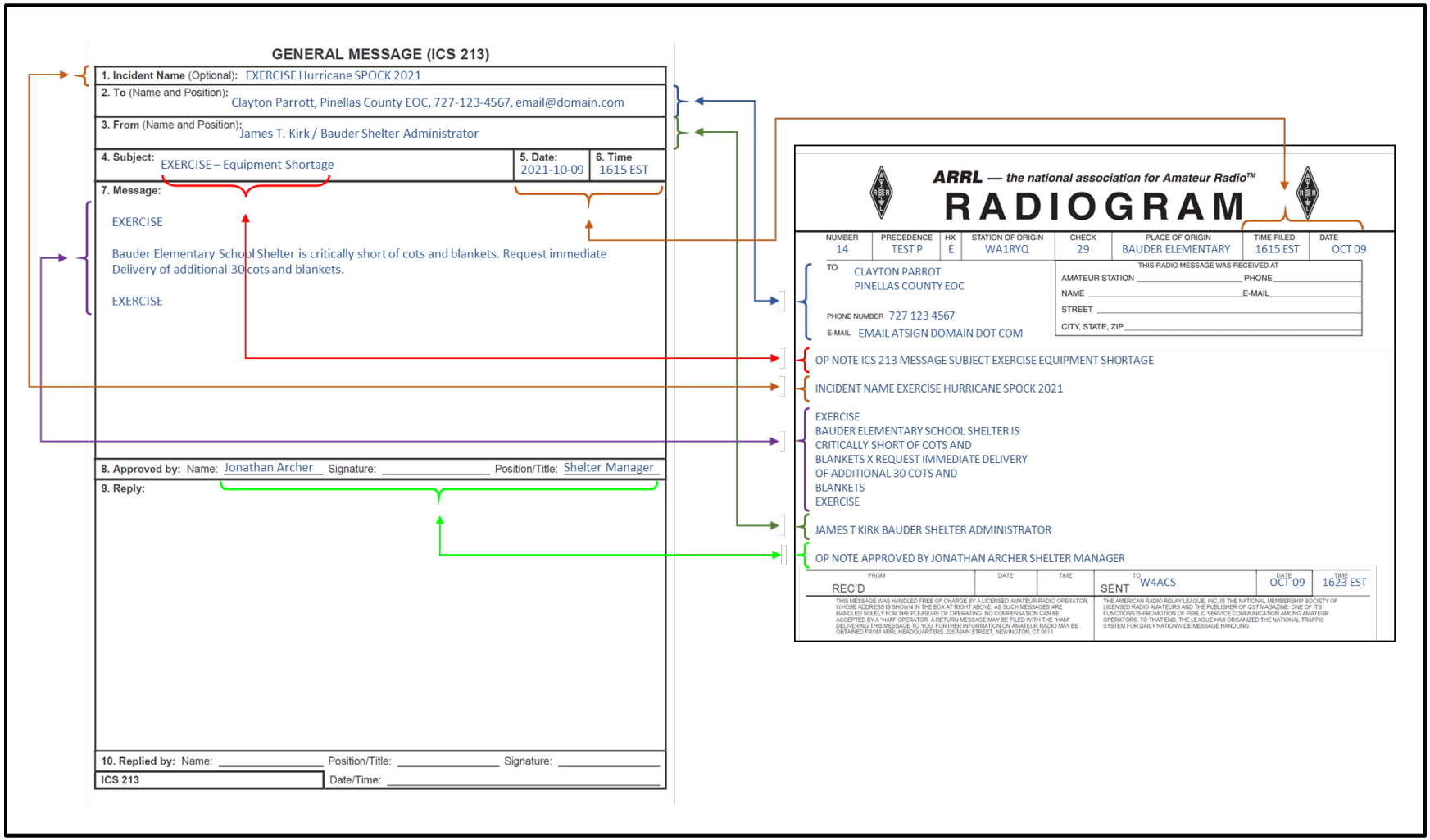


Figure 8. Form ICS 213 Conversion to Radiogram

5.1.5.2.2 Convert ICS 213 Reply Message to Radiogram

Many ICS 213 messages will request that the recipient provide a written response back to the originator. The lower section of the standard ICS 213 form is designed to record a message response. When an ACS/ARES® member is provided with an ICS 213 containing the response to a previously received ICS 213 formatted radiogram, the radio operator will need to convert the ICS 213 reply into a standard radiogram and then locate the radiogram containing the original ICS 213 so that the appropriate return address and message reference data can be added to the reply radiogram.

The information contained in each field of the ICS 213 reply message should be transferred to the corresponding radiogram field identified in Table VI. Figure 9 displays the mapping between the original ICS 213 radiogram, the ICS 213 reply message, and the ICS 213 reply radiogram.

Table VI. ICS 213 Reply Radiogram Field Conversion

No	ICS 213 Field Name	Radiogram Field
1	Incident Name	*Not used.*
2	To (Name and Position)	*Not used.*
3	From (Name and Position)	Addressee of the Radiogram.
4	Subject	*Not used.*
5	Date	*Not used.*
6	Time	*Not used.*
7	Message	*Not used.*
8	Approved by (Name/Position/Title)	*Not used.*
9	Reply	Text section of Radiogram.
10	Replied by (Name/Position/Time/Date)	Name and Position – Signature of radiogram. Time – Preamble Time. Use 24-hour format (Local Time). Date – Preamble Date.

The remaining fields of the radiogram should be completed in accordance with the information shown in Table VII. Once message conversion is complete, the user should send the message using standard voice or CW procedures.

When users receive a standard radiogram containing an ICS 213 reply message, users can convert the radiogram back into an ICS 213 prior to delivery.

Table VII. Radiogram Fields

Radiogram Field	Instructions
Message Number	The message number is a unique numeric value (i.e., *no* letters or special symbols) that is assigned by the station originating the reply message. The assigned number follows the message from source to destination and is never changed in route.
Precedence	Refer to paragraph 5.1.1 for detailed information about the use of precedence.
Handling Instructions (HX)	During ACS/ARES® activation, this optional field should only be used if the originating station is requesting that the addressee reply to or acknowledge receipt of the message. When a reply is requested, the HX code "**E**" should be entered into the field. If receipt acknowledgement is requested, the HX code "**C**" should be entered into the field. No other codes should be used.
Station of Origin	The amateur radio call sign of the station that originated the reply message. *Do not* use tactical call signs in this field during ACS/ARES® deployments.
Place of Origin	During an ACS/ARES® activation, this field is used to identify the deployment location of the station originating the reply message. If in use, the tactical call signs listed in Appendix D may be used in this field.
Addressee	Enter the Name and Position from the original ICS 213. Add the ***PLACE OF ORIGIN*** from the original radiogram that this message is responding to.

Table VII. Radiogram Fields	
Radiogram Field	**Instructions**
Addressee OP NOTE	Enter an OP NOTE that contains the phrase "**ICS 213 REPLY**". The OP NOTE must also include the ***MESSAGE NUMBER*** and ***STATION OF ORIGIN*** (call sign) from the original radiogram that this message is responding to. **EXAMPLE:** OP NOTE ICS 213 REPLY WA1RYQ 14
Signature OP NOTE	*Not used.*

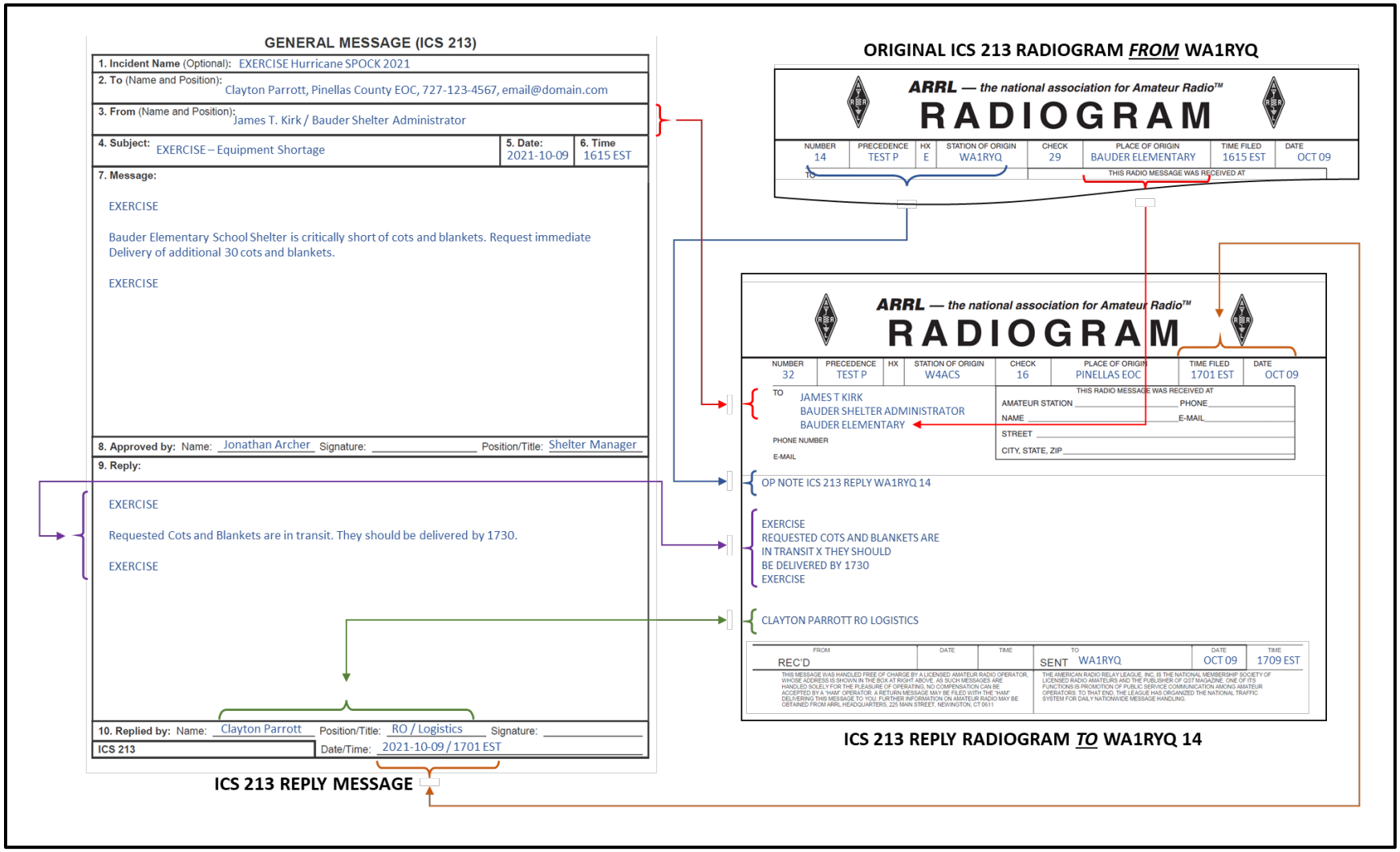


Figure 9. ICS 213 Reply Conversion to Radiogram

5.1.5.3 Winlink Messages

The Winlink development team has created a significant number of Hypertext Markup Language (HTML) based message templates that support both routine and emergency communication environments. A small sample of the many message templates available in Winlink are shown in Figure 10. Within this document, only the Winlink ICS 213 will be described in any detail. For additional information about Winlink, users should refer to the *Pinellas County ACS/ARES® Winlink Training Plan*.

Only those ACS/ARES® members who have completed the qualification steps documented in the *Pinellas County ACS/ARES® Winlink Training Plan* are eligible for independent deployment as Winlink operators.

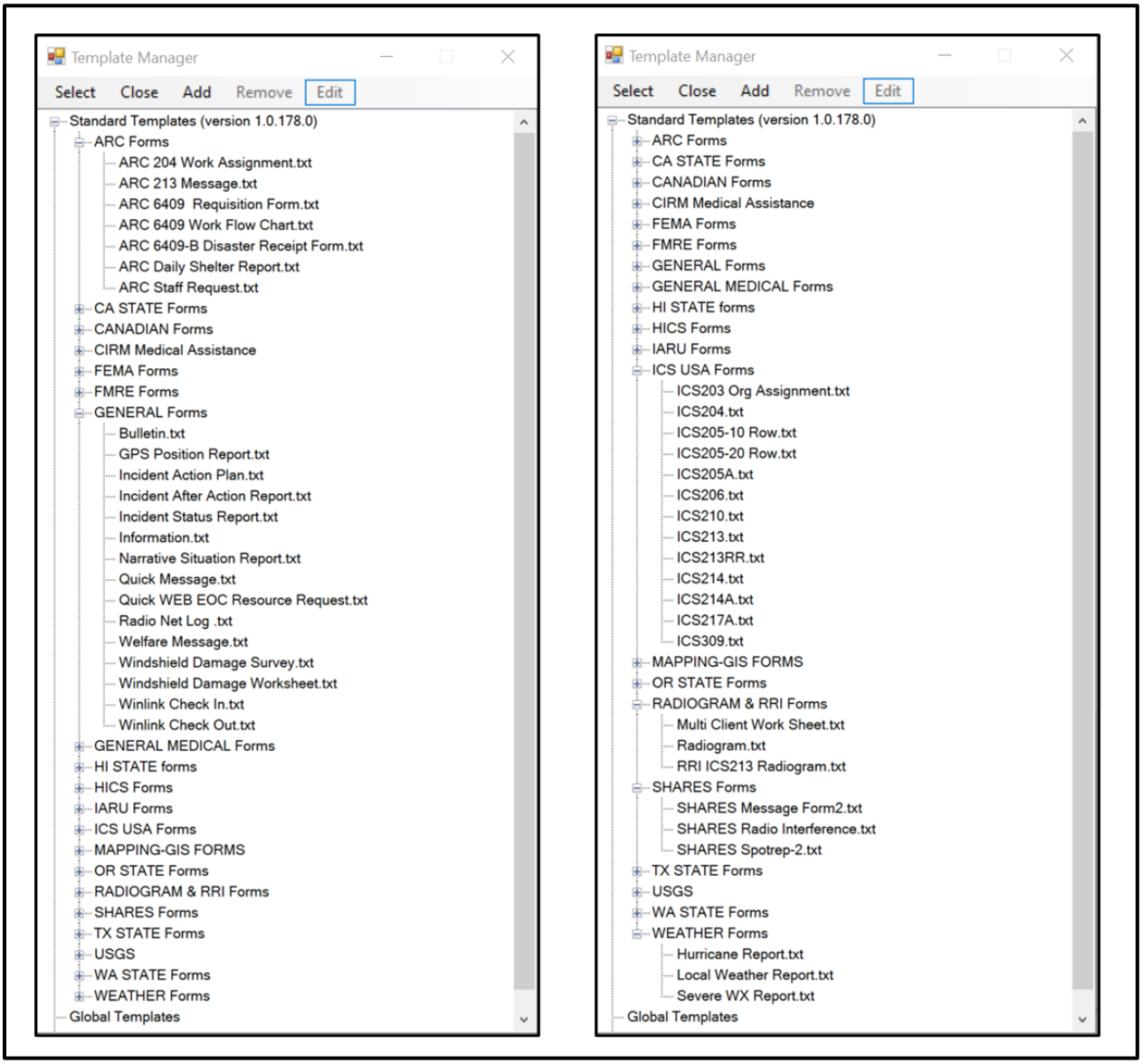


Figure 10. Winlink Message Templates

5.1.5.3.1 Winlink ICS 213 Message Form

Served agency personnel will provide message data to the Winlink operator as handwritten text, Microsoft (MS) Excel Spreadsheets, MS Word documents, or text files. It is the responsibility of the Winlink operator to enter the served agency data into the correct Winlink ICS form and send the information to the intended recipient. Served agency personnel will not operate the Winlink computer.

All served agency information imported into the Winlink computer is to be performed via "Sneaker-net". The Winlink computer is never to be connected to a served agency computer, network, or another digital device (e.g., Phone, tablet, etc.). Information is entered into the computer via Universal Serial Bus (USB) thumb drives. These procedures are implemented to mitigate the potential transmission of malicious software between systems.

When the Winlink operator selects the ICS 213 template, a computer browser window will automatically open and display the message template. Users simply enter the data from the original ICS 213 into the corresponding field of the Winlink form and press the SUBMIT button. Refer to Figure 11 for an example of a completed Winlink template.

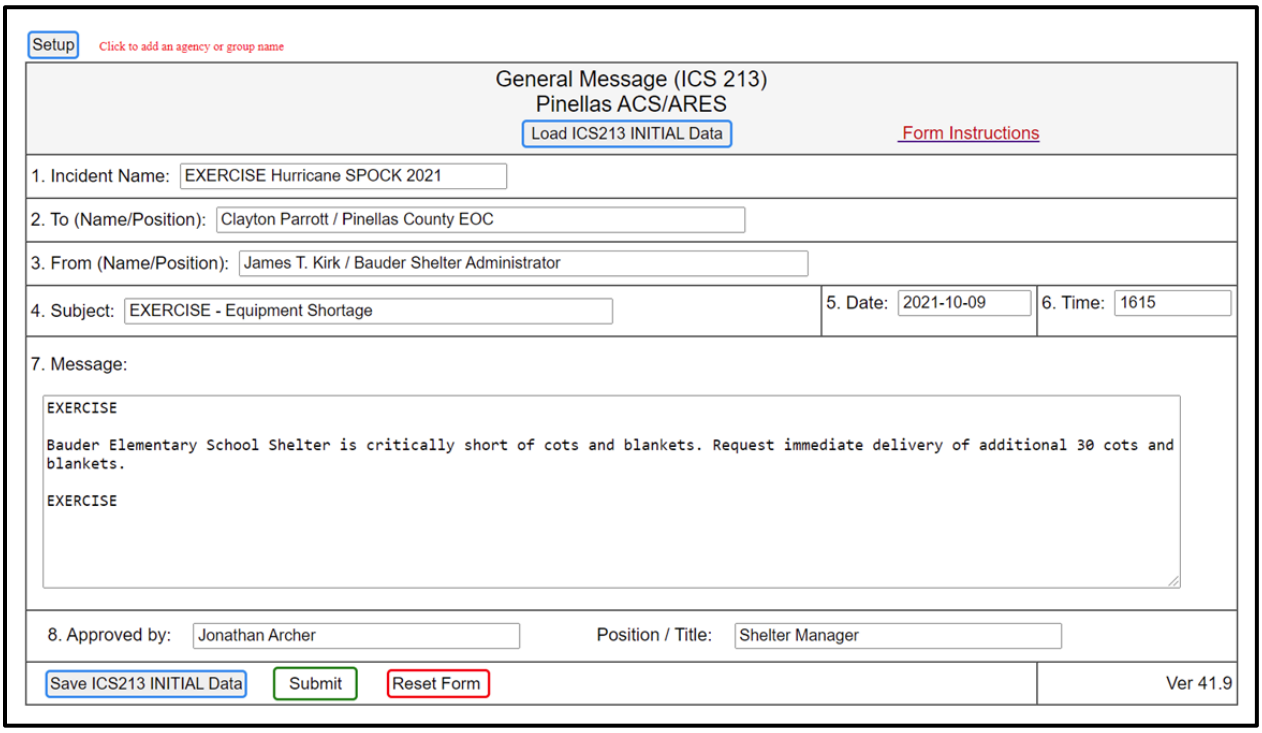


Figure 11. Winlink ICS 213 General Message Template

Once the message template is closed, the new message window will again be displayed. Three additional steps must be completed before the message can be sent. First, the Winlink operator must address the message to the intended recipient and send a copy to the Pinellas Admin Officer. Users should refer to Appendix D for the appropriate Pinellas ACS Winlink Tactical Address.

NOTE: *The requirement stating that a message copy must be sent to Admin Officer is not limited to the ICS 213. All Winlink messages, regardless of type, must include the Pinellas Admin Officer on the Cc line of the message.*

Second, the user must determine and assign the appropriate message precedence. Four precedence levels are defined within Winlink. Messages generated by ACS/ARES® will only be assigned a Winlink precedence of ROUTINE, PRIORITY, or IMMEDIATE. Under no circumstances will any message be assigned a Winlink precedence of FLASH. Table VIII should be used to identify the Winlink precedence that corresponds to the appropriate ARRL® NTS™ precedence definition.

Table VIII. WINLINK Message Precedence

Winlink Precedence	ARRL® NTS™ Precedence	SUBJECT LINE Preamble	Notes
FLASH (Z)	N/A	//WL2K Z/	***DO NOT USE***
IMMEDIATE (O)	EMERGENCY	//WL2K O/	
PRIORITY (P)	PRIORITY	//WL2K P/	
ROUTINE (R)	ROUTINE	//WL2K R/	Default for all messages

If the Winlink user determines that the appropriate Winlink precedence is ROUTINE, no further action is required before sending the message. If a precedence of PRIORITY or IMMEDIATE is required, the subject line preamble listed in Table VIII that corresponds to the selected precedence must be added to the beginning of the message subject line.

Finally, the user must ensure that the originator receives an acknowledgement that the ICS 213 was received by each addressee. Message Acknowledgements (receipts) can be a critical part of the documentation and audit trail created during an exercise or activation event. To receive an acknowledgement, the user must confirm that the "**Request Message Receipt**" box is checked

in the header of the new message. If it is checked, no further action is required. If it is *not* checked, the user must check the box.

An example of a Winlink ICS 213 message that has been assigned a precedence of PRIORITY is shown in Figure 12. The addressee, priority, and acknowledgement attributes are shown in **Red**. Users should refer to paragraph 5.3.4.1 for additional information about exchanging Winlink messages via digital networks.

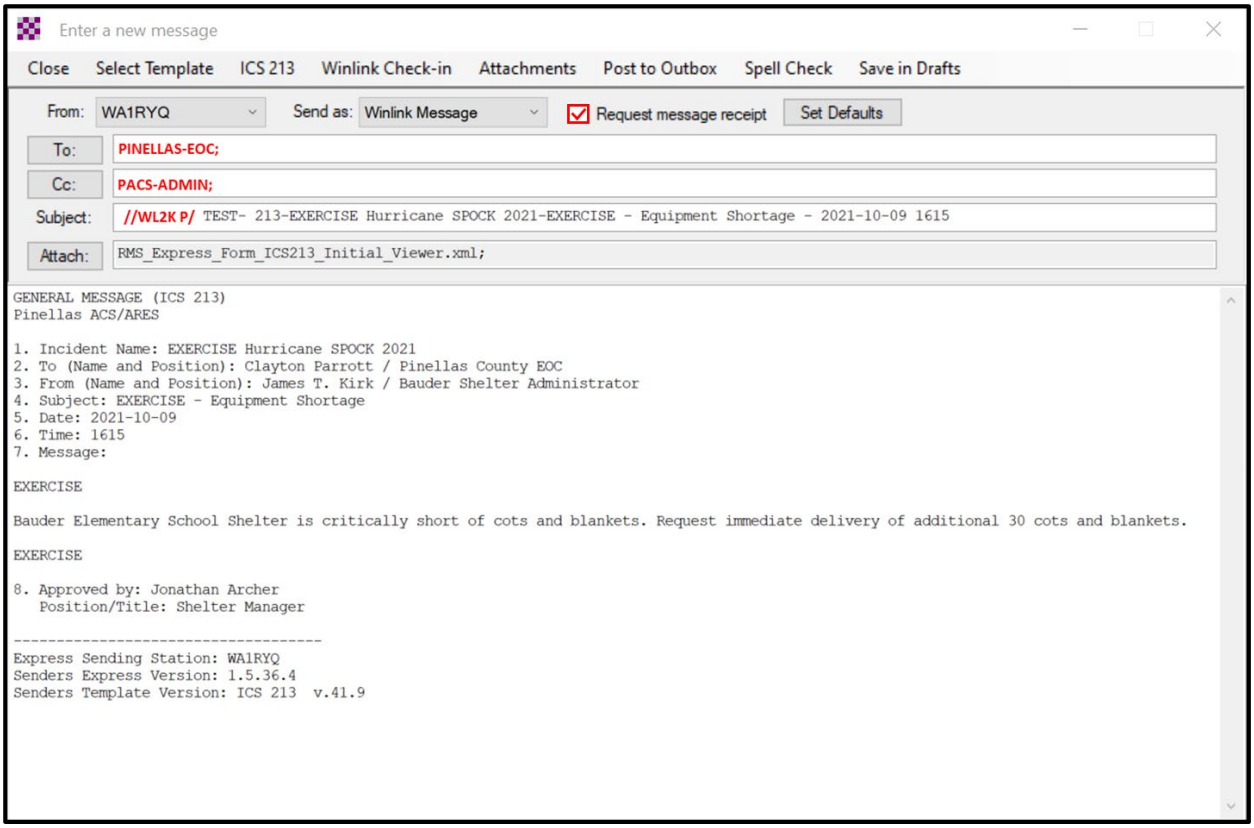


Figure 12. Completed Winlink ICS 213 Message

5.1.6 Exercise Messages

To become proficient at both creating and exchanging formal written traffic, ACS/ARES® will schedule and perform a variety of Drills, Functional Exercises, Full-Scale Exercises, and ARRL® Simulated Emergency Tests. During these training events, it is important that the messages generated and exchanged closely mirror those that users will likely encounter during a real activation event. However, it is just as important to ensure that no one mistakes a message generated during a training event as a report associated with a real-world emergency.

The following paragraphs describe how to properly format a message used during a training event.

5.1.6.1 Radiogram Exercise Message Format

To properly format a radiogram used during a drill or exercise, perform the steps listed below.

a. Message Precedence -The word "**TEST**" should be added to the precedence.

(1) TEST R

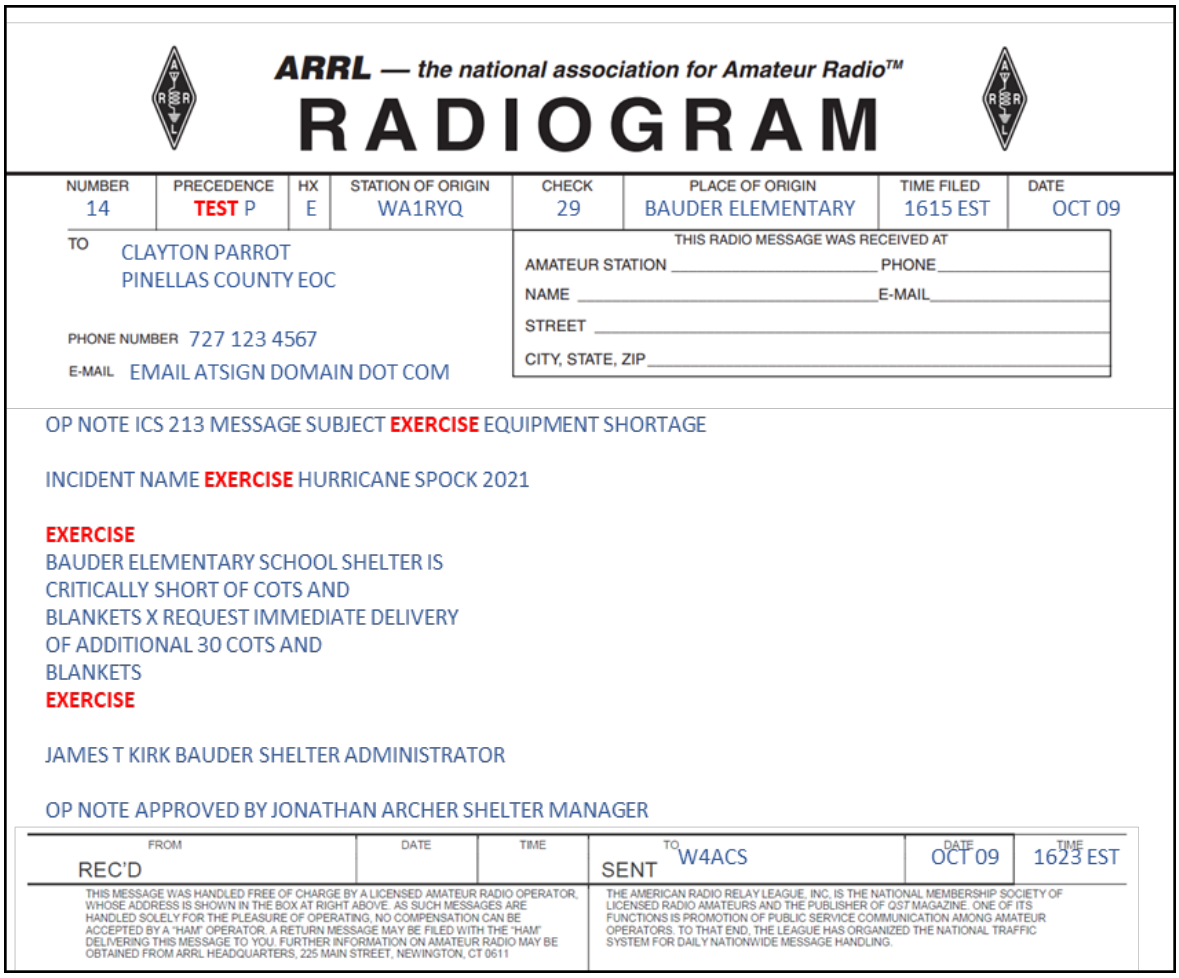
(2) TEST W

(3) TEST P

(4) TEST EMERGENCY

b. Message Text – Add the word "**EXERCISE**" to the text section of the radiogram. The word "**EXERCISE**" should be the first and last words in the text section of the radiogram.

Refer to Figure 13 for an example of a properly formatted exercise radiogram. The radiogram attributes that clearly mark the radiogram as an exercise message are shown in **RED**.



ARRL — the national association for Amateur Radio™

RADIOGRAM

NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE
14	TEST P	E	WA1RYQ	29	BAUDER ELEMENTARY	1615 EST	OCT 09

TO CLAYTON PARROT
PINELLAS COUNTY EOC

PHONE NUMBER 727 123 4567
E-MAIL EMAIL ATSIGN DOMAIN DOT COM

THIS RADIO MESSAGE WAS RECEIVED AT
AMATEUR STATION _____ PHONE _____
NAME _____ E-MAIL _____
STREET _____
CITY, STATE, ZIP _____

OP NOTE ICS 213 MESSAGE SUBJECT **EXERCISE** EQUIPMENT SHORTAGE

INCIDENT NAME **EXERCISE** HURRICANE SPOCK 2021

EXERCISE
BAUDER ELEMENTARY SCHOOL SHELTER IS
CRITICALLY SHORT OF COTS AND
BLANKETS X REQUEST IMMEDIATE DELIVERY
OF ADDITIONAL 30 COTS AND
BLANKETS
EXERCISE

JAMES T KIRK BAUDER SHELTER ADMINISTRATOR

OP NOTE APPROVED BY JONATHAN ARCHER SHELTER MANAGER

FROM	DATE	TIME	TO	DATE	TIME
REC'D			SENT W4ACS	OCT 09	1623 EST

THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR, WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING, NO COMPENSATION CAN BE ACCEPTED BY A "HAM" OPERATOR. A RETURN MESSAGE MAY BE FILED WITH THE "HAM" DELIVERING THIS MESSAGE TO YOU. FURTHER INFORMATION ON AMATEUR RADIO MAY BE OBTAINED FROM ARRL HEADQUARTERS, 225 MAIN STREET, NEWINGTON, CT 0611

THE AMERICAN RADIO RELAY LEAGUE, INC. IS THE NATIONAL MEMBERSHIP SOCIETY OF LICENSED RADIO AMATEURS AND THE PUBLISHER OF *QST* MAGAZINE. ONE OF ITS FUNCTIONS IS PROMOTION OF PUBLIC SERVICE COMMUNICATION AMONG AMATEUR OPERATORS. TO THAT END, THE LEAGUE HAS ORGANIZED THE NATIONAL TRAFFIC SYSTEM FOR DAILY NATIONWIDE MESSAGE HANDLING.

Figure 13. Radiogram Exercise Message

5.1.6.2 ICS 213 Exercise Message Format

To properly format an ICS 213 exercise message, perform the three steps listed below.

a. Incident Name (Block 1) – Add the word "**EXERCISE**" to the beginning of the Incident name.

b. Message Subject (Block 4) - Add the word "**EXERCISE**" to the beginning of the message subject.

c. Message Text (Block 7) – Add the word "**EXERCISE"** to the text section of the message. The word "**EXERCISE**" should be the first and last word in the message.

Refer to Figure 14 for an example of a properly formatted ICS 213 exercise message. The message attributes that clearly mark the ICS 213 as an exercise message are shown in **RED**.

GENERAL MESSAGE (ICS 213)

1. Incident Name (Optional): **EXERCISE** Hurricane SPOCK 2021		
2. To (Name and Position): Clayton Parrott, Pinellas County EOC, 727-123-4567, email@domain.com		
3. From (Name and Position): James T. Kirk / Bauder Shelter Administrator		
4. Subject: **EXERCISE** – Equipment Shortage	**5. Date:** 2021-10-09	**6. Time** 1615 EST
7. Message: **EXERCISE** Bauder Elementary School Shelter is critically short of cots and blankets. Request immediate Delivery of additional 30 cots and blankets. **EXERCISE**		
8. Approved by: Name: Jonathan Archer Signature: _____ Position/Title: Shelter Manager		
9. Reply:		
10. Replied by: Name: _____ Position/Title: _____ Signature: _____		
ICS 213	Date/Time: _____	

Figure 14. ICS 213 Exercise Message

5.1.6.3 Winlink ICS 213 Exercise Message Format

A Winlink ICS 213 exercise message is formatted in the same way as a standard ICS 213. Simply follow the steps documented in paragraph 5.1.6.2.

Refer to Figure 15 for an example of a properly formatted Winlink exercise ICS 213. The message attributes that clearly mark the ICS 213 as an exercise message are shown in **RED**.

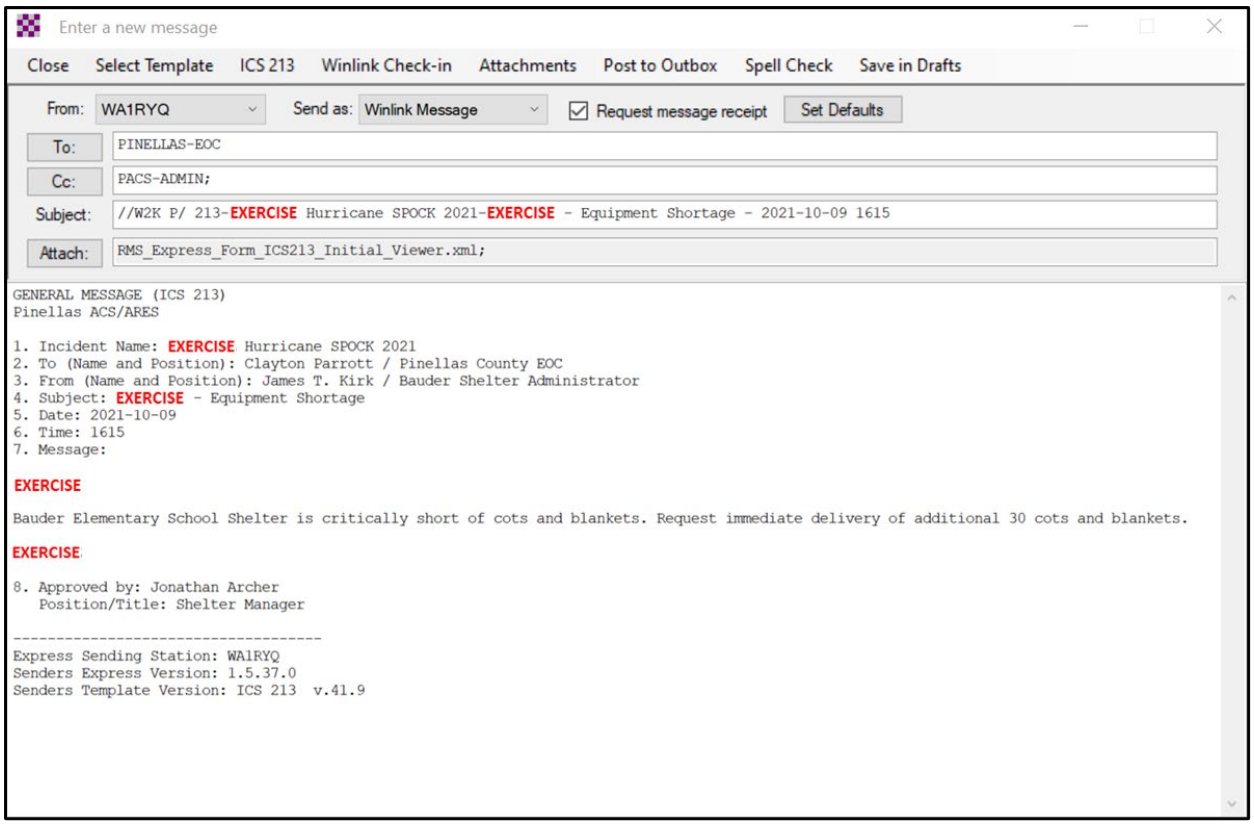


Figure 15. WINLINK Exercise Message

5.2 RECORD KEEPING

Record keeping is an important component of any exercise, event, or activation period. It provides a historical record of the events and actions that occurred during the activation period and will be instrumental in the creation of after-action reports and correction plans. County, state, and federal officials will also likely make use of this information during their own after-action analysis.

5.2.1 Site Activity Log ICS 214

The Activity Log is used to record all significant events that occur during an exercise, event, or activation period. Deployed members of ACS/ARES® are required to maintain an up to date and accurate record of all significant activities.

The ICS 214 has eight numbered fields. The six fields at the top of the form are unique to the activation event, site, and operational period.

a. **Incident Name (Block 1):** This field contains the name of the Incident/activation event that is associated with the ICS 214. This information will be provided by the Net Manager, Radio Officer, or his designee.

b. **Operational Period (Block 2):** This field contains the start date (month/day/year) and time (24-hour local time) and end date and time for the activation event. This is the period over which the ICS 214 is applicable.

Blocks three through six are designed for used by standard ICS organizations and are not fully applicable to ACS/ARES®. The Radio Officer may request that users modify these entries based on the type of activation event or location being supported.

c. **Name (Block 3):** This field contains the name of the facility being supported by ACS/ARES®. For example, if ACS/ARES® is supporting an emergency evacuation shelter, the name of the shelter should be entered into this field.

d. **ICS Position (Block 4):** This field identifies the job being performed by the organization completing the form. In almost all cases users should enter *Radio Operator*.

e. **Home Agency (and Unit) (Block 5):** This field contains the name of the organization completing the form. Users should enter *Pinellas ACS/ARES®*.

f. **Resources Assigned (Block 6)**: This field contains the Name and FCC call sign of the individual that is associated with the ICS 214. Note that it is important for each individual to maintain a personal ICS 214; however, if a site ICS 214 is also being maintained, the name of each Pinellas ACS team member at the site should also be listed.

Once the top of the form is complete, users will enter significant events into Block 7. When entering information onto the form, time should be entered using a 24-hour format. Entries should be in local rather than UTC time. Significant events include but are not limited to the following:

a. Arrival and departure of ACS/ARES® personnel
b. Shift and operator changes
c. Changes to station operational availability. Include addition or loss of specific bands, modes, power, etc.
d. Changes in utility status (e.g., shore power, internet, cell service, water, etc.)
e. Events that could impact the ability of the deployed location to perform its defined mission (e.g., Generator failures, supply shortages, structural damage, overcrowding, unrest, etc.)
f. Meetings and Briefings
g. Issues with personnel
h. Injuries
i. Rumors
j. Task assignments and completions

The final block on the form, Block 8, contains the name, title, and signature of the individual completing the form. Once complete, the time and date that the form was closed should also be entered. The Activity Log is provided to the Pinellas ACS Admin officer at the conclusion of the exercise, event, or activation period. Refer to Figure 16 for an example of this form.

ACTIVITY LOG (ICS 214)

1. Incident Name:	2. Operational Period: Date From: 4/30/2021 Date To: 05/01/2021 Time From: 0000 EST Time To: 2359 EST	
Hurricane SPOCK 2021 (EXERCISE)		
3. Name: Bauder Elementary	**4. ICS Position:** Radio Operator	**5. Home Agency** (and Unit)**:** Pinellas ACS/ARES®

6. Resources Assigned:

Name	ICS Position	Home Agency (and Unit)
Drake, WA1RYQ	Radio Operator	Pinellas ACS/ARES®

7. Activity Log:

Date/Time	Notable Activities
4/30/2021 1605	Pinellas ACS team arrived on site at Bauder Elementary School Shelter and begin equipment set-up.
4/30/2021 1624	Completed equipment set-up and notified the NCS that the site is operational.
4/30/2021 1702	First evacuees arrive at the shelter.
4/30/2021 1832	Shelter manager reports that the delivery of water bottles is short by a count of 200 units. Manager will request additional inventory via phone as cell service is still operational.
4/30/2021 1901	Internet service at the shelter is no longer operational. Power and cell service still OK.
4/30/2021 2243	Lost shore power. Radio equipment now operating on battery. Land line and cell service OK
4/30/2021 2245	Land line and cell service down.
4/30/2021 2316	Shelter manager has requested that ACS follow-up with EOC about status of water bottle delivery.

8. Prepared by: Name: Position/Title:_____ Signature: _____

ICS 214, Page 1

Date/Time: _____

Figure 16. Sample Site Activity Log ICS 214

5.2.2 Site Communications Log ICS 309

The Communications Log is used to record the details of all event specific message traffic that is exchanged during an exercise, event, or activation period. The NCS and ANCS will each maintain a log of the message exchanges that take place on their associated nets and each net participant will maintain a separate log of the message traffic sent and received by their individual station. These logs provide the basic reference from which to extract communications traffic history.

A sample Site Communications Log, ICS 309, for voice and CW nets is shown in Figure 17. Since the ICS 309 is not a standard NIMS ICS form, users may encounter slightly different variants during a deployment. Therefore, users should concentrate on the information that should be recorded in the communications log rather than the exact format of the ICS 309.

The ICS 309 used by Pinellas ACS/ARES® has eight numbered fields. The four fields at the top of the form are unique to the activation event, site, and operational period.

a. **Incident Name (Block 1):** This field contains the name of the Incident/activation event that is associated with the ICS 309. This information will be provided by the Net Manager, Radio Officer, or his designee.

b. **Operational Period (Block 2):** This field contains the start date (month/day/year) and time (24-hour local time) and end date and time for the activation event. This is the period over which the ICS 309 is applicable.

c. **Radio Net Name / Tactical Call Sign / Location (Block 3):** The content of this field is dependent on the position being filled by the Radio Operator.

    (1) NCS/ANCS: This field will contain the name of the radio net being managed by the NCS and ANCS.

    (2) Net Participant: This field will contain the tactical call sign of the net participant. If no tactical call sign has been assigned, this field will contain the location of the participant.

d. **Radio Operator (Block 4):** This field contains the name and FCC call sign of the primary radio operator.

Once the top of the form is complete, users should log all incoming and outgoing formal message traffic, regardless of precedence into Block 5. When exchanging informal/tactical message traffic, users should log any message with a precedence of Emergency or Priority. Additional tactical message traffic can be logged at the user's discretion. Each entry in Block 5 is divided into the five fields listed below.

a. **Time:** The time each message was sent or received. Use 24-hour format (Local Time).

b. **Call Sign/ID FROM:** The FCC call sign or Tactical Call Sign of the station sending the message. When the sending station is the local station (i.e., the station identified in Blocks 3 and 4), the field can be left blank.

c. **Call Sign/ID TO:** This field will contain the FCC call sign or tactical call sign of the station directly receiving the message. When the receiving station is the local station, the field can be left blank.

d. **Msg # / Precedence / Origin:**

(1) Formal message – This field will contain the message number, message precedence, and the FCC call sign of the station that originated the message.

(2) Informal message – This field will contain the message precedence.

e **Message Subject/Notes:** This field should contain the subject of the message and any additional information that will help identify or track the message.

The final three blocks on the form contain the name of the individual completing the form and the time and date that the form was finalized.

a. **Prepared by (Block 6):** Enter name and FCC call sign of the person completing the log.

b. **Date and Time Prepared (Block 7):** Enter the time and date that the log was finalized and ready for delivery to the PACS Admin Officer.

c. **Page __ of __ (Block 8):** Sequentially number all pages for the operational period covered by the log. Page numbers start over at one at the beginning of each new operational period.

The Site Communications Log is provided to the Pinellas ACS Admin officer at the conclusion of the exercise, event, or activation period.

Communications Log (ICS 309)

1. Incident Name	2. Operational Period
Hurricane SPOCK 2022 (EXERCISE)	**Date From:** 01/30/2022 **Date To:** 01/30/2022 **Time From:** 0000 **Time To:**
3. Radio Net Name / Tactical Call Sign / Location LEALMAN EXCHANGE	**4. Radio Operator (Name, Call Sign)** DRAKE, WA1RYQ

5. COMMUNICATIONS LOG

Time 24Hr Local	Call Sign/ID		Msg # / Precedence / Origin	Message Subject/Notes
	FROM	TO		
				Start of new Day January 30 2022
0545		PC EOC	001 / P / WA1RYQ	Status Report
0637	PC EOC		023 / P / W4ACS	Generator fuel delivery schedule
0645	BOCA CIEGA		043 / P / KC4SXO	(RELAY) Origin – BOCA CIEGA; Destination – PC EOC
0651		PC EOC	043 / P / KC4SXO	(RELAY) Origin – BOCA CIEGA; Destination – PC EOC
0731		PC EOC	002 / P / WA1RYQ	ICS 213 – Equipment Shortage; 30 January 2022; 07:25; Signed James T Kirk
0816		PC EOC	EMERGENCY	Request for immediate medical assistance

6. Prepared By (Name, Call Sign)	7. Date & Time Prepared	8.
Michael Drake, WA1RYQ		**Page 1 of 1**

PACS ICS 309

Figure 17. Sample Communications Log ICS 309

5.2.2.1 Winlink Site Communications Log ICS 309

The Winlink computer program can generate an ICS 309 communications log from the information stored in its internal message database. It is therefore unnecessary to record Winlink messages in the Site Communications Log described in paragraph 5.2.2. At the conclusion of the exercise, event, or activation period, Winlink users should generate a Winlink ICS 309 and send the log to the Pinellas ACS Admin officer.

5.2.3 Additional Records

In addition to the Activity (ICS 214) and Site Communications Logs (ICS 309), users should also retain the information listed below. These records should be provided to the Pinellas ACS Admin officer at the conclusion of the exercise, event, or activation period.

a. Copies of all ICS documentation provided to the deployment team (e.g., ICS 201, ICS 205, ICS 217A, etc.)

b. Copies of all formal messages sent and received. Messages should be kept in numerical order (if possible) to simplify later location if a response to a message is received or if retransmission or clarification is required.

c. Net Control Logs should record the call sign, tactical call sign, location, and status of each station that checks into the net. The log should also list all traffic that is passed and any significant issues that were encountered.

5.3 PINELLAS ACS/ARES® NETS AND FREQUENCIES

Effective communication will only take place if ACS/ARES® implements a detailed communications plan and ensures that the membership has ready access to the document. The ICS 217A, Communications Resource Availability Worksheet, and the ICS 205, Incident Radio Communications Plan, will be used to document and distribute information to the membership.

The ICS 217A lists all the potential VHF/UHF nets, HF nets, and digital nets that could be used during an ACS/ARES® activation event. The document describes network functions, repeater system operational parameters, simplex frequencies, and operating modes. When ACS/ARES® activation is imminent, the ACS Net Manager in coordination with the EC/RO will identify the networks needed to support the activation event. The Net Manager will then extract the appropriate data from the ICS 217A, to construct the incident specific Radio Communications Plan, ICS 205.

The Radio Communication Plan developed by the Net Manager will be posted to the ACS Web site and emailed to the ACS/ARES® membership as soon as it is available. If necessary, an updated ICS 205 can also be distributed via Winlink.

The ICS 217A for Pinellas ACS/ARES® is documented in Appendix F. A sample ICS 205 is shown in Figure C- 4.

Each of the potential networks used by ACS/ARES® is documented in the following paragraphs. The interactions between each of the networks is shown in Figure 18.

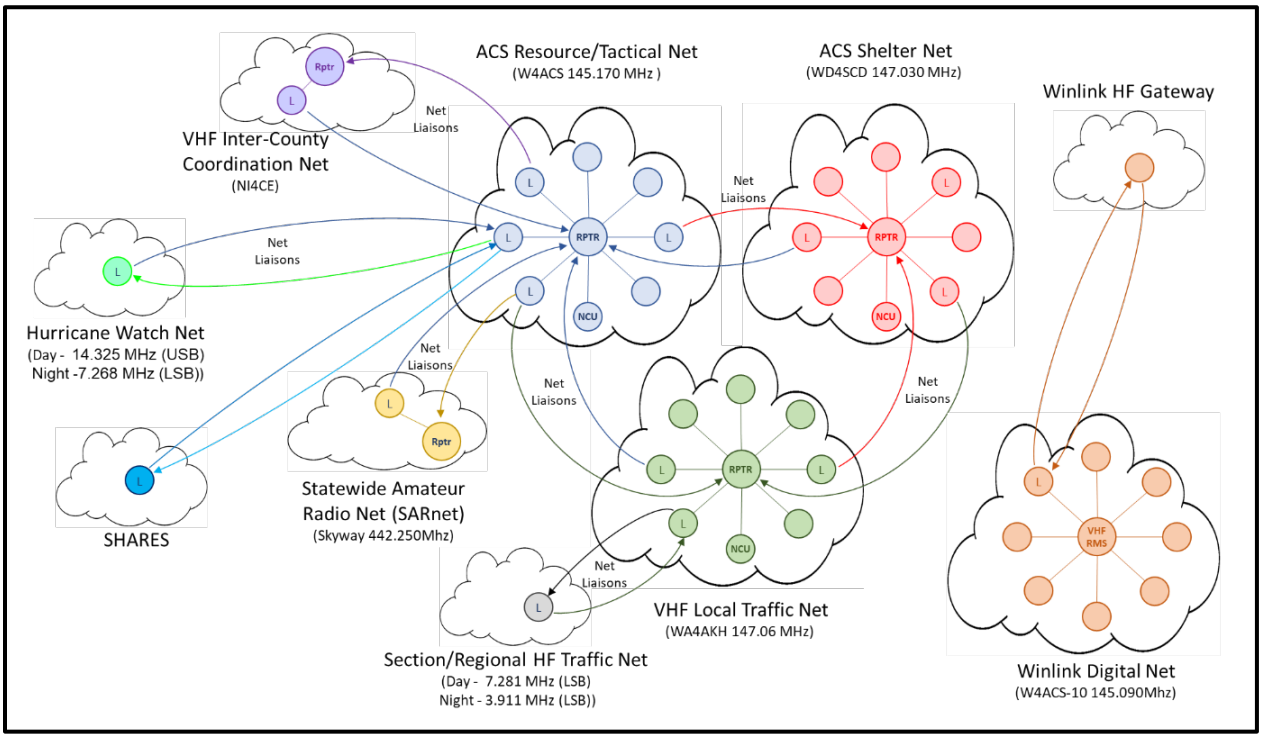


Figure 18. Pinellas ACS Emergency Net Structure

5.3.1 ACS/ARES® Tactical-Resource Net

The Pinellas County ACS/ARES® Tactical-Resource net will be activated to support the emergency and non-emergency events described in paragraph 4.1. When activated, the net has two main functions. First, as a tactical net, it will be used to manage the flow of real-time ACS tactical communications within the county. Second, as a resource net, its NCS will keep track of all net participants, the capabilities of each participant, and the deployment status of each participant. This net will also be used to issue assignments; locate needed equipment and supplies; and dispatch repair crews as needed. To keep the frequency open for tactical exchanges and resource management, whenever possible, formal written traffic will be redirected to the Winlink Digital Data net, the Pinellas VHF traffic net, or the ACS/ARES® Shelter net, as appropriate, for servicing.

The W4ACS repeater system is the primary repeater used to support the tactical-resource net. Refer to Table IX for operational information.

NOTE: *Each of the frequency tables shown in this section have seven columns. The column definitions are consistent with the definitions use for the ICS 205. Refer to* ICS 213RR Resource Request Message *for ICS 205 column definitions.*

Table IX. W4ACS Repeater System Frequencies						
Function	**RX Freq N or W**	**RX Tone/NAC**	**TX Freq N or W**	**TX Tone/NAC**	**Mode A, D, M**	**Remarks**
Tactical-Resource	145.1700W	CSQ	144.5700W	156.7	A	Linked Rptr
Tactical-Resource	443.4000W	CSQ	448.4000W	156.7	A	Linked Rptr

5.3.2 ACS/ARES® Shelter Net

The ACS/ARES® Shelter net will be activated anytime the Pinellas County EOC issues an evacuation order. The mission of the ACS/ARES® Shelter net is to provide communications between each county evacuation shelter and the county EOC. The WD4SCD repeater system is the primary repeater used to support this net. The WD4SCD repeater has a single transmitter site and five receive sites distributed throughout Pinellas County. The repeater receive sites are connected to the transmitter site using UHF communication links. Users should identify the receiving station that is closest to their current location and then program their radio with the corresponding Continuous Tone Coded Squelch System (CTCSS) tone documented in Table X. Refer to Figure 19 for the location of each WD4SCD repeater site.

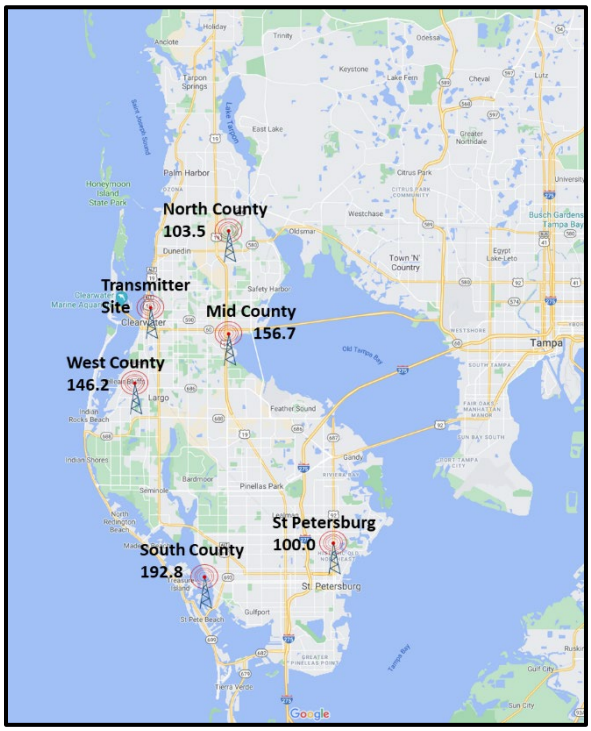


Figure 19. WD4SCD Repeater Site Locations

Table X. WD4SCD Repeater System Frequencies						
Function	**RX Freq N or W**	**RX Tone/NAC**	**TX Freq N or W**	**TX Tone/NAC**	**Mode A, D, M**	**Remarks**
Shelter Net	147.0300W	CSQ	147.6300W	100.0	A	St Petersburg
Shelter Net	147.0300W	CSQ	147.6300W	103.5	A	North County
Shelter Net	147.0300W	CSQ	147.6300W	156.7	A	Mid County
Shelter Net	147.0300W	CSQ	147.6300W	146.2	A	West County
Shelter Net	147.0300W	CSQ	147.6300W	192.8	A	South County

5.3.3 Traffic System Nets

Traffic system nets will be used to exchange formal message traffic with stations both within and outside of Pinellas County. Three nets will be available to process traffic during an activation event: A local VHF traffic net, an HF Section/Regional traffic net, and a Winlink digital

data net. When possible, users should first attempt to send and receive messages via the Winlink Digital Data network before submitting the traffic to the local VHF traffic net.

5.3.3.1 Local VHF Traffic Net

The local VHF traffic net is used to exchange formal message traffic between stations within Pinellas County and as a gateway for traffic destined for or received from locations outside of the Tampa Bay region. A Section/Regional traffic net liaison station will be assigned to this net to expedite delivery of out of region traffic. The WA4AKH repeater system is the primary repeater used to support the local VHF traffic net. Refer to Table XI for operational information.

Table XI. Local VHF Traffic Net Frequencies

Function	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
Traffic Net - Voice	147.0600W	CSQ	147.6600W	CSQ	A	WA4AKH

5.3.3.2 Section/Regional Traffic Nets

The Section and Regional nets listed in Table XII are used to send and receive traffic destined for or received from locations outside of the Tampa Bay region. A liaison station will be assigned to the Pinellas County local VHF traffic net to expedite the delivery of out of region traffic.

Table XII. Section/Regional Traffic Net Frequencies

Function	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
WC FL ARES®	3.9110		3.9110		A	(1930 to 0730 ET)
North FL Emergency Net	3.9500		3.9500		A	(1930 to 0730 ET)
South FL ARES®	3.9400		3.9400		A	(1930 to 0730 ET)
WC FL ARES®	7.2810		7.2810		A	(0730 to 1930 ET)
North FL Emergency Net	7.2420		7.2420		A	(0730 to 1930 ET)

Table XII. Section/Regional Traffic Net Frequencies						
Function	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
South FL ARES®	7.2400		7.2400		A	(0730 to 1930 ET)

5.3.4 Digital Data Networks

5.3.4.1 Winlink Digital Data Net

The Winlink Digital Data Net is used to exchange both informal and formal message traffic between deployed ACS/ARES® users and the Pinellas EOC.

During many of the scenarios during which the data network will be operational, VHF RMS stations within the Tampa Bay region are likely to lose internet access. Therefore, VHF RMS stations will be configured to accept local message traffic, hold messages locally, and deliver messages addressed to local users who connect to the RMS.

Digital message flow control will be performed by manual collision avoidance; each user waiting for the frequency to become available before sending or receiving traffic. The ACS/ARES® Shelter net will be used to notify Winlink digital net participants that digital traffic has been sent to the RMS.

If the NCS for the ACS/ARES® Shelter net determines that a more managed form of flow control is required on the Winlink digital net, the NCS will take control of the digital net and users will be required to request permission before connecting to the RMS to deliver or retrieve message traffic.

The Winlink computer program maintains a database of all Winlink RMS stations. The database contains the relative location, modes, and frequencies of operation for each station. Within Pinellas County, the Winlink RMS stations identified within Table XIII are configured to support ACS/ARES®. The W4ACS-10 Winlink RMS is the primary RMS used during ACS/ARES® activation.

Table XIII. Digital Data Network RMS Stations						
Function	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
1200 baud Packet	145.0900W		145.0900W		D	W4ACS-10 EMCOMM Group
1200 baud Packet	145.0500W		145.0500W		D	N4GD-10 PUBLIC Group
VARA FM Wide	145.0700W		145.0700W		D	KJ4RUS-10 PUBLIC Group
1200 baud Packet	145.0700W		145.0700W		D	KJ4RUS-10 PUBLIC Group

If Winlink message traffic is required to leave the Tampa Bay region during an event where internet access has been lost throughout the Tampa Bay area, the ACS Shelter NCS will assign an HF capable Winlink station to act as a liaison and all out of region traffic will be sent to the liaison station for relay out of area.

5.3.4.2 Automatic Packet Reporting System®.

The Automatic Packet Reporting System® (APRS®) is used to report position data from ACS/ARES® units in the field, real-time weather information from amateur radio weather stations, and bulletins of interest to the community. APRS® also supports a text messaging capability between APRS® enabled units. Computer software, such as APRSIS32, can be used to display this information on a map of the region.

The APRS® digipeaters operating within the Tampa Bay area are listed in Table XIV.

Table XIV. APRS® Stations and Frequencies						
Function	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
APRS® Digipeater	144.3900W		144.3900W		D	Verna-Manatee
APRS® Digipeater	144.3900W		144.3900W		D	Riverview-Hillsborough
APRS® Digipeater	144.3900W		144.3900W		D	Holiday-Pasco

Table XIV. APRS® Stations and Frequencies						
Function	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
APRS® Digipeater	144.3900W		144.3900W		D	Rocky Point Tampa
APRS® Digipeater	144.3900W		144.3900W		D	Belleair

5.3.5 VHF Inter-County Coordination Net

The WA4GDN repeater (New Port Richey) has been designated as the inter-county operations frequency for Emergency operations during extensive or long-term events affecting multiple counties in Pinellas/Pasco/Hillsborough.

This frequency is for NCS use only and should be used to relay significant emergency events moving from county to county or along county borders including weather emergencies.

If the WA4GDN repeater is unavailable, then the N4TP repeater can be used as the inter-county frequency with the permission of the Hillsborough ARES®/RACES EC/RO.

WCF ARES® nets will be operated on a section level upon authorization of the WCF section EC or the section manager. Such nets will be conducted to support inter-county emergency operations using the NI4CE repeater system. Refer to Table XV for operational information about inter-county coordination repeater systems.

Table XV. Inter-County Coordination						
Function	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
Tactical-Traffic	146.6700W	CSQ	146.0700W	146.2	A	WA4GDN N Prt Rich
Tactical-Traffic	147.1050W	CSQ	147.7050W	146.2	A	N4TP TARC EOC
Tactical-Traffic	145.4300W	CSQ	144.8300W	100	A	NI4CE Verna
Tactical-Traffic	443.4500W	CSQ	448.4500W	100	A	NI4CE Holiday
Tactical-Traffic	442.5500W	CSQ	447.5500W	100	A	NI4CE Riverview

5.3.6 Statewide Amateur Radio Net

"The Statewide Amateur Radio Network (SARnet) is a network of linked UHF voice repeaters that serves the State of Florida. During a significant emergency event, SARnet may be called upon for support, through an official state emergency request, and radio traffic in and out of an affected area may become heavy. … During such an emergency, if a controlled net is called, it will be by [amateurs] working with the county and state EOCs." (SARnet, 2021)

The SARnet frequencies accessible from Pinellas County are listed in Table XVI.

Table XVI. SARnet Frequencies

Function	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
Tactical-Traffic	442.2500W	CSQ	447.2500W	146.2	A	Skyway
Tactical-Traffic	442.8500W	CSQ	447.8500W	146.2	A	Tampa
Tactical-Traffic	444.8000W	CSQ	449.8000W	100	A	Sarasota

5.3.7 Hurricane Watch Net

"The primary mission of the Hurricane Watch Net is to disseminate tropical cyclone advisory information to island communities in the Caribbean, Central America, along the Atlantic seaboard of the U.S., and throughout the Gulf of Mexico coastal areas. [The Net will] also collect observed or measured weather data from amateur radio operators in the storm affected area as well as any post storm damage, and convey that information to the Hurricane Forecasters in the National Hurricane Center via the amateur radio station in the center (**WX4NHC**)." (Net, 2021)

The Hurricane Watch Net Frequencies are documented in Table XVII.

Table XVII. Hurricane Watch Net Frequencies						
Function	**RX Freq N or W**	**RX Tone/NAC**	**TX Freq N or W**	**TX Tone/NAC**	**Mode A, D, M**	**Remarks**
Traffic	14.3250		14.3250		A	USB - Day
Traffic	7.2680		7.2680		A	LSB - Night

5.3.8 SKYWARN® Net

The mission of the Pinellas County SKYWARN® program is to provide the National Weather Service Forecast Office at Tampa Bay with timely and accurate reports of severe weather. SKYWARN® operations within Pinellas County are documented in the *Pinellas SKYWARN® Operational Guidelines Policy and Procedures* document.

NOTE: *The W4ACS repeater is the primary repeater system for SKYWARN® operations within Pinellas County. However, if Pinellas County activates ACS/ARES®, the operation of ACS/ARES® will take precedence over SKYWARN® operations.*

5.3.9 SHARES Coordination Network

The SHAred RESources (SHARES) Coordination Network (SCN) is the Department of Homeland Security's High Frequency (HF) Radio System. Its purpose is to provide an additional means for users with a national security and emergency preparedness mission to communicate when landline and cellular communications are unavailable. Local governments, state governments, the federal government, critical infrastructure, and disaster response agencies can use SHARES to coordinate and transmit their emergency messages. The SHARES radio network is available 24-hours a day to provide emergency communications and operates at one of three readiness levels.

a. **Operational Level 3** - Conditions normal. No emergency exists. The ten-channel SCN may be used by SHARES station personnel for training and non-emergency operations.

b. **Operational Level 2** - Emergency potential exists. Non-emergency operations on the SCN suspended. SCN monitoring increased. Communications operations established on the National and Regional nets to receive Stations Availability Reports.

c. **Operational Level 1** - Emergency exists. SHARES message support required. National and regional nets maintain full-period operations to receive Station Availability Reports, to list SHARES message traffic, and to coordinate the processing of SHARES messages.

The ACS Radio room located at the Pinellas County EOC has an operational SHARES radio system that can exchange digital traffic using Winlink PACTOR 3 and PACTOR 4 protocols. Each county EOC within the WCF region that has an operational SHARES system is listed in Table I. During activation events, EOC radio operators will need to consult the SHARES Handbook to identify the stations, frequencies, and/or Automatic Link Establishment addresses needed to send and receive message traffic using the SCN.

5.4 CONTINGENCY OPERATIONS

Once activated, ACS/ARES® must continue to perform its mission even when equipment failures render one or more repeater systems inoperative. The loss of shore power, back-up power systems, masts, or antennas can disable a repeater and immediately disrupt network operations. Although it is not possible to plan for every potential failure, the contingency plans listed in the following paragraphs should address the failures most likely to be encountered.

5.4.1 Tactical-Resource Net Repeater System Failure

During an activation event, Pinellas ACS will establish a Tactical-Resource net using the W4ACS repeater system. If for any reason this repeater system becomes unusable, Pinellas ACS will implement the following contingency plan.

a. The Tactical-Resource NCS will perform the following actions.

(1) Starting with the primary backup repeater system, WD4SCD, identify the highest priority repeater system listed in Table XVIII that is operational.

(2) If ***none*** of the repeaters listed in Table XVIII are operational, then activate a simplex net in accordance with the procedures documented in paragraph 5.4.3.

Table XVIII. Back-up Repeater System Frequencies

Function	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
Primary Backup	147.0300W	CSQ	147.6300W	156.7[A]	A	WD4SCD
Secondary Backup	147.0600W	CSQ	147.6600W		A	WA4AKH
Third Backup	146.8500W	CSQ	146.2500W	146.2	A	W4ORM
Forth Backup	***TBD***		***TBD***	***TBD***	***A***	***TBD***

[A] Refer to Table X for a complete list of the CTCSS tones for the WD4SCD repeater system.

(3) Select the highest priority backup repeater and then announce on the W4ACS output frequency that the ACS/ARES® Tactical-Resource net is moving to the selected back-up repeater system. The announcement should identify the back-up repeater system and reference the appropriate ICS 205.

NOTE: *Some stations monitoring the W4ACS repeater may have activated the tone squelch feature on their local transceiver. To ensure that all stations receive the simplex announcements broadcast on the output frequency of the repeater, a subaudible tone of 156.7 Hz must be utilized by the NCS and alternate NCS during these announcements.*

(4) Direct the alternate NCS to remain on the W4ACS output frequency and repeat the announcement once every 15-minutes for 1-hour.

(5) Change frequency to the selected back-up repeater system.

(6) If a secondary net is operational on the selected back-up repeater system (e.g., Shelter net), wait for a break in message traffic and then call the NCS for the secondary net.

(a) Notify the NCS that the primary repeater system has failed and that the ACS/ARES® Tactical-Resource net will be combined with the secondary net.

(b) The Tactical-Resource NCS will assume the duties as the NCS for the combined net. The Secondary net's NCS will assume the role of assistant NCS.

(c) Since this is a combined net, a new net roster will need to be created. The NCS should re-establish the net and call for net check-ins.

(7) If a secondary net is *not* operational on the selected back-up repeater system, perform the following actions.

(a) Announce that the ACS/ARES® Tactical-Resource net is now active on the selected back-up repeater system.

(b) Perform a rollcall of ACS/ARES® Tactical-Resource net participants to determine which stations successfully transitioned to the new repeater system.

b. Tactical-Resource net participants will perform the following actions.

(1) Listen to and follow any directions heard on the output frequency of the W4ACS repeater system.

(2) If no directions are heard, scan each of the repeater systems listed in Table XVIII for net activity. Once the correct backup repeater is found, follow the directions of the NCS.

(3) If no activity is found on any of the backup repeater systems, assume that the net is operating in simplex mode. Refer to paragraph 5.4.3 for additional information.

5.4.2 Shelter Net Repeater System Failure

The ACS/ARES® Shelter net will be activated anytime the Pinellas County EOC issues an evacuation order. WD4SCD is the primary repeater system for the ACS/ARES® Shelter net. If for any reason this repeater system becomes unusable, Pinellas ACS will implement the following contingency plan.

a. The Shelter NCS will perform the following actions.

(1) Starting with the secondary backup repeater system, WA4AKH, identify the highest priority repeater system listed in Table XVIII that is operational.

(2) If ***none*** of the repeaters listed in Table XVIII are operational, then activate a simplex net in accordance with the procedures documented in paragraph 5.4.3.

(3) Select the highest priority backup repeater and then announce on the WD4SCD output frequency that the ACS/ARES® Shelter net is moving to the selected back-up repeater system. The announcement should identify the back-up repeater system and reference the appropriate ICS 205.

(4) Direct the alternate NCS to remain on the WD4SCD output frequency and repeat the announcement once every 15-minutes for 1-hour.

(5) Change frequency to the selected back-up repeater system.

(6) If a secondary net is operational on the selected back-up repeater system (e.g., Traffic net), wait for a break in message traffic and then call the NCS for the secondary net.

(a) Notify the NCS that the primary repeater system has failed and that the ACS/ARES® Shelter net will be combined with the secondary net.

(b) The Shelter NCS will assume the duties as the NCS for the combined net. The Secondary net's NCS will assume the role of assistant NCS.

(c) Since this is a combined net, a new net roster will need to be created. The NCS should re-establish the net and call for net check-ins.

(7) If a secondary net is *not* operational on the selected back-up repeater system, perform the following actions.

(a) Announce that the ACS/ARES® Shelter net is now active on the selected back-up repeater system.

(b) Perform a rollcall of ACS/ARES® Shelter net participants to determine which stations successfully transitioned to the new repeater system.

b. ACS/ARES® Shelter net participants will perform the following actions.

(1) Listen to and follow any directions heard on the output frequency of the WD4SCD repeater system.

(2) If no directions are heard, scan each of the repeater systems listed in Table XVIII for net activity. Once the correct backup repeater is found, follow the directions of the NCS.

(3) If no activity is found on any of the backup repeater systems, assume that the net is operating in simplex mode. Refer to paragraph 5.4.3 for additional information.

5.4.3 County Wide Simplex Net Operation

During an activation event, a county wide simplex net will ***only*** be activated if the primary, secondary, and tertiary repeater systems within the county are all inoperative.

Pinellas County is thirty-eight miles long from north to south and fifteen miles wide at its broadest point. Its elevation varies throughout the county from sea level to a high point of 110 feet near the intersection of SR 580 and Countryside Blvd in Clearwater. For many stations, the county's topography will limit the number of simplex VHF/UHF communication links they can establish.

To overcome this problem, the NCS will need to identify and assign an appropriate number of relay stations. The procedure used by ACS will form a tree structure of up to four branches or tiers.

a. Tier-1: NCS

b. Tier-2 Relay Stations: Those stations heard directly by the NCS

c. Tier-3 Relay Stations: Those stations heard by the Tier-2 Relay stations

d. Tier-4 stations: Those stations heard by the Tier-3 Stations.

Fortunately, most of the county's critical infrastructure supported by ACS, (e.g., EOC's, hospitals, evacuation shelters, etc.) is located on high ground. This mitigates, to some extent, the number of relay stations that will be required.

ACS/ARES® will activate a county wide simplex net in accordance with the following procedures.

a. The NCS will perform the following actions.

(1) Announce on the output frequency of the WD4SCD repeater system that the net is now operating in simplex mode. The announcement should state the following information.

(a) The simplex frequency is 146.4300 MHz wideband.

(b) ***TBD***

NOTE: *The WD4SCD repeater does not broadcast a subaudible tone; therefore, users cannot enable the tone squelch feature on their local transceiver when using this repeater. The NCS and Alternate NCS do not need to use a subaudible tone when broadcasting on the output frequency of the WD4SCD repeater.*

(2) Direct the alternate NCS to remain on the WD4SCD output frequency and repeat the announcement once every 15-minutes for 1-hour.

(3) Change frequency to the designated simplex frequency.

(4) Call for check ins, checking in those stations you hear. The stations heard by Net Control will be referred to as Tier-2 Relays. Refer to Figure 20. The NCS and its associated Radio Frequency (RF) coverage map is shown in **Red**.

(5) Request, in turn (one at a time), that each the Tier-2 relay stations call for check-ins and then report back to net control with their list of additional net stations. Refer to Figure 20. The Tier-2 stations and their associated RF coverage map are shown in **green**.

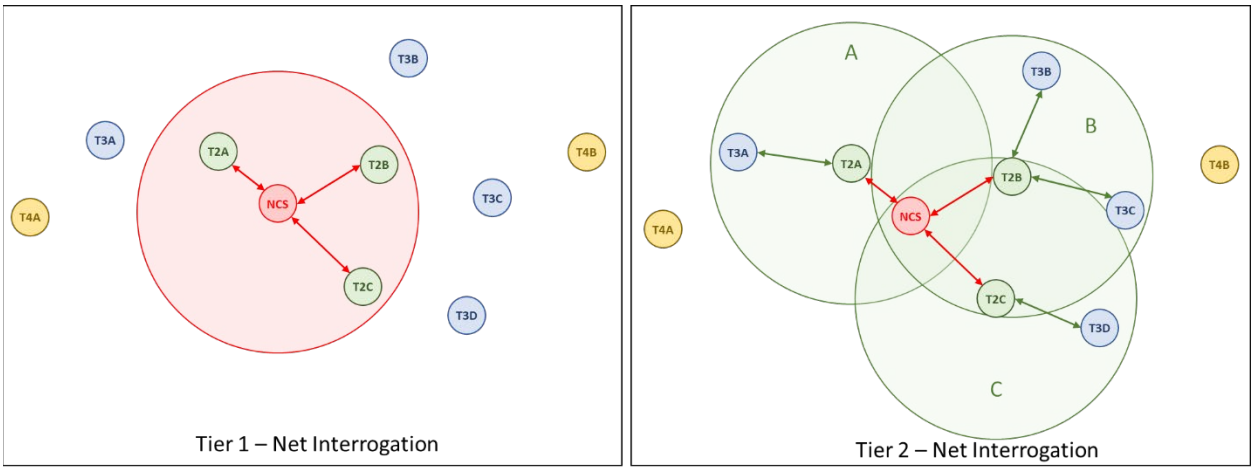


Figure 20. Simplex Net – Tier-1 and Tier-2

(6) Depending on the size of the network and the distribution of stations throughout the county, the NCS may need to perform a Tier-3 level net check-in. To perform a Tier-3 net check-in, the NCS will perform the following actions. Refer to Figure 21. The Tier-3 stations and their associated RF coverage map are shown in **blue**.

(a) Request, in turn (one at a time), that each the Tier-2 relay stations direct each of their subordinate Tier-3 stations to call for net check-ins.

(b) Once each of the Tier-3 stations under the control of a Tier-2 relay station has completed net check-in, the Tier-2 relay will report back to net control with a list of additional net stations.

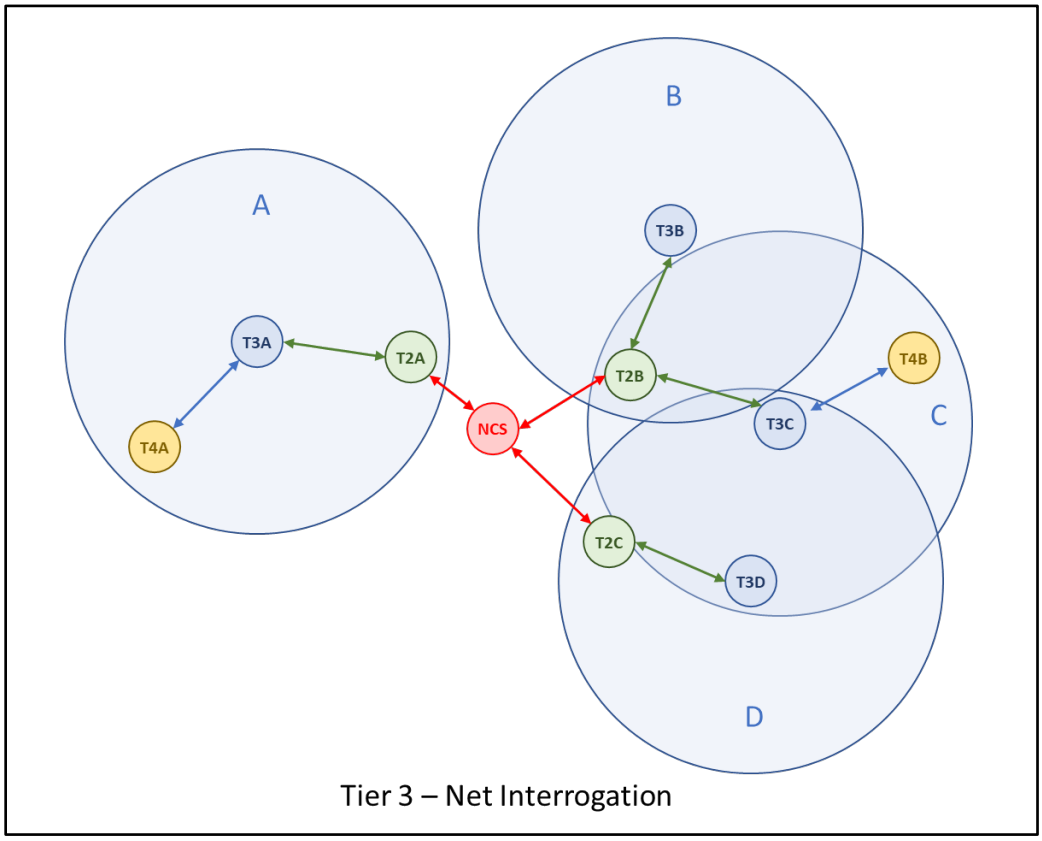


Figure 21. Simplex Net – Tier-3 Net Interrogation

(7) When the check in portion is over, the net should go on as any other net would. Have each of the Tier-2 and Tier-3 relay stations pass your instructions and bulletins. Be sure to ask if anyone needs fills or relays periodically.

NOTE: *Once the county wide simplex net has been established, the NCS will need to determine if the scope of the emergency, the number of stations participating in the net, and the amount of traffic that needs to be passed can be efficiently managed in a single net. If the NCS determines that a single county wide simplex net will result in unacceptable delays in message delivery times, the NCS should split the county wide net into two separate nets in accordance with the procedures documented in paragraph 5.4.4.*

b. Net participants will perform the following actions.

(1) Listen to and follow any directions heard on the output frequency of the WD4SCD repeater system.

(2) Remain on assigned frequency until either released from the net or given other instructions.

(3) It is possible that you may hear several stations call for check-ins. Only check-in to the net one time.

5.4.4 Split County Simplex Net Operation

Pinellas ACS/ARES® may need to split the county wide simplex net into two independent nets if the county wide simplex net is unable to process and deliver all critical messages in a timely manner. If required, the two independent county nets will be implemented in accordance with the following procedure. Refer to Figure 22 to determine which simplex net to join.

a. The county wide simplex NCS will perform the following actions.

(1) Request that a Tier-2 station located south of Ulmerton road verify that the south county simplex frequency is clear and available for use.

(a) If it is not available for use, the south county Tier-2 station should propose an alternate frequency.

(2) Announce that the county wide simplex net will be split into two independent nets. The announcement should include the following information.

(a) All stations operating north of Ulmerton Road will remain on the current frequency of 146.4300 MHz.

(b) All stations operating south of Ulmerton Road will change frequency to 146.4700 MHz (or the alternate frequency proposed by the south Tier-2 station).

(c) Identify the north county and south county area NCS.

***NOTE*:** *Only one additional NCS should be required. The current county wide simplex NCS should assume the role of NCS for the area of the county in which he or she is located.*

(3) Request that each Tier-2 and Tier-3 relay station repeat the announcement and direct all stations to move to their designated area frequency.

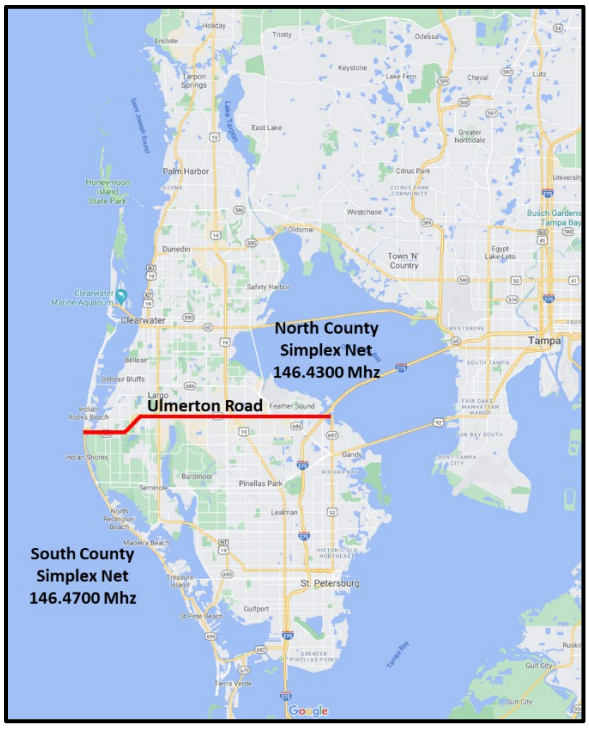


Figure 22. Split County Simplex Net Operation

b. Once the net has been split, the north and south area NCS's should perform the following actions.

(1) Perform a rollcall of stations within their respective areas. Direct Tier-2 and Tier-3 stations to relay check-ins as required.

(2) Assign a liaison station to pass message traffic to the alternate (i.e., North or South) area simplex net.

c. Net participants will perform the following actions.

(1) Listen to and follow all NCS directions.

(2) Remain on assigned area frequency until either released from the net or given other instructions.

5.4.5 Winlink Failure Modes

The Winlink network is a fault tolerant system that will continue to provide users with the ability to exchange digital message traffic even when one or more critical network components has failed. This section describes the most common failure modes ACS/ARES® is likely to encounter. For additional information about Winlink, readers should refer to the *Pinellas County ACS/ARES® Winlink Training Plan.*

***NOTE*:** *VHF RMS stations within Pinellas County will be configured to act as mail servers for local message traffic when internet service becomes unavailable.*

5.4.5.1 Primary Winlink RMS Failure

The Winlink Data net will be activated when the ACS/ARES® Shelter net is activated or at the direction of the ACS Net Manager. The RMS located at the Pinellas EOC, W4ACS-10, is the primary RMS used by the Winlink Data net. If for any reason this RMS becomes unusable, Pinellas ACS will implement the following contingency plan.

NOTE*: If the WD4SCD repeater system is operational, the Winlink NCS will use this repeater system to coordinate the flow of Winlink traffic within the data network. If the WD4SCD repeater system is not operational, the Winlink NCS will establish a simplex voice net on the same frequency as the Winlink Data net.*

a. The NCS for the Winlink Data Net will perform the following actions.

(1) Starting with the primary backup RMS, KJ4RUS-10, identify the highest priority RMS listed in Table XIX that is operational.

(2) If ***none*** of the RMS stations listed in Table XIX are operational, then activate a Winlink P2P net in accordance with the procedures documented in paragraph 5.4.5.2.

Table XIX. Back-up Digital Data Network RMS Stations

Function	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
Primary Backup	145.0700W		145.0700W		D	KJ4RUS-10 VARA FM Packet 1200
Secondary Backup	TBD		TBD		D	TBD

(3) Select the highest priority back-up RMS that is operational and then announce on the Winlink voice coordination frequency that the Winlink data net is moving to the selected back-up RMS.

(4) Resume normal Winlink data net operation.

b. Winlink Net participants will perform the following actions.

(1) Listen to and follow any directions heard on the Winlink voice coordination frequency.

(2) Remain on assigned frequency until either released from the net or given other instructions.

5.4.5.2 Winlink Peer-to-Peer Operation

Depending on the type of emergency ACS/ARES® is supporting, it is possible that the primary and all back-up RMS stations may become unusable. When this failure mode is encountered, ACS/ARES® will activate a Winlink P2P net in accordance with the procedure listed below. Figure 23 displays the topography of a P2P VHF network. All digital exchanges are coordinated

by net control. Each VHF unit within the network can exchange information with any other network participant within VHF range.

a. The NCS for the Winlink Data Net will perform the following actions.

(1) Announce on the Winlink Voice Coordination frequency that the Winlink Data Net is now operating in P2P mode. The announcement should state the following information.

(a) The simplex frequency is 145.000 MHz.

(b) ***TBD***

(2) Perform a rollcall of Winlink Data Net participants to determine which stations are capable of a P2P connection with the Winlink Station located at the Pinellas EOC.

(3) Assign a north and south county relay station.

(4) Ask the north county relay station to perform a rollcall of the north county Winlink Data net participants who were unable to establish a P2P connection with the EOC.

(5) Ask the south county relay station to perform a rollcall of the south county Winlink Data net participants who were unable to establish a P2P connection with the EOC.

NOTE: *Although a VARA digipeater station does not require a VARA license, a VARA license is required by any station attempting to pass information through a VARA digipeater.*

(6) If the north and south relay stations are configured to support VARA FM, and the stations they are supporting are also VARA FM capable, ask the relay stations to configure themselves as VARA FM digipeaters.

(7) Resume normal Winlink Data net operations.

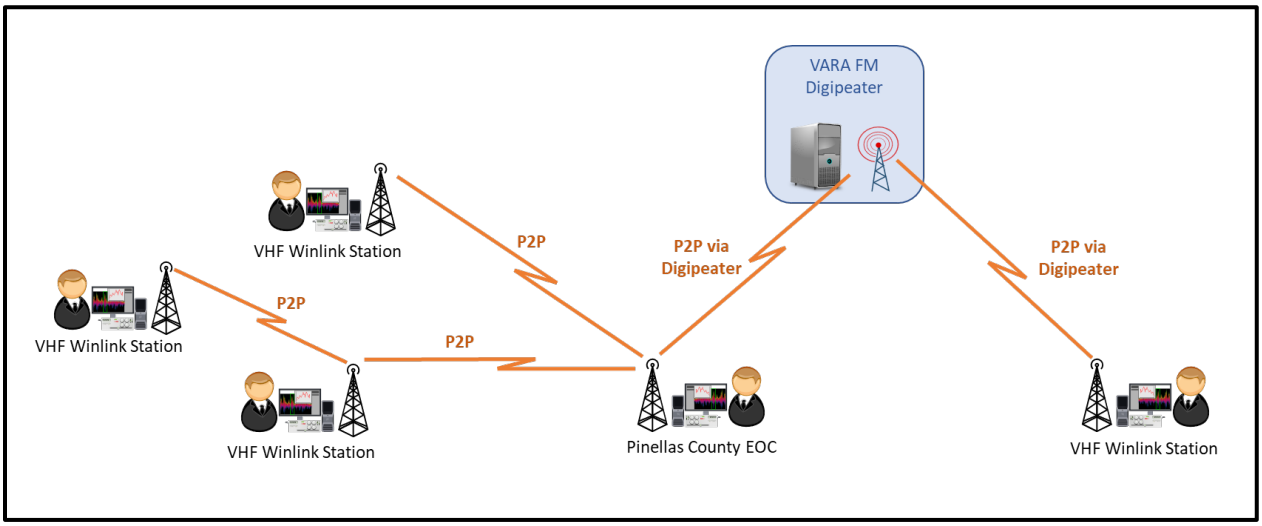


Figure 23. Winlink P2P Network

b. Winlink Net participants will perform the following actions.

(1) Listen to and follow any directions heard on the Winlink Voice coordination frequency.

(2) If unable to establish a direct P2P link with the Pinellas EOC, send and receive traffic via the designated relay station. If your local station is configured for VARA FM operation and the designated relay station is also configured as a VARA FM digipeater, send and receive traffic via the digipeater.

5.4.5.3 Regional Internet Failure

When regional internet outages occur, remote HF RMS stations can be accessed to exchange traffic with stations outside of the affected area.

5.4.5.4 Total Internet Failure – Winlink Radio-Only Hybrid Network

The Winlink radio-only hybrid network capability was developed to ensure that federal, state, and local agencies could maintain email connectivity in the unlikely event of a total internet outage.

Although many natural disasters (hurricanes, earthquakes, fires, etc.), industrial accidents, or terrorist attacks could cause widespread and even regional power, cell, and internet service outages, individual Winlink users should still be able to connect to an RMS outside the impacted region. RMS gateways within the impacted region can be configured to store and deliver messages to local users and forward out of area messages to RMS gateways outside the impacted region using PACTOR or VARA HF. Therefore, the radio-only capability of Winlink should rarely, if ever, need to be used.

Figure 24 displays a network topography using the hybrid network to exchange data between Winlink users (Clients) during a nationwide internet outage. For additional information about the Winlink hybrid network, readers should refer to the *Pinellas County ACS/ARES® Winlink Training Plan.*

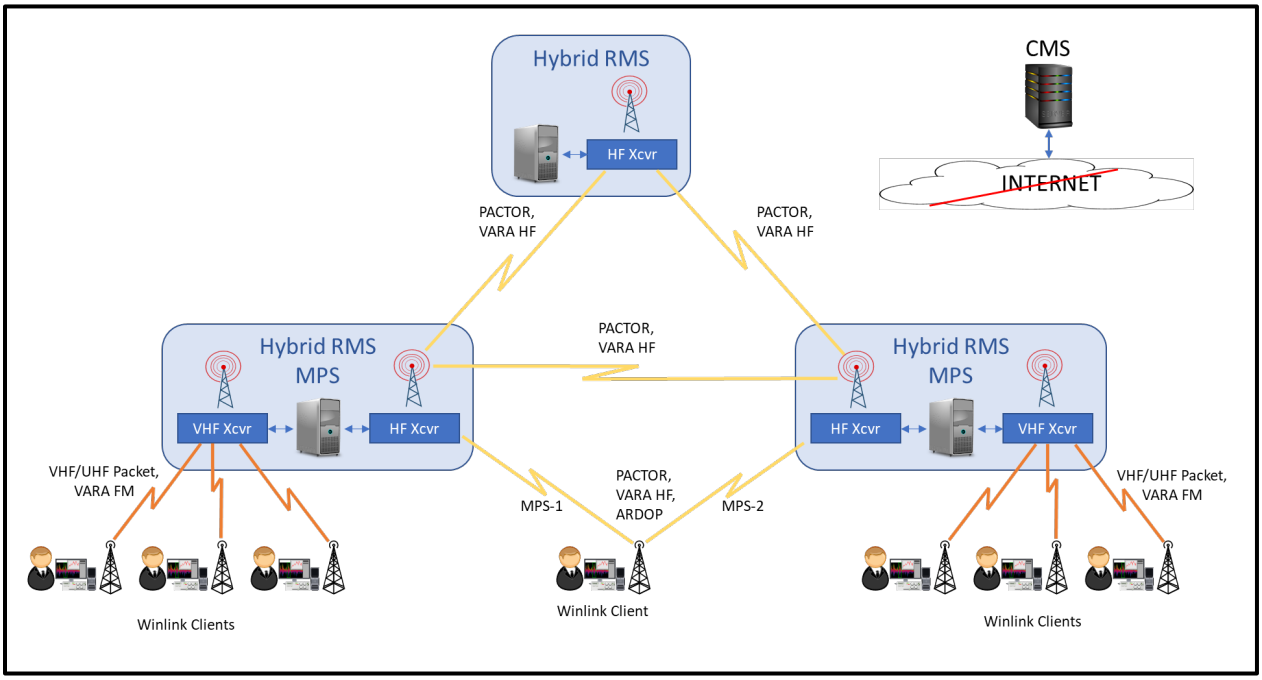


Figure 24. Communications via the Radio-Only Hybrid Network

5.5 EVENT SPECIFIC OPERATION

This section provides an overview of the events that will cause ACS/ARES® to activate, the potential impacts to critical infrastructure anticipated, the communication networks activated, and ACS/ARES® assets required during a deployment.

5.5.1 Tropical Storms and Hurricanes

Tropical storms and hurricanes are a frequent occurrence in the western Atlantic, Caribbean, and Gulf of Mexico. The time between initial formation of a tropical depression and the potential landfall of a tropical storm or hurricane will normally provide ACS/ARES® members with several days or even a week of advanced notice that a local activation will occur. For this scenario, ACS/ARES® activation will progress orderly from Level 4 upwards through Level 3, Level 2, and Level 1 as the storm track and landfall location solidifies.

Depending on the size, projected path, and timing of the storm, emergency managers may order evacuations and open all or a limited number of shelters.

Once activated in support of the storm, the **ACS/ARES® Tactical-Resource net**, the **ACS/ARES® Shelter net**, the **Winlink Data net**, the **Local VHF Traffic Net**, and the **SHARES** net will be activated. Liaison stations will also be assigned to the **VHF Inter-County Coordination net** and **SARnet**. Members will be deployed to the EOC, all activated shelters, and additional locations as requested by emergency managers.

The ACS RO and the NCS for the Tactical-Resource net will need to assess the potential scope of the emergency to determine the number and type of assets to deploy to each location. Deployment sites without emergency power will need assets to arrive with one or more sources of back-up power (e.g., batteries, generator, solar).

Each deployment location should be staffed by two ACS/ARES® members. Whenever possible, at least one of the ACS/ARES® members at each deployment location should be Winlink qualified and be equipped to support the Winlink data net. If the number of Winlink qualified members is limited, the NCS for the Tactical-Resource net should assign Winlink assets to those

locations where a high volume of traffic is anticipated (e.g., EOCs, Hospitals, Special Needs shelters, etc.).

Prior to landfall, members can assume that all area VHF/UHF repeater networks and Winlink RMS gateways are fully operational and available to support the activation event. Power, phone, cell, and internet services will also be available at all shelter locations. Members will be able to freely move between home and deployment locations in support of shift change and staff leveling requirements.

However, as landfall approaches, the storm comes ashore, and in the aftermath of the storm, the status of critical infrastructure can change rapidly. The storm may cause local or wide area power, cell service, and internet outages that may last from a few hours to several days. Movement within the county is likely to be difficult or impossible until debris is cleared from the roadways. Therefore, the go-kits assembled by members should contain, as a minimum, the personal support (e.g., clothing, food, water, etc.) and communications equipment needed to operate independently for 3 to 5 days.

During and after the storm, the operational availability of local VHF/UHF repeater networks and Winlink RMS gateways may be impacted. The contingency modes documented in section 5.4 will need to be reviewed and activated as required. In addition to the SHARES net, the ACS RO may need to assign additional local Near Vertical Incident Skywave (NVIS) gateway stations to maintain communications with state, federal, and ARES® Section officials.

If in the aftermath of the storm, emergency managers establish asset staging areas or incident command posts, the ACS RO may deploy a PodRunner® and/or SatRunner® asset to provide VHF, UHF, HF, and satellite communications links; a local Wi-Fi computer network; and FirstNet® phone service to the deployment site. Only those members trained to transport, emplace, configure, and operate PodRunner® and SatRunner® assets will be deployed to these locations.

5.5.2 Non-Tropical Weather Events

Non-tropical weather events include severe thunderstorms, flash floods, and tornados. These severe weather events have the potential to cause significant property damage, serious injuries, and death. ACS/ARES® and SKYWARN® members should monitor National Oceanic and Atmospheric Administration (NOAA) Weather Radio (NWR) and local news outlets for severe weather warnings. The SKYWARN® net should be activated in accordance with the *Pinellas SKYWARN® Operational Guidelines Policy and Procedures* document.

In the aftermath of a storm, an immediate damage assessment or the potential for flash flooding may cause emergency managers to order an evacuation and/or open a limited number of evacuation shelters. Assistance from the ARC may be requested. The event may cause localized power, cell, and internet outages. Movement in and around the impacted area may be difficult or impossible.

If activated in support of the emergency, the **ACS/ARES® Tactical-Resource net**, the **ACS/ARES® Shelter net**, and the **Winlink Data net** will be activated. Members will be deployed to the EOC, all activated shelters, and additional locations as requested by emergency managers.

All area VHF/UHF repeater networks and Winlink RMS gateways are assumed to be fully operational and available to support the activation event. Power, phone, cell, and internet services are also assumed to be available at all shelter locations. Members can freely move between home and deployment locations in support of shift change and staff leveling requirements. Each deployment location should be staffed by two ACS/ARES® members. Whenever possible, at least one of the ACS/ARES® members at each deployment location should be Winlink qualified and be equipped to support the Winlink data net. If the number of Winlink qualified members is limited, the NCS for the ACS Tactical-Resource net should assign Winlink assets to those locations where a high volume of traffic is anticipated (e.g., EOCs, Hospitals, Special Needs shelters, etc.).

5.5.3 Public Safety Communications Emergency

The loss of internal or external communications, (phone or radio), in any facility that contributes to the public safety or welfare, (e.g., phone cable cuts, hospital PBX outages, etc.) is defined as a public safety communications emergency. An emergency can also be declared when backup communications are required due to the overloading of the communications in any public safety or welfare facility.

A public safety communications emergency is likely to occur with little or no warning. Reasons for an outage or overload vary widely. The outage or overload could be localized to a single facility or impact several locations within the county. The ACS RO and the NCS for the Tactical-Resource net will need to assess the scope of the outage to determine the number and type of assets to deploy. If a localized power outage is contributing to the emergency, deployed assets will need to arrive with one or more sources of back-up power (e.g., batteries, generator, solar).

If activated in support of the emergency, the **ACS/ARES® Tactical-Resource net** and the **Winlink data net** will be activated. Members will be deployed to the EOC, facilities experiencing a communications failure or overload, and additional locations as requested by emergency managers.

All area VHF/UHF repeater networks and Winlink RMS gateways are assumed to be fully operational and available to support the activation event. Each deployment location should be staffed by two ACS/ARES® members. At least one of the ACS/ARES® members at each deployment location should be Winlink qualified and be equipped to support the Winlink data net. If the number of Winlink qualified members is limited, the NCS for the Tactical-Resource net should assign Winlink assets to those locations where a high volume of traffic is anticipated (e.g., EOCs, Hospitals, etc.).

5.5.4 Localized Emergencies

Localized emergencies include but are not limited to industrial accidents, hazardous material spills, and major urban fires. The scope of the emergency is limited to neighborhoods, industrial

zones, or city blocks. ACS/ARES® will receive little or no warning prior to a request for activation.

The event may cause localized power, cell, and internet outages. Movement in and around the impacted area may be difficult or impossible. Emergency managers may order an evacuation and call for a limited number of shelters to be opened.

If activated in support of the emergency, the **ACS/ARES® Tactical-Resource net**, the **ACS/ARES® Shelter net**, and the **Winlink data net** will be activated. Members will be deployed to the EOC, all activated shelters, and additional locations as requested by emergency managers.

All area VHF/UHF repeater networks are assumed to be fully operational and available to support the activation event. Power, phone, cell, and internet services are also assumed to be available at all shelter locations. Members can freely move between home and deployment locations in support of shift change and staff leveling requirements. Each deployment location should be staffed by two ACS/ARES® members. Whenever possible, at least one of the ACS/ARES® members at each deployment location should be Winlink qualified and be equipped to support the Winlink data net. If the number of Winlink qualified members is limited, the NCS for the Tactical-Resource net should assign Winlink assets to those locations where a high volume of traffic is anticipated (e.g., EOCs, Hospitals, Special Needs shelters, etc.).

5.5.5 Regional or National Emergencies

Regional or national emergencies include but are not limited to widespread power outages, cyber-attacks, acts of terror, and acts of war. The scope of the emergency encompasses the entire Tampa Bay region and could extend throughout the state of Florida, large areas of the southeastern US, or the entire country.

Critical infrastructure to include power, communications networks, cell service, and internet access could be impacted. The scale and the duration of the emergency is likely to be measured in days or weeks rather than hours. ACS/ARES® can expect little to no warning prior to activation.

Once activated in support of the emergency, the **ACS/ARES® Tactical-Resource net**, the **Winlink data net,** and the **SHARES net** will be activated. Liaison stations will also be assigned to the **VHF Inter-County Coordination net** and **SARnet**. If emergency managers order evacuations and call for shelters to be opened, the **ACS/ARES® Shelter net** will also be activated. Members will be deployed to the EOC, all activated shelters, and additional locations as requested by emergency managers.

The ACS RO and the NCS for the Tactical-Resource net will need to assess the scope of the emergency to determine the number and type of assets to deploy to each location. Deployment sites without shore or emergency power will need assets to arrive with one or more sources of back-up power (e.g., batteries, generator, solar).

If emergency managers establish asset staging areas or incident command posts, the ACS RO may deploy a PodRunner® and/or SatRunner® asset to provide VHF, UHF, HF, and satellite communications links; a local Wi-Fi computer network; and FirstNet® phone service to the deployment site. Only those members trained to transport, emplace, configure, and operate PodRunner® and SatRunner® assets will be deployed to these locations.

The operational availability of local VHF/UHF repeater networks and Winlink RMS gateways may be impacted by the emergency. The contingency modes documented in section 5.4 will need to be reviewed and activated as required. In addition to the SHARES net, the ACS RO may need to assign additional local NVIS gateway stations to maintain communications with state, federal, and ARES® section officials.

Each deployment location should be staffed by two ACS/ARES® members. Whenever possible, at least one of the ACS/ARES® members at each deployment location should be Winlink qualified and be equipped to support the Winlink data net. If the number of Winlink qualified members is limited, the NCS for the Tactical-Resource net should assign Winlink assets to those locations where a high volume of traffic is anticipated (e.g., EOCs, Hospitals, Special Needs shelter, etc.).

Movement within the county may or may not be impacted by the emergency. The scope and scale of the emergency may make it difficult to perform regularly scheduled shift changes. Therefore, the go-kits assembled by members should contain, as a minimum, the personal support (e.g., clothing, food, water, etc.) and communications equipment needed to operate independently for 3 to 5 days.

5.5.6 Search and Rescue

Due to the nature of Pinellas County, most requests for Search and Rescue support will take place in urban, coastline, park, or lightly wooded areas. Members deployed to search teams will need to dress appropriately for the environment, bring sufficient water for the duration of the search period, and back-up batteries for HTs and flashlights.

If activated in support of a SAR operation, the **ACS/ARES® Tactical-Resource net** will be activated. Members will be deployed to the EOC and designated assembly areas for assignment. Whenever possible, members assigned to a search team should activate APRS® so that their position can be rapidly identified.

During SAR operations, members should assume they will encounter no issues with critical infrastructure; Power, cell, phone, and internet service will be readily available. All area VHF/UHF repeater networks, APRS® digipeaters, and Winlink RMS gateways will be fully operational and available to support the activation event. Emergency shelter activation will *not* be required.

Members can freely move between home and deployment locations in support of shift change and staff leveling requirements.

5.5.7 Non-Emergency Special Events

Non-emergency special events include but are not limited to parades, bicycle races, runs, walk-a-thons, and VIP visits. Participation by ACS/ARES® supports public safety and provides training opportunities to both the ACS/ARES® membership and our served agency partners.

The ACS/ARES® leadership will notify members of upcoming non-emergency special events well in advance of the scheduled event date. A detailed plan that includes a description of the event; date, time, and duration of the event; and a description of all planned ACS/ARES® activities will be created and provided to the membership. The plan will also identify the nets to be activated and all planned operating frequencies.

During special events, members should assume they will encounter no issues with critical infrastructure; Power, cell, phone, and internet service will be readily available. All area VHF/UHF repeater networks, APRS® digipeaters, and Winlink RMS gateways will be fully operational and available to support the activation event. Emergency shelter activation will ***not*** be required.

Members can freely move between home and deployment locations in support of shift change and staff leveling requirements.

NOTE*: During an emergency activation drill or exercise, one or more critical infrastructure outages may be simulated to evaluate ACS/ARES® operational readiness.*

5.5.8 Deployment Outside of Pinellas County

When a local or regional emergency outside of Pinellas County overwhelms the ARES®, ACS, or RACES organization operating within the impacted area, the effected SM or county EC may request assistance from Pinellas ACS/ARES®. Upon receipt of a request for assistance, the Pinellas County ACS EC/RO will consult with the Pinellas County DEM and determine if Pinellas ACS is able to support the request for help. If Pinellas ACS can offer assistance, the ACS EC/RO will activate the Pinellas County ARES® Mutual Assistance Team (ARESMAT). The EO/RO will brief the ARESMAT on the type, scope, duration, points of contact, and equipment requirements for the deployment.

Depending on the type and scope of the emergency, ARESMAT members may need to bring with them the personal support (e.g., clothing, food, water, etc.), emergency power, and

communications equipment needed to operate independently for the planned duration of the deployment.

As a minimum, members of the Pinellas County ARESMAT must meet the qualifications listed in paragraph 6.3.1.3 for Remote ACS Communicator. If a PodRunner® and/or SatRunner® will be deployed with the ARESMAT, at least two members of the team must meet the qualifications listed in paragraph 6.3.1.4 for Advanced ACS Communicator.

For additional information on ARESMAT, refer to chapter 4 of the *ARES Manual*.

6 TRAINING REQUIREMENTS

Training is used to help users learn and practice the operational skill sets needed to support the deployment of operators during an activation exercise or emergency. Drills and exercises will be used to evaluate the performance of both individual users and the Pinellas ACS to perform these tasks.

6.1 TRAINING AND EVALUATION DEFINITIONS

The following definitions are used in this section.

6.1.1 Small- and Large-Scale Exercise Types.

The following list of operation-based exercises are defined as either small-scale or large-scale exercises.

6.1.1.1 Drill.

"A coordinated, supervised activity usually used to test a single specific operation or function in a single agency. Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills. Typical attributes include the following: A narrow focus, measured against established standards; Instant feedback; Performance in isolation; Realistic environment." (B. Wayne Blanchard, 2008)

6.1.1.2 Functional Exercise (FE).

"An activity designed to test and evaluate individual capabilities, multiple functions, activities within a function, or interdependent groups of functions. Events are projected through an exercise scenario with event updates that drive activity at the management level. [A] Functional Exercise simulates the reality of operations in a functional area by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment." (B. Wayne Blanchard, 2008)

6.1.1.3 Full Scale Exercise (FSE).

"A multi-agency, multi-jurisdictional, multi-organizational activity that tests many facets of preparedness. They focus on implementing and analyzing the plans, policies, procedures, and cooperative agreements developed in discussion-based exercises and honed in previous, smaller, operations-based exercises. In FSEs, the reality of operations in multiple functional areas presents complex and realistic problems that require critical thinking, rapid problem solving, and effective responses by trained personnel. During FSEs, events are projected through a scripted exercise scenario with built-in flexibility to allow updates to drive activity. FSEs are conducted in a real-time, stressful environment that closely mirrors real events." (B. Wayne Blanchard, 2008)

6.1.1.4 Simulated Emergency Test (SET).

"The ARRL® Simulated Emergency Test is a nationwide exercise in emergency communications, administered by ARRL® Emergency Coordinators and Net Managers. Both ARES® and the NTS™ are involved. The SET weekend gives communicators the opportunity to focus on the emergency communications capability within their community while interacting with NTS™ nets. …The official SET weekend is the first full weekend of October; however, ARES® groups are free to conduct their SET any time during the calendar year. The activity period should not exceed 48 hours." (American Radio Relay League® (ARRL), 2015)

6.1.2 Events.

Public service events include but are not limited to races, runs, walks, festivals, etc.

6.1.3 Tabletop Exercise (TTX).

"An activity that involves key personnel discussing simulated scenarios in an informal setting. This type of exercise can be used to assess plans, policies, and procedures or to assess the systems needed to guide the prevention of, response to, and recovery from a defined incident. TTXs typically are aimed at facilitating understanding of concepts, identifying strengths and shortfalls, and achieving changes in attitude. Participants are encouraged to discuss issues in depth and develop decisions through slow-paced problem solving, rather than the rapid,

spontaneous decision making that occurs under actual or simulated emergency conditions." (B. Wayne Blanchard, 2008)

6.2 MEMBERSHIP REQUIREMENTS

Membership requirements for Pinellas ACS are listed below.

a. 18 years of age or older.
b. Hold a Technician, General, Advanced, or Amateur Extra class FCC license.
c. Register for the Pinellas County ACS/ARES® using the ***aresdb*** database.
d. Register with Pinellas County volunteer services. Once contacted by a Pinellas County representative, schedule an appointment and complete the registration process.
e. Complete the Pinellas VIP online orientation course.

6.3 TRAINING

The purpose of training is to help users learn and practice the operational skill sets needed to support the deployment of operators to remote locations within or outside Pinellas County during an activation exercise or emergency. Self-paced online learning, on-line training meetings, and radio training nets will be used to support training within Pinellas ACS.

6.3.1 ACS Training Levels

Pinellas ACS has defined the four qualification levels listed below. Each qualification level has a defined set of minimum requirements. ACS/ARES® VHF/UHF training nets, VHF voice, internet zoom exchanges, drills, and deployment exercises will be used to practice and demonstrate proficiency with the skills needed to attain each qualification level.

a. Basic ACS Communicator
b. Local ACS Communicator
c. Remote ACS Communicator
d. Advanced ACS Communicator

6.3.1.1 Basic ACS Communicator

The basic ACS Communicator is qualified to support deployments within Pinellas County *only* when deployed with a team of ACS communicators who are qualified for independent local or remote operations. The minimum set of training requirements for a basic ACS communicator are listed below.

a. The individual is compliant with each of the membership requirements documented in paragraph 6.2.
b. The individual has completed the training tasks for **ARES® Level I** as documented in the *Florida ARRL® Tri-Section ARES® Standardized Training Plan.*

6.3.1.2 Local ACS Communicator

The local ACS communicator is qualified to independently support VHF/UHF deployments within Pinellas County. These communicators are also qualified to operate as part of a larger deployment team or as the ACS site lead responsible for the supervision of one or more basic ACS communicators. The minimum set of training requirements for a local ACS communicator are listed below.

a. The individual has completed each of the training requirements documented in paragraph 6.3.1.1 for a basic ACS communicator.
b. The individual has completed the training tasks for **ARES® Level II** as documented in the *Florida ARRL® Tri-Section ARES® Standardized Training Plan.*

For the communicator to also qualify as an independent VHF/UHF Winlink operator, the individual will need to meet the following training requirements.

a. Demonstrate compliance with the Deployment ready VHF/UHF Communication skill set as documented in the *Pinellas County ACS/ARES® Winlink Training Plan.*

6.3.1.3 Remote ACS Communicator

The remote ACS communicator is qualified to support VHF, UHF, and HF deployments both within and outside of Pinellas County. These communicators are qualified to operate independently, as part of a larger deployment team, or as the ACS site lead responsible for the supervision of one or more ACS communicators. The minimum set of training requirements for a remote ACS communicator are listed below.

a. The individual has completed each of the training requirements documented in paragraph 6.3.1.2 for a local ACS communicator.
b. The individual has completed the tasks documented in the *Position Task Book (PTB) for the Position of Auxiliary Communicator (AUXC).*

In addition to the Winlink training requirements documented in paragraph 6.3.1.2, users will need to meet the following training requirements to qualify as an independent HF Winlink operator.

a. Demonstrate compliance with the Deployment ready HF Communication skill set as documented in the *Pinellas County ACS/ARES® Winlink Training Plan.*

6.3.1.4 Advanced ACS Communicator

The advanced ACS communicator is qualified to transport, emplace, and operate both the PodRunner® and SatRunner® compact deployable equipment suites. Deployments may be within or outside of Pinellas County. The minimum set of training requirements for an advanced ACS communicator are listed below.

a. The individual has completed each of the training requirements documented in paragraph 6.3.1.3 for a remote ACS communicator.
b. The individual has completed each of the training requirements documented in the *Pinellas County ACS PodRunner® / SatRunner® Training Plan.*

6.3.2 Self-paced Online Training

Individual on-line self-paced training allows users to learn about ACS/ARES®, emergency communications, and its associated applications and hardware on their own schedule. The two topic areas listed below identify information sources and tools readily available on-line. Individuals are encouraged to examine and use the tools as appropriate.

a. On-line Training courses: Both FEMA and the ARRL® have created training courses to support emergency communications. Refer to the *Florida ARRL® Tri-Section ARES® Standardized Training Plan* for applicable on-line training courses. For Website information refer to the Training entries in Appendix B.

b. Discussion Groups: A variety of on-line discussion groups are available. Each has a significant archive of topics that can be accessed and subject matter experts to answer questions. Refer to the Discussion group entries in Appendix B for Website information.

6.3.3 On-line Training Meetings

On-line training meetings (Zoom, MS Teams, Google Meet, etc.) will be used to assist users with specific operational issues, to present training information to the membership, and to exchange lessons learned obtained from drills and exercises. Online meetings will be scheduled on an as-needed basis. Bulletins and training net announcements will be used to notify the membership of upcoming on-line meetings.

6.3.4 Pinellas ACS Training Net

The Pinellas ACS training net will be used to familiarize ARES®/ACS participants with net procedures, message formats, phonetics, use of prowords, and other basic skills. The training segment of the net will be narrowly focused on a small set of skills and will be designed to require less than 30-minutes to complete. This segment of the net will also be used to provide members with detailed information about upcoming drills and exercises.

6.3.4.1 Implementation

The Pinellas ACS training net is a directed net that will make use of the W4ACS VHF/UHF repeater system. The NCS will announce the net using the NCS script located on the ACS website. The net is divided into the seven segments listed below.

a. Call for priority traffic
b. Call for general check-ins
c. Bulletins
d. Staff Reports
e. Traffic and announcements
f. Training
g. Final announcements and net shutdown

6.3.4.2 Schedule

The Pinellas ACS Training Net will take place once per week at 1930 hours on Tuesday evenings.

6.3.4.3 Location

As a rule, users will participate in training nets from their home QTH.

6.4 PERFORMANCE EVALUATION

Performance evaluation is used to assess the ability of individual users and the Pinellas ACS organization to perform the skills needed during the deployment of operators during emergencies. Drills, Functional Exercises, Full Scale Exercises, and SETs will be used to evaluate performance. Only one drill or exercise will take place during any calendar month.

6.4.1 Drills

Drills will be used to exercise specific operational skills, practice digital and voice network operations, and assess user performance. Each drill will be narrowly focused on a small set of skills and will be designed to require one hour or less to complete. Drills will be the primary tool used to certify user performance.

6.4.1.1 Implementation

On the Tuesday prior to the drill, the weekly ACS training net will be used to distribute information and field questions about the drill. When the drill requires detailed information to be distributed, the information will be posted on the Pinellas ACS web site and distributed via email and Winlink.

6.4.1.2 Schedule

Drills will take place once per month except during those months in which a Functional Test, Simulated Emergency Test, or Full-Scale Exercise is scheduled.

6.4.1.3 Location

As a rule, users will participate in drills from their home QTH.

6.4.1.4 After-Action Report and Improvement Plan

One week after the drill, the weekly ACS training net will be used to provide feedback to drill participants, discuss issues encountered during the drill, and field recommendations for additional training and drill activities.

6.4.2 Functional Exercise

Each Functional Exercise will be used to evaluate equipment capabilities and ACS readiness to respond to an activation event. The exercise will require participants to perform a variety of skills that are associated with VHF/UHF and HF deployments. The Functional Exercise will incorporate a subset of the skills identified in the *Florida ARRL® Tri-Section Training Plan* and the *Pinellas County ACS/ARES® Winlink Training Plan*. Each Functional Exercise will be designed to require no more than 8 hours to complete.

6.4.2.1 Implementation

A detailed plan will be developed for each Functional Exercise and distributed to all participants prior to the event.

6.4.2.2 Schedule

A Functional Exercise will take place once per year. The Functional exercise will be scheduled approximately 6 months before any scheduled Simulated Emergency Test or Formal Exercise. During the month that the Functional Exercise is scheduled, no training drills will be performed.

6.4.2.3 Location

The detailed plan developed for the Functional Exercise will identify the location and staffing requirements for each station.

6.4.2.4 After-Action Report and Improvement Plan

Following the exercise, an After-Action meeting with the participants will be held to discuss issues encountered and recommendations going forward. The EC/RO, or his/her designated appointee, will then generate a written After-Action Report and Improvement plan. A copy of the report will be delivered to WCF ACS/ARES® leadership and all exercise participants. During the next scheduled ACS/ARES® meeting following the exercise, the EC/RO will brief the ACS/ARES® membership on the exercise and its outcome.

6.4.3 Simulated Emergency Test (SET) or Full-Scale Exercise

Each full-scale exercise/SET will be used to evaluate equipment capabilities and ACS readiness to respond to an activation event. The exercise will require participants to perform a variety of skills that are associated with VHF/UHF and HF deployments. The full-scale exercise/SET will incorporate a subset of the skills identified in the *Florida ARRL® Tri-Section Training Plan* and the *Pinellas County ACS/ARES® Winlink Training Plan*. Each Functional Exercise will be designed to require no more than 8 hours to complete.

6.4.3.1 Implementation

Each full-scale exercise/SET will be designed as a Homeland Security Exercise Evaluation Program (HSEEP) compliant exercise that will incorporate, to the maximum extent possible, local government agencies and NGOs.

A detailed plan will be developed for each full-scale exercise/SET and distributed to all participants prior to the event.

6.4.3.2 Schedule

Only one Full-scale exercise or SET will take place per year. The Full-scale exercise / SET will be scheduled approximately 6 months after any scheduled Functional Exercise. During the month that the Full-scale Exercise or SET is scheduled, no training drill will be performed.

6.4.3.3 Location

The detailed plan developed for the full-scale exercise / SET will identify the location and staffing requirements for each station.

6.4.3.4 After-Action Report and Improvement Plan

Following the exercise/SET, an After-Action meeting with the participants will be held to discuss issues encountered and recommendations going forward. The EC/RO, or his/her designated appointee, will then generate a written After-Action Report and Improvement plan. A copy of the report will be delivered to WCF ACS/ARES® leadership and all exercise participants. During the next scheduled ACS/ARES® meeting following the exercise, the EC/RO will brief the ACS/ARES® membership on the exercise and its outcome.

For SET events, the EC/RO will create and deliver the appropriate ARRL® SET documentation to ARRL®.

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Appendix A

A Appendix A – Acronyms, Abbreviations, and Definitions

A.1 Acronyms

The following acronyms are used in this document.

ACRONYM	DEFINITION
ACS	Auxiliary Communication Service
AEC	Assistant Emergency Coordinator
APRS®	Automatic Packet Reporting System
ARC	American Red Cross
ARES®	Amateur Radio Emergency Service®
ARESMAT	Amateur Radio Emergency Service Mutual Assistance Team
ARRL®	American Radio Relay League
ASEC	Assistant Section Emergency Coordinator
AT&T	American Telephone and Telegraph
AUXC	Auxiliary Communicator
AUXFOG	Auxiliary Communications Field Operations Guide
CAP	Civil Air Patrol
CC	Color Code (DMR)
CISA	Cybersecurity and Infrastructure Security Agency
CMS	Common Message Server
CSQ	Carrier Squelch
CTCSS	Continuous Tone Coded Squelch System
CW	Continuous Wave

ACRONYM	DEFINITION
DEC	District Emergency Coordinator
DEM	Division of Emergency Management
DMAT	Disaster Medical Assistance Team
DMR	Digital Mobile Radio
DRO	Deputy Radio Officer
DWI	Disaster Welfare Inquiry
EC	Emergency Coordinator
EOC	Emergency Operations Center
ESF	Emergency Support Function
FCC	Federal Communication Commission
F-DARN	Florida – Digital Amateur Radio Network
FE	Functional Exercise
FEMA	Federal Emergency Management Agency
FM	Frequency Modulation
FSE	Full Scale Exercise
GMRS	General Mobile Radio Service
HIPAA	Health Insurance Portability and Accountability Act
HF	High Frequency
HSEEP	Homeland Security Exercise Evaluation Program
HT	Handie-Talkie; Hand-held Transceiver
HX	Handling Instructions
IARU	International Amateur Radio Union
ICS	Incident Command System
IP	Internet Protocol
LSB	Lower Sideband
MARS	Military Auxiliary Radio Service
MPG	Methods and Practices Guidelines

ACRONYM	DEFINITION
MPS	Message Pick-up Station
MS	Microsoft
NAC	Network Access Code
NCC	National Coordinating Center for Communications
NCS	Net Control Station
NGO	Non-Governmental Organization
NIMS	National Incident Management System
NOAA	National Oceanic and Atmospheric Administration
NTS™	National Traffic System™
NVIS	Near Vertical Incident Skywave
NWR	NOAA Weather Radio
NXDN	Next Generation Digital Network
PACS	Pinellas County Auxiliary Communication Service
P2P	Peer-to-Peer
PBX	Private Branch Exchange
PII	Personally Identifying Information
PDF	Portable Document Format
PTB	Position Task Book
RACES	Radio Amateur Civil Emergency Service
RAN	Radio Access Number (NXDN)
RATPAC	Radio Amateur Training Planning and Activities Committee
RF	Radio Frequency
RMS	Radio Message Server
RO	Radio Officer
RRI	Radio Relay International
SAR	Search and Rescue
SARnet	Statewide Amateur Radio Net

ACRONYM	DEFINITION
SCN	SHARES Coordination Network
SEC	Section Emergency Coordinator
SET	Simulated Emergency Test
SM	Section Manager
SOP	Standard Operating Procedure
TCP/IP	Transmission Control Protocol/Internet Protocol
TTX	Tabletop Exercise
UHF	Ultra High Frequency
USB	Universal Serial Bus
USB	Upper Sideband
VHF	Very High Frequency
VIP	Very Important Person
VOAD	Volunteer Organizations Active in Disaster
WCF	West Central Florida
WL2K	Winlink 2000 System

A.2 ABBREVIATIONS

The following abbreviations are used in this document.

ABBREVIATION	DEFINITION
COML	Communications Unit Leader
Digipeater	Digital Repeater
EmComm	Emergency Communications
Hz	Hertz
MHz	Megahertz
SHARES	Shared Resources

A.3 DEFINITIONS

The following definitions are used in this document.

A.3.1 ALERT PINELLAS.

Alert Pinellas is an emergency notification service for Pinellas County, local municipalities, and the Sheriff's Office. Users choose how to receive alerts. Alert methods include cell phone, landline, text, and email.

A.3.2 AMATEUR RADIO EMERGENCY SERVICE® (ARES®).

"The Amateur Radio Emergency Service® (ARES®), a program of ARRL, The national association for Amateur Radio®, is comprised of organized, trained, and identified Amateur Radio operators who augment and support vital communications on behalf of the public through partner agencies and organizations during emergencies and disasters. The Amateur Radio Emergency Service, through its volunteer radio communicators, strives to be an effective partner in emergency and disaster response, providing public service partners at all levels with radio communications expertise, capability, and capacity." (ARRL, 2022)

A.3.3 AMERICAN RADIO RELAY LEAGUE® (ARRL®).

The national organization of Amateur Radio Service operators that has memorandum of understanding with national served agencies that use amateur radio operators as primary or secondary means of communications.

A.3.4 ASSISTANT SECTION EMERGENCY COORDINATOR (ASEC).

The Assistant Section Emergency Coordinator is the appointee of the SEC to coordinate the emergency communications of the Section and perform other duties as assigned by the SEC and will act in his/her place as needed.

A.3.5 AUXILIARY COMMUNICATIONS SERVICE (ACS).

An Amateur Radio Service, using amateur stations as well as County Radio equipment to support and augment local government communications during periods of local, regional, or

national emergencies and is only activated by the Pinellas County Division of Emergency Management.

A.3.6 COMMON MESSAGE SERVER (CMS).

"The Common Message Servers (CMS) are the common coordinating engines at the heart of the Winlink 2000 "star" Network configuration. They coordinate the traffic between network radio server stations (RMS gateway stations), and provide the email, telnet, bulletin and position reporting services. All this is done over the Internet using TCP/IP for speed, and to use the amateur radio spectrum efficiently. Winlink gets synergy of both the internet and radio spectrum without suffering connectivity failures or crowding the amateur bands. Each of the existing Common Message Servers is a mirror image of the other, providing continual redundancy should one of these servers become inoperative. The CMS Telnet server is compatible with AirMail, Paclink, Outpost, Windows Telpac, Telpac Node/LinuX, Linux RMS Gateway, RMS Packet, and RMS Pactor gateway software. There can be up to five active CMS sites. The sites are [geographically] distributed worldwide, are synchronized, and any single site is capable of handling all traffic for the entire network." (Amateur Radio Safety Foundation, Inc., 2021)

A.3.7 DIGIPEATER.

The term Digipeater is an abbreviation for Digital Repeater. It is a device designed to retransmit digital information rather than voice. While a standard full-duplex Very High Frequency (VHF)/Ultra High Frequency (UHF) voice repeater receives information on one frequency and simultaneously retransmits the information on a second frequency, a digipeater receives digital information, processes the information, and then retransmits the information on the same frequency.

A.3.8 DISTRICT EMERGENCY COORDINATOR (DEC).

The District Emergency Coordinator is the appointee of the Section Manager (SM) and Section Emergency Coordinator (SEC) to coordinate the emergency communications between designated groups of counties and assist the SEC as directed.

A.3.9 DIVISION OF EMERGENCY MANAGEMENT (DEM).

The Division of Emergency Management is the agency of the state or local government empowered by statutes to govern during natural or man-made emergencies.

A.3.10 EMERGENCY COORDINATOR (EC).

The Emergency Coordinator is the appointee of the SM and/or the SEC to coordinate the emergency communications of a designated county.

A.3.11 EMERGENCY OPERATIONS CENTER (EOC).

"The physical location at which the coordination of information and resources to support incident management (on-scene operations) activities normally takes place. An EOC may be a temporary facility or may be located in a more central or permanently established facility, perhaps at a higher level of organization within a jurisdiction. EOCs may be organized by major functional disciplines (e.g., fire, law enforcement, medical services), by jurisdiction (e.g., Federal, State, regional, tribal, city, county), or by some combination thereof." (FEMA, 2021)

A.3.12 FEDERAL COMMUNICATIONS COMMISSION (FCC).

The United States Government agency charged with regulation of interstate and foreign communications.

A.3.13 FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).

The United States Government agency charged with planning for and coordinating the response to national and regional disasters.

A.3.14 FIRSTNET®.

FirstNet® is an AT&T wireless broadband cellular network dedicated to public safety. Only FirstNet® enabled devices can access the network.

A.3.15 FORMAL MESSAGES.

"Formal messages are structured messages containing a prescribed sequence of key message elements. Radio operators expect the elements to be exchanged in a certain sequence and will

receive and write the information onto message forms. The National Incident Management System (NIMS) ICS 213 is the message form common to emergency management agencies. Each agency in turn may implement specialized message forms to report and exchange operational information important to that agency." (American Radio Relay League® (ARRL), 2015)

A.3.16 GATEWAY STATIONS.

Gateway stations are Amateur Radio Service radio stations that pass traffic into and out of the area through the National Traffic System. Gateway stations should be registered with all National Traffic System™ (NTS™) nets serving their area and if possible, should be part of these nets. All gateway stations should have the capability to interface with as many modes of communications as possible. Their prime responsibility is to provide an outlet and inlet for NTS™ traffic.

A.3.17 HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA).

The Health Insurance Portability and Accountability Act regulates the use and disclosure by a covered entity of protected health information that includes any part of an individual's medical record. Individuals, organizations, and agencies that meet the definition of a covered entity under HIPAA include doctors, clinics, psychologists, dentists, nursing homes, pharmacies, and health insurance companies. If an entity or individual does not meet the definition of a covered entity or business associate, it does not have to comply with HIPAA.

A.3.18 INCIDENT COMMAND SYSTEM (ICS).

"[The Incident Command System] is a standardized approach to the command, control, and coordination of on-scene incident management that provides a common hierarchy within which personnel from multiple organizations can be effective. ICS specifies an organizational structure for incident management that integrates and coordinates a combination of procedures, personnel, equipment, facilities, and communications. Using ICS for every incident helps hone and maintain skills needed to coordinate efforts effectively. ICS is used by all levels of government as well as by many NGOs and private sector organizations. ICS applies across

disciplines and enables incident managers from different organizations to work together seamlessly. This system includes five major functional areas, staffed as needed, for a given incident: Command, Operations, Planning, Logistics, and Finance/Administration." (FEMA, 2017)

A.3.19 LINK.

Link, as used in this document, refers to a path of communications between two or more people, agencies, or locations. It is not restricted to one radio frequency, mode, or type of communications. One link between two people may be via telephone during evacuation and by 144 MHz radio during the storm and then evolve to 440 MHz radio during recovery. The link remains the same even though the medium may change.

A.3.20 NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS).

"[The National Incident Management System] guides all levels of government, nongovernmental organizations (NGO), and the private sector to work together to prevent, protect against, mitigate, respond to, and recover from incidents. NIMS provides stakeholders across the whole community with the shared vocabulary, systems, and processes to successfully deliver the capabilities described in the National Preparedness System. NIMS defines operational systems, including the Incident Command System (ICS), Emergency Operations Center (EOC) structures, and Multiagency Coordination Groups (MAC Groups) that guide how personnel work together during incidents. NIMS applies to all incidents, from traffic accidents to major disasters." (FEMA, 2017)

A.3.21 NATIONAL TRAFFIC SYSTEM™ (NTS™).

The official ARRL® national network for routing traffic between sections.

A.3.22 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WEATHER RADIO.

"NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather

Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week." (NOAA, 2021)

A.3.23 PODRUNNER®.

A deployable command center pre-installed with monitors, computer, printer, VHF/UHF and High Frequency (HF) amateur radios, marine and public service radios, public address system, Wi-Fi network, and FirstNet® phone support. The PodRunner® has an integrated Honda 2k generator and is designed for easy transport.

A.3.24 RADIO MESSAGE SERVER (RMS).

Winlink Radio Message Servers are RF gateway stations between Winlink users (clients), the Winlink CMS, and/or other RMS stations. When operating in conventional mode, messages exchanged with Winlink users are passed to and from the CMS via the internet. When operating in Hybrid HF radio-only mode, messages are routed to other RMS stations using PACTOR or VARA HF radio forwarding. During radio-only operation, Winlink users must designate one or more RMS stations as a Message Pick-up Station (MPS). These RMS stations will store Winlink user messages for each designated user until the messages are retrieved by that user.

A.3.25 SATRUNNER®.

The SatRunner® is an AT&T FirstNet® deployable cell tower. It generates a 1-mile coverage area of FirstNet® Cellular service and provides one thousand feet of Wi-Fi coverage. The SatRunner® has an integrated Honda 2k generator and is designed for easy transport.

A.3.26 SECTION EMERGENCY COORDINATOR (SEC).

The Section Emergency Coordinator is the appointee of the SM to coordinate the emergency communications of the Section.

A.3.27 SECTION MANAGER (SM).

The Section Manager is the duly elected official of the ARRL® to manage a particular area. Pinellas County is in the West Central Florida Section. There are 71 Sections across the nation. The SM is elected by the members in his/her Section.

A.3.28 SERVED AGENCY.

Served Agencies are the Government and Non-Government Agencies (NGO) and organizations served by ACS/ARES® during periods of local, regional, or national emergencies. The government agencies served include but are not limited to local or state emergency management agencies, Emergency Operations Centers, public safety agencies such as law enforcement or fire service, street, road, and highway maintenance departments, etc. NGOs supported by ACS/ARES® include the American Red Cross, Catholic Relief Services, Adventist Disaster Response, Presbyterian Disaster Assistance, and Salvation Army.

A.3.29 SHARED RESOURCES (SHARES).

"The SHAred RESources (SHARES) High Frequency (HF) Radio Program coordinates a voluntary network of government, industry, and disaster response agency HF radio stations used for emergency communications. SHARES supports government (federal, state, and county), critical infrastructure, and nationwide or multi-state disaster response organizations in two ways: by transmitting emergency messages when normal communications systems are destroyed or unavailable, and by providing HF radio channels for interoperability. SHARES supports Emergency Support Function Two (ESF #2), Communications, and helps participants maintain awareness of applicable regulatory, procedural, and technical issues. SHARES is a program of the National Coordinating Center for Communications (NCC), a division of CISA Central." (CYBERSECURITY & INFRASTRUCTURE SECURITY AGENCY, 2021)

A.3.30 TACTICAL MESSAGES.

"Tactical messages are unstructured messages originated by the radio operator and typically convey status, progress, or situational information. Examples are road closures or obstruction, current location of a vehicle responding to a situation, or a short message from a third party to be relayed to another person. For tactical messages, key elements of the message are implied and usually not stated such as time of the message, and the position of authority of the message originator and recipient." (American Radio Relay League® (ARRL), 2015)

A.3.31 VARA.

VARA HF and VARA Frequency Modulation (FM) are proprietary software modems developed by Jose Alberto Nieto Ros, EA5HVK. Both applications are available for use under a shareware license.

A.3.32 WINLINK GLOBAL RADIO EMAIL®.

"...A network of amateur radio and authorized government-licensed stations that provides worldwide radio email using radio pathways where the internet is not present. The system is built, operated and administered entirely by licensed [Amateur Radio] volunteers. It supports email with attachments, position reporting, weather and information bulletins, and is well-known for its role in interoperable emergency and disaster relief communications. It is capable of operating completely without the internet--automatically--using smart-network radio relays. Licensed Winlink operators/stations use both amateur radio and government radio frequencies worldwide. Support for the system is provided by the *Amateur Radio Safety Foundation, Inc.*, a US 501(c)(3) non-profit, public-benefit entity. Winlink Global Radio Email® is a US registered trademark of the Amateur Radio Safety Foundation, Inc." (Amateur Radio Safety Foundation, Inc, 2021)

A.3.33 WINLINK HYBRID NETWORK.

"A voluntary subset of RMS HF and RMS VHF/UHF stations which can exchange messages (on behalf of others) between each other using "radio", in addition to performing their normal WL2K functions. The goal of this function is to enable Winlink users to function during an "internet outage", without using the "peer-to-peer" method." (Amateur Radio Safety Foundation, Inc., 2021)

B APPENDIX B – WEBSITE REFERENCES

WEBSITE REFERENCES

ACS – Pinellas County: Pinellas County ACS Home Page

ACS/ARES® *aresdb* Database: http://www.aresdb.com/

American Radio Relay League: WWW.ARRL.ORG

ARES® – North Florida Section: https://arrl-nfl.org/ares/

ARES® – South Florida Section: https://sflarrl.org/amateur-radio-emergency-service/

ARES® – WCF Section – Documents: WCF ARES® Home Page and Documents

ARRL NTS™ MPG: http://www.arrl.org/appendix-b-nts-methods-and-practices-guidelines

ARRL® – WCF Section: WCF ARRL Section Home Page

CISA Field Operations Guides: https://www.cisa.gov/publication/fog-documents

CISA National Emergency Communications Plan: https://www.cisa.gov/necp

Discussion Group – American Red Cross: ARC-EmComm Groups.io

Discussion Group – RATPAC: Radio Amateur Training Planning Groups.io

Discussion Group – SEC- ARES®: SEC-ARES Groups.io Main Page

FEMA Acronyms, Abbreviations, and Terms: FEMA Acronyms, Abbreviations, and Terms PDF

FEMA Training Glossary: FEMA Glossary

Hurricane Watch Net: https://hwn.org/

IARU Emergency Comms: https://www.iaru.org/on-the-air/emergency-communications/

ICS Interactive Forms: FEMA ICS Forms for Download

Pinellas County Volunteer Services: http://www.pinellascounty.org/volserv/default.htm

Pinellas SKYWARN®: https://www.pcacs.org/radio-operations/skywarn-operations/

Radio Relay International: https://radio-relay.org

Training - American Red Cross (ARC) EmComm Training: ARC EmComm Training Home Page

Training – ARRL EmComm Training: http://www.arrl.org/emergency-communications-training

Training – FEMA Training Courses: https://training.fema.gov/

WEBSITE REFERENCES

VoIP SKYWARN®/Hurricane Net: http://voipwx.net/

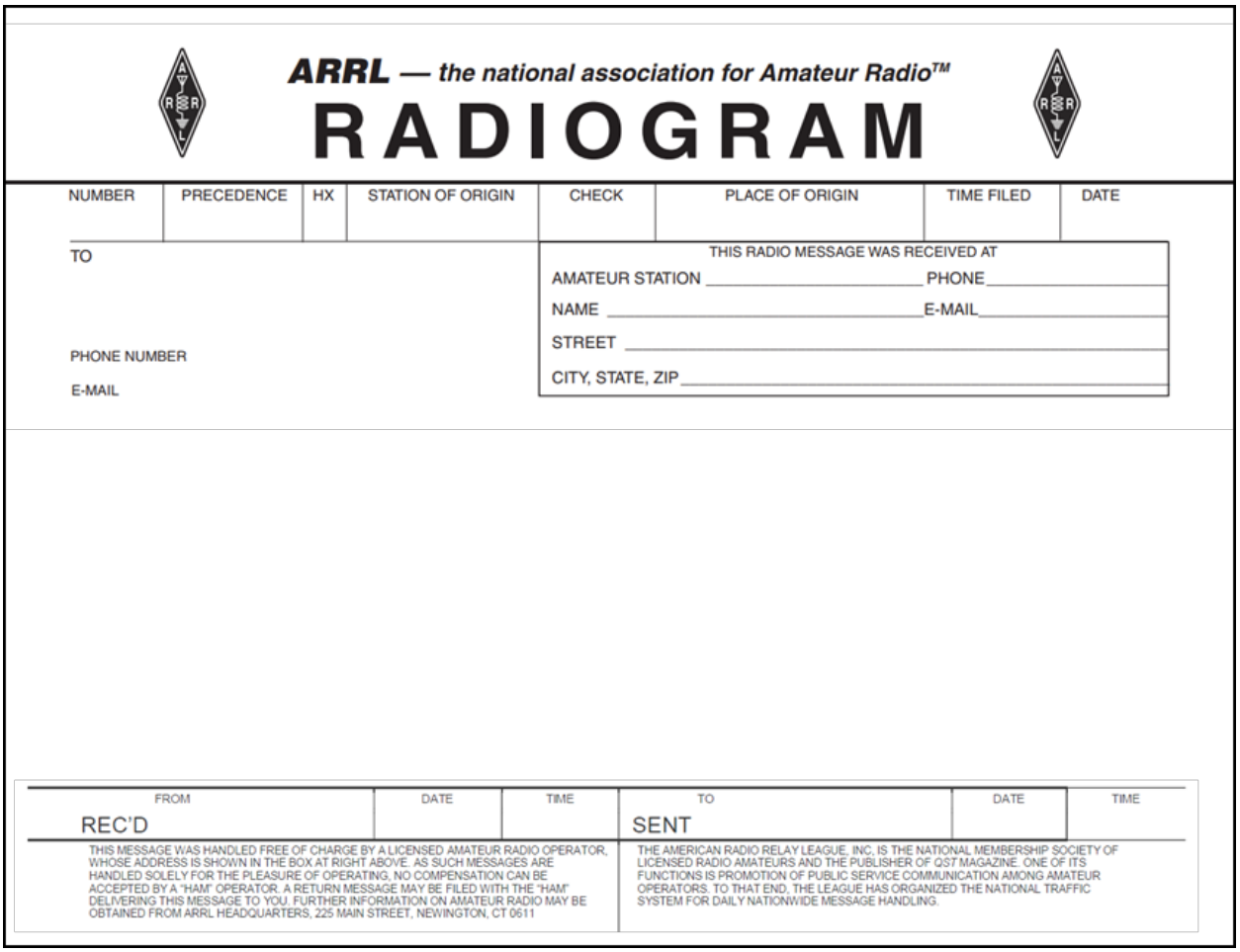
Winlink Book of Knowledge (BOK): Winlink Book of Knowledge

Appendix C

C APPENDIX C – RADIOGRAM AND ICS STANDARD FORMS

This section of the document contains examples of the ARRL® Radiogram and the ICS Standard Forms used by ACS/ARES®.

C.1 ARRL RADIOGRAM



ARRL — the national association for Amateur Radio™

RADIOGRAM

NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE

TO

PHONE NUMBER

E-MAIL

THIS RADIO MESSAGE WAS RECEIVED AT

AMATEUR STATION _____ PHONE _____

NAME _____ E-MAIL _____

STREET _____

CITY, STATE, ZIP _____

FROM	DATE	TIME	TO	DATE	TIME
REC'D			SENT		

THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR, WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING, NO COMPENSATION CAN BE ACCEPTED BY A "HAM" OPERATOR. A RETURN MESSAGE MAY BE FILED WITH THE "HAM" DELIVERING THIS MESSAGE TO YOU. FURTHER INFORMATION ON AMATEUR RADIO MAY BE OBTAINED FROM ARRL HEADQUARTERS, 225 MAIN STREET, NEWINGTON, CT 0611

THE AMERICAN RADIO RELAY LEAGUE, INC. IS THE NATIONAL MEMBERSHIP SOCIETY OF LICENSED RADIO AMATEURS AND THE PUBLISHER OF *QST* MAGAZINE. ONE OF ITS FUNCTIONS IS PROMOTION OF PUBLIC SERVICE COMMUNICATION AMONG AMATEUR OPERATORS. TO THAT END, THE LEAGUE HAS ORGANIZED THE NATIONAL TRAFFIC SYSTEM FOR DAILY NATIONWIDE MESSAGE HANDLING.

Figure C- 1. ARRL® Radiogram Form

TRAFFIC OPERATIONS AID

1. MESSAGE EXAMPLE
2. 1 R HXG W1NJM 8 NEWINGTON CT 1830 JUL 1
   a b c d e f g h
3. DONALD SMITH
   164 EAST SIXTH AVE
   NORTH RIVER CITY MD 21201
   410 555 1234
   OP NOTE DELIVER WEEKDAY
   BT
4. HAPPY BIRTHDAY X SEE YOU
   SOON X LOVE
   BT
5. DIANA
   OP NOTE SERVICE TO STATION OF ORIGIN

1. CHARACTERS: Use **only** capital letters, figures, slant bars (/).
2. PREAMBLE: (Tracking information stays with message to delivery)
   a. Number (begin with 1 each month or year - no leading zeros) SVC may be entered ahead of the number for Service messages.
   b. Precedence (R, W, P, EMERGENCY). TEST + space may be used before Prec. in exercise traffic, as in: TEST P.
   c. Handling Instructions (optional - see table for formatting)
   d. Station of Origin (first amateur handler's call sign)
   e. Check (number of words/groups in text only. ARL + space precede figures if ARRL Numbered Radiograms in the text, as in: "ARL 8". Corrections are appended with "/".
   f. Place of Origin (signer's location, not necessarily location of station of origin)
   g. Time Filed (optional with originating station - if not UTC, add time zone letters and adjust Date as necessary.)
   h. Date (MON, 3 letters, DT, no leading zeros - must agree with Time Filed) Time Filed, Date and Time are assumed UTC by default.
3. ADDRESS: (complete with zip code, telephone #, email address, etc., may include an OP NOTE).
4. TEXT (typical limit, 25 groups, but may be expanded for emergencies) X as punctuation counts as a word - <BT> does not. A group is a series of characters with no spaces between them. (Text may be in email format*, as in ICS form content, in the Hybrid Radiogram.)
5. SIGNATURE (person for whom message originated - may include a full address and OP NOTE).

RADIOGRAM HANDLING INSTRUCTIONS ("HX-CODES")

HXA__ (Followed by number.) Collect landline delivery authorized by addressee within ____ miles, (if no number in blank, authorization is unlimited). This means that the originating station has obtained authorization from the addressee, through the party originating the message, to call collect when delivering the message.

HXB__ (Followed by number.) Cancel message if not delivered within ____ hours of filing time; service message back to originating station. NOTE: filing time must be included in preamble.

HXC Report date and time of delivery of the message back to the originating station by service message.

HXD Report to originating station the identity of station from which received, plus date and time. Report identity of station to which relayed, plus date and time, or if delivered, report date and time and method of delivery (this information is sent by service message to the originating station).

HXE Delivering station get reply from addressee, originate message back. This reply is sent to the person from whom the original message was received, at the "place of origin", using a full address obtained from the addressee. If an address is not available, a reply can often be successfully routed back to the station of origin since a record is kept of originator's info.

HXF__ (Followed by a number.) Hold delivery until ____ (date). This blank contains the number of the day on which the message should be delivered (even if it is in the following month).

HXG Delivery by mail or landline toll call not required. If toll call or other expense involved, cancel message and send service message back to originating station.

Compliance with these instructions is mandatory. **MORE THAN ONE HX__ CODE MAY BE USED**. If more than one code is used, they may be combined provided no numbers are to be inserted; otherwise the HX should be repeated, thus: **HXCE, HXAC**, or **HXA50 HXC**

Ed. note: The numbers following eligible HX_ codes are expected. In this example the HXA in the first case has the range number intentionally omitted, thus the "C" may be appended. In the second case, where the optional 50 mile range is included, the figures force the separation of the full "HXC."

MESSAGE SENT ON VOICE

"**NUMBER** ONE ROUTINE HOTEL X-RAY GOLF WHISKEY ONE NOVEMBER JULIETT MIKE EIGHT
NEWINGTON CONNECTICUT ONE EIGHT TREE ZERO JULY ONE
DONALD SMITH I spell SIERRA MIKE INDIA TANGO HOTEL
figures ONE SIX FOUR EAST SIXTH I spell S I X T H initials ALFA VICTOR ECHO
NORTH RIVER CITY MARYLAND figures TWO ONE TWO ZERO ONE
figures FOUR ONE ZERO FIFE FIFE FIFE ONE TWO TREE FOUR
OP NOTE DELIVER WEEKDAY
BREAK" // (mandatory listening pause)
"HAPPY BIRTHDAY initial X-RAY SEE YOU SOON initial X-RAY LOVE
BREAK
DIANA I spell DELTA INDIA ALFA NOVERMBER ALFA
OP NOTE SERVICE TO STATION OF ORIGIN
END NO MORE"
(NOTE: It is critically important to voice the message at a speed suitable for the receiving operator to copy accurately. Use no extraneous words. Do not voice the names of message parts.)

SENDING MESSAGES BOOKED

Unique text groups are each marked by "BLANK" to affirm Check, and the actual groups are sent later with the unique parts after a "BREAK" or <BT> on CW. Copy begins with "BOOK OF [quantity] and ends with "END BOOK", or <AR> END BOOK <AR> on CW. Common parts are sent first. Book parts are separated by "BREAK" or <BT> on CW, each unique message part beginning with "NUMBER" or NR on CW. Booked messages may be sent to multiple stations, polled ready to copy, and checking with each for copy when their unique parts are finished; or bulletins sent to multiple stations, polled ready to copy and then polled for acknowledgment at the end.

ITU PHONETIC ALPHABET

A	ALFA	S	SIERRA
B	BRAVO	T	TANGO
C	CHARLIE	U	UNIFORM
D	DELTA	V	VICTOR
E	ECHO	W	WHISKEY
F	FOXTROT	X	X-RAY
G	GOLF	Y	YANKEE
H	HOTEL	Z	ZULU
I	INDIA	1	ONE
J	JULIETT	2	TWO
K	KILO	3	THREE (TREE)
L	LIMA	4	FOUR
M	MIKE	5	FIVE (FIFE)
N	NOVEMBER	6	SIX
O	OSCAR	7	SEVEN
P	PAPA (PA-'PA)	8	EIGHT
Q	QUEBEC (KAY-'BEK)	9	NINE (NINER)
R	ROMEO	0	ZERO

RADIOGRAM PRECEDENCES

These precedences are not meant to prohibit handling lower level traffic until all higher levels are passed. Handle higher precedence traffic before lower as outlets are available.

EMERGENCY (Spelled out on form.)*: Any message having life and death urgency to any person or group of persons, which is transmitted by Amateur Radio in the absence of regular commercial facilities. This includes official messages of welfare agencies during emergencies requesting supplies, materials or instructions vital to relief of stricken populace in emergency areas. During normal times, it will be very rare. On CW/RTTY, this designation will always be spelled out. If in doubt, do not use it.

PRIORITY (P): Use abbreviation P on CW/RTTY. This classification is for a) important messages having a specific time limit, b) official messages not covered in the emergency category, c) press dispatches and emergency related traffic not of the utmost urgency, d) notice of death or injury in a disaster area, personal or official.

WELFARE (W): This classification, abbreviated as W on CW/RTTY, refers to either an inquiry as to the health and welfare of an individual in the disaster area or an advisory from the disaster area that indicates all is well. Welfare traffic is handled only after all emergency and priority traffic is cleared. The Red Cross equivalent to an incoming Welfare message is DWI (Disaster Welfare Inquiry).

ROUTINE (R): Most traffic in normal times will bear this designation. In disaster situations, traffic labeled Routine (R on CW/RTTY) should be handled last, or not at all when circuits are busy with higher precedence traffic.

* **EMERGENCY**: Emergency is always spelled out in the preamble. Means other than Amateur Radio should be included in the delivery options. EMERGENCY messages have immediate urgency. They should take priority over any other activity and should be passed by the best means available with the cooperation of all stations.

FORMATTING

DASH	substitute for hyphen in text and zip codes
DOT	substitute for period in email addresses and URLs
R	substitute for decimal point in figure groups
X	substitute for period in text - except after last group

All other punctuation is entered as a spelled-out word.

EMAIL ADDRESS, URL,

JOHN DOT SMITH ATSIGN DOMAIN DOT NET
HTTP COLON SLASH SLASH WWW DOT WORK DOT COM

INTRODUCERS - VOICING, USE ONLY ONE PER GROUP

Initial(s): "initial BRAVO", "initials JULIETT ROMEO"
Figure(s): "figure FOUR", "figures ONE NINER"
Mixed Group: "mixed group BRAVO SLASH SIX"
Mixed Group Figure(s): "mixed group figures TWO TWO ZULU"
Amateur Call: "amateur call WHISKEY ONE NOVEMBER JULIETT MIKE"
Telephone Figures: to introduce telephone figures if no zip code
NOTE: Introduced groups are voiced one character at a time, letters phonetically. Introducers are not voiced for Preamble groups.

MESSAGE SENT ON CW

NR 1 R HXG W1NJM 8 NEWINGTON CT 1830 JUL 1
DONALD SMITH <AA>
164 EAST SIXTH AVE <AA>
NORTH RIVER CITY MD 21201 <AA>
410 555 1234 <AA>
OP NOTE DELIVER WEEKDAY
BT // (mandatory listening pause)
HAPPY BIRTHDAY X SEE YOU
SOON X LOVE
BT
DIANA <AA>
OP NOTE SERVICE TO STATION OF ORIGIN
<AR> N

* See the ICS Guidance Document for methods used for voicing and sending email formatted text.

P. 1

RRI 1720r3 5/17 // ed: W3YVQ FOR USE ON AMATEUR RADIO SERVICE TRAFFIC NETS www.radio-relay.org

Figure C- 2. Radio Relay League Traffic Aid – Page 1

TRAFFIC OPERATIONS AID

QN SIGNALS FOR CW NET USE

QNA*	Answer in prearranged order.
QNB*	Act as a relay Between ____ and ____.
QNC	All net stations Copy. I have a message to all net stations.
QND*	Net is Directed (controlled by a net control station).
QNE*	Entire net stand by.
QNF	Net is Free (not controlled).
QNG	Take over as net control station.
QNH	Your net frequency is High.
QNI	Net stations report In.* I am reporting into the net. (Follow with a list of traffic or QRU.)
QNJ	Can you copy me? Can you copy ____?
QNK*	Transmit messages for ____ to ____.
QNL	Your net frequency is Low.
QNM*	You are QRMing the net. Stand by.
QNN	Net control station is ____. What station has net control?
QNO	Station is leaving the net.
QNP	Unable to copy you. Unable to copy ____.
QNQ*	Move frequency to ____ and wait for ____ to finish handling traffic. Then send him traffic for ____.
QNR*	Answer ____ and Receive traffic.
QNS	Following stations are in the net.* (Follow with list.) Request list of stations in the net.
QNT	I request permission to leave the net for ____ minutes.
QNU*	The net has traffic for you. Stand by.
QNV*	Establish contact with ____ on this frequency. If successful, move to ____ and send him traffic for ____.
QNW	How do I route messages for ____?
QNX	You are excused from the net.* Request to be excused from the net.
QNY*	Shift to another frequency (or to ____ kHz) to clear traffic with ____
QNZ	Zero beat your signal with mine.

*** For use only by the Net Control Station.**

Notes on the Use of QN Signals

The QN signals listed above are special Q signals for use in amateur CW nets only. They are not for use in casual amateur conversation. Other meanings that may be used in other services do not apply. Do not use QN signals on phone nets. Say it with words. QN signals need not be followed by a question mark, even though the meaning may be interrogatory.

INTERNATIONAL Q SIGNALS

A "Q" signal followed by a ? asks a question. A "Q" signal without the ? answers the question in the affirmative unless otherwise indicated.

QRA	What is the name of your station?
QRG	What is my exact frequency?
QRH	Does my frequency vary?
QRI	How is my tone? (1-3)
QRK	What is my signal intelligibility? (1-5)
QRL	Are you busy?
QRM	Is my transmission being interfered with?
QRN	Are you troubled by static?
QRO	Shall I increase transmitter power?
QRP	Shall I decrease transmitter power?
QRQ	Shall I send faster?
QRS	Shall I send slower?
QRT	Shall I stop sending?
QRU	Have you anything for me? (Answer in negative.)
QRV	Are you ready?
QRW	Shall I tell ____ you're calling him?
QRX	When will you call again?
QRZ	Who is calling me?
QSA	What is my signal strength? (1-5)
QSB	Are my signals fading?
QSD	Is my keying defective?
QSG	Shall I send ____ messages at a time?
QSK	Can you work break-in?
QSL	Can you acknowledge receipt?
QSM	Shall I repeat the last message sent?
QSO	Can you communicate with ____ direct?
QSP	Will you relay to ____?
QSV	Shall I send a series of V's?
QSW	Will you transmit on ____?
QSX	Will you listen for ____ on ____?
QSY	Shall I change frequency?
QSZ	Shall I send each word/group more than once? (Answer, send twice or ____.)
QTA	Shall I cancel number ____?
QTB	Do you agree with my word count? (Answer negative.)
QTC	How many messages have you to send?
QTH	What is your location?
QTR	What is your time?
QTV	Shall I stand guard for you?
QTX	Will you keep your station open for further communication with me?
QUA	Have you news of ____?

OPERATIONAL, PROWORDS, PROSIGNS

VOICE	CW
YES, AFFIRMATIVE	C
NO, NEGATIVE	N
ROGER	R

(ROGER/R means all received and understood. It does not mean yes/affirmative.)

OVER	K
CLEAR	CL
CLEAR	<SK>
SEVENTY THREE	73

(Best regards - note meaning is plural.)

ARL (in Check)	ARL (in CK)
ARL (in Text)	ARL (in TXT)

(ARL + space precede Check figures if ARRL Numbered Radiograms in text - voiced as letters "A R L", ARL on CW. ARL + space precede the Numbered Radiograms in the text as 1 group.)

NUMBER	NR

(begins message record copy until END)

BOOK OF [#]	BOOK OF [#]

(begins record copy of [# as spelled word] booked messages until END BOOK)

(use a slight pause)	<AA>

(<AA> marks end of address lines like a CR/LF)

OP NOTE	OP NOTE

(Introduces operator delivery or service note - generally not delivered to addressee.)

BREAK	<BT> or =

(Marks start and end of text and separates parts of booked messages. A listening pause follows a break at the start of the text and before NR when sending books. No listening pause before SIG.)

END + [MORE, ONE MORE, NO MORE]	<AR> + [B, B1 (or 1), N]

(ends record copy of single messages + number of messages to follow)

END BOOK + [MORE, ONE MORE, NO MORE]	<AR> END BOOK <AR> + [B, B1 (or 1), N]

(ends record copy of messages sent booked + number of messages to follow)

I SAY AGAIN	?
(FOR CLARITY)	(FOR CLARITY)

(Send "I SAY AGAIN, or "?" on CW, repeat previous group(s) for emphasis/clarity.

I SAY AGAIN	?
(FOR ERROR)	(FOR ERROR)

(Send "I SAY AGAIN, or "?" on CW, repeat last group sent correctly, and then continue.)

I SPELL	(none)

(Voice only ONE group then "I spell", and then spell the group with phonetics or letter spelling, then continue. Last and other proper names should be spelled phonetically.)

DTN BATCH FILE FORMAT - text files for importing Radiograms into a DTN Hub via Radio-email or direct.

```
ST 21201@NTSMD < WA1QAA
P BALTIMORE 410 555

78 P WA1QAA 15 ELLICOTT CITY MD 1800 SEP 20
BACI EOC
BALTIMORE MD 21201
410 555 1212
BT
TWELVE SUPPORT TEAMS IN ROUTE
TO YOUR EOC X DO
YOU HAVE EMERGENCY POWER QUERY
BT
MIKE WA1QAA MDC SEC

/EX
(blank line if last message, or ST line of next message - no blank line allowed)
```

ST + space + [zip]@NTS[2 letter state] is key to routing. Use some kind of zip code even if a generic one close to the delivery point - Canadian zips must entered as 6 characters with no middle space. The call after "<" is the station of origin. The next line is the TOWN line showing the Precedence Flag, town, area code and exchange of the message's phone number. Batch Files must contain only messages of the same precedence status, a combination of the Precedence itself plus the presence or absence of the HXD handling instruction and Service status (SVC messages). Thus the possible flags are **S, D, SD, W, SW, WD, SWD, P, SP, PD, SPD.** No flag R is used for Routine messages. Thus the P flag matches the Radiogram Precedence here. The blank line before the PBL and after the signature is for readability. The Radiogram is entered as shown, framing the text with BTs on lines of their own. The /EX ends the message and must be followed by one more blank line if the last message, or immediately by the ST of an additional message, if any. Many Radiograms may be packed into one Batch File. Booking is not permitted. Filenames must be 8 x 3 (FAT) plain text files.

FILL REQUESTS - VOICE

"[IN (part)] **WORD AFTER** (group(s))"
"[IN (part)] **WORD BEFORE** (group(s))"
"[IN (part)] **ALL AFTER** (group(s))"
"[IN (part)] **ALL BEFORE** (group(s))"
"[IN (part)] **BETWEEN** (group) **AND** (group)"
"part name"
"confirm (group(s)"

FILL REQUESTS - CW

"[IN (part)] **WA** (group(s))"
"[IN (part)] **WB** (group(s))"
"[IN (part)] **AA** (group(s))"
"[IN (part)] **AB** (group(s))"
"[IN (part)] **BN** (group) **ES** (group)"
"part name"
"CFM (group(s))"

(Respond only with group(s) requested or CONFIRM on voice, CFM on CW, as warranted. The "[IN (part)]" is used optionally to avoid ambiguity in defining the fill location.)

RADIO-EMAIL TYPES

TYPE 1:	Radio-email carrying active Radiograms. Subject line begun RRI for plain text, DTN for Batch Files + service class, [destination], quantity and the request for confirmation of receipt: "pse QSL this email" .
TYPE 2:	Regular Radio-email with multiple network and/or internet addressees, binary attachments, email body text.
TYPE 3:	Radio-email sent to a single network client for delivery to a Radiogram type address entered with a PBL as the first lines of the body text, with an email-formatted body text message (a modern form of Radiogram).
TYPE 4:	Radio-email sent to a single client directly, peer-to-peer, for refiling (or forwarding) onto the network or internet by a station with access.

GENERAL NOTES: The objective in handling formal written Radiogram traffic is to pass an exact copy of the original message to the addressee in an efficient and timely fashion. Radio-email, added to the tool- kit, allows real-time messaging everywhere, error corrected, with no intermediate relaying manpower needed.

P. 2

RRI 1720r3 5/17 // ed: W3YVQ FOR USE ON AMATEUR RADIO SERVICE TRAFFIC NETS www.radio-relay.org

Figure C- 3. Radio Relay League Traffic Aid – Page 2

C.2 ICS 205 INCIDENT RADIO COMMUNICATIONS PLAN

Purpose. The Incident Radio Communications Plan (ICS 205) is a standard NIMS ICS form that is used by Pinellas ACS to identify all the amateur radio repeaters, digipeaters, Winlink RMS Gateways, and simplex frequencies planned for use by Pinellas ACS during an activation event.

The form specific instructions provided by NIMS have been updated to clarify and tailor the information to the amateur radio community and Pinellas ACS.

Preparation. During the initial stages of an activation event, the Pinellas ACS Net Manager will use the information in the ICS 217A to build an ICS 205 that is appropriate and meets the needs of the specific event.

Distribution. Once complete, the ICS 205 will be posted on the Pinellas ACS Website; emailed to all registered members of Pinellas ACS and the WCF ARES® leadership team; and delivered to the Planning Section Chief of the Pinellas EOC. If necessary, an updated ICS 205 can also be distributed via Winlink. At the discretion of the Planning Section Chief, the Pinellas ACS ICS 205 may be incorporated into the Incident Action Plan (IAP).

The Pinellas ACS Admin officer is responsible for maintaining a copy of all Incident / activation event documentation that was created by Pinellas ACS and delivering the original documents to the Pinellas EOC Documentation Unit.

TABLE C- I. ICS 205 Incident Radio Communication Plan		
Block Number	**Block Title**	**Instructions**
1	**Incident Name**	This field contains the name of the Incident/activation event that is associated with the ICS 205. It will be provided to the Net Manager by the Radio Officer or his designee.
2	**Date/Time Prepared**	Enter date prepared (month/day/year) and time prepared (24-hour Local Time).
3	**Operational Period** • Date and Time From • Date and Time To	This field contains the start date (month/day/year) and time (24-hour Local Time) and projected end date and time for the activation event. This is the period over which the ICS 205 is applicable.
4	**Basic Radio Channel Use**	Enter the following information about radio channel use:
	Zone Group	This is an optional field that is currently not used by Pinellas ACS.
	Channel Number	This field is uniquely associated with the shelter radios that are distributed by the Pinellas EOC during an activation event. The field identifies the channel number used by the shelter radio to store the identified repeater or simplex frequency. For all other users, it should be treated as a reference line number on the ICS 205 document.
	Function	This field identifies the type of network assigned to the resource. Although NIMS defines five network types, Pinellas ACS will only deploy Tactical and Support nets. • **Tactical Nets** – Used to support the mission critical functions managed by the Pinellas ACS Operations group. • **Support/Logistics Nets** – Used to support non-tactical functions. These include but are not limited to equipment distribution; equipment staging and installation; equipment repair; the coordination of material requests; and distribution of supplies.

TABLE C- I. ICS 205 Incident Radio Communication Plan		
Block Number	**Block Title**	**Instructions**
4	Channel Name/Trunked Radio System Talkgroup	This field will identify a common name for the resource. (e.g., Repeater FCC call sign or Simplex). When combined with the information in the Assignment field, users should have a clear understanding of how and under what conditions the resource will be used.
	Assignment	This field identifies the specific mission or function assigned to the resource.
	RX (Receive) Frequency (N or W)	The receive frequency as the mobile or portable radio would be programmed using ***xxx.xxxx*** out to four decimal places followed by a "**N**" designating narrowband (12.5Khz Bandwidth or less) or a "**W**" designating wideband emissions[1].
	RX Tone/NAC	The receive Continuous Tone Coded Squelch System (CTCSS) subaudible tone, Digital Coded Squelch (DCS), Network Access Code (NAC), Radio Access Number (RAN), or Color Code (CC) for the receive frequency as the mobile or portable radio would be programmed. If no tone/code is required, the field will indicate that the radio should use Carrier Squelch (CSQ).
	TX (Transmit) Frequency (N or W)	The transmit frequency as the mobile or portable radio would be programmed using ***xxx.xxxx*** out to four decimal places followed by a "**N**" designating narrowband (12.5Khz Bandwidth or less) or a "**W**" designating wideband emissions.
	TX Tone/NAC	The transmit CTCSS subaudible tone, DCS, NAC, RAN or CC for the transmit frequency as the mobile or portable radio would be programmed. If no Tone/Code is required, enter CSQ.
	Mode (A, D, or M)	The mode of operation: "**A**" for analog operation, "**D**" for digital operation or "**M**" for Mixed mode operation (e.g., Analog and Fusion).

[1] Analog FM amateur radio systems operating with a deviation of 5Khz are defined as wideband. Analog FM amateur radio systems operating with a deviation of 2.5Khz are defined as narrowband.

TABLE C- I. ICS 205 Incident Radio Communication Plan		
Block Number	**Block Title**	**Instructions**
4	Remarks	This field can contain any additional information that might be beneficial to the user during the planned activation. Examples include repeater location, modes of operation (e.g., D-Star, Next Generation Digital Network (NXDN), P25, Fusion, DMR), Club Name, or a dedicated purpose such as PACS Shelter Net.
5	**Special Instructions**	This field can contain any information that would be useful to the general membership during the activation event. Special instructions might include the use of cross-band repeaters or special instructions for handling message traffic.
6	**Prepared by** (Communications Unit Leader) • Name • Signature • Date/Time	The name and signature of the person preparing the form. Typically, within NIMS, this would be the Communications Unit Leader. For Pinellas ACS, the ICS 205 will be created by the Net Manager and approved by the Radio Officer. Enter date (month/day/year) and time prepared (24-hour Local Time).

INCIDENT RADIO COMMUNICATIONS PLAN (ICS 205)

1. Incident Name:	2. Date/Time Prepared:	3. Operational Period:
Hurricane Spock EXERCISE	Date: 4/29/2021 Time: 0800 EST	Date From: 4/30/2021 Date To 5/1/2021 Time From: 1600 EST Time To: 1600 EST

4. Basic Radio Channel Use:

Zone Grp.	Ch #	Function	Channel Name/Trunked Radio System Talk group	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
	1	Tactical	W4ACS Rptr	Coordination	145.1700W	CSQ	144.5700W	156.7	A	Pinellas EOC – Lkd Rptr
		Tactical	W4ACS Rptr	Coordination	443.4000W	CSQ	448.4000W	156.7	A	Pinellas EOC - Lkd Rptr
	2	Tactical	WD4SCD Rptr	Shelter Ops	147.0300W	CSQ	147.6300W	100.0	A	Shelter Net- St Pete
	3	Tactical	WD4SCD Rptr	Shelter Ops	147.0300W	CSQ	147.6300W	103.5	A	Shelter Net- North County
	4	Tactical	WD4SCD Rptr	Shelter Ops	147.0300W	CSQ	147.6300W	156.7	A	Shelter Net Mid County
	5	Tactical	WD4SCD Rptr	Shelter Ops	147.0300W	CSQ	147.6300W	82.5	A	Shelter Net East County
	6	Tactical	WD4SCD Rptr	Shelter Ops	147.0300W	CSQ	147.6300W	146.2	A	Shelter Net West County
	7	Tactical	WD4SCD Rptr	Shelter Ops	147.0300W	CSQ	147.6300W	192.8	A	Shelter Net S Pasadena
	8	Tactical	WA4AKH Rptr	Out-of-Area Traffic	147.0600W	CSQ	147.6600W	CSQ	A	SPARC NTS™ Traffic Net
	9	Tactical	NI4CE Rptr	WCF Coord	145.4300W	CSQ	144.8300W	100.0	A	WCF ARES®: NI4CE Verna

5. Special Instructions: The WD4SCD repeater has a single transmitter site and five receive sites distributed throughout Pinellas County. The repeater receive sites are connected to the transmitter site using UHF communication links.

6. Prepared by (Communications Unit Leader)**:** Name: **James T Kirk** Signature: _____

ICS 205	IAP Page _1 of 3_	Date/Time: 4/30/2021

Figure C- 4. Sample ICS 205

C.3 ICS 205A COMMUNICATIONS LIST

Purpose. The Communications List (ICS 205A) records methods of contact for incident personnel. While the Incident Radio Communications Plan (ICS 205) is used to provide information on all radio frequencies down to the Division/Group level, the ICS 205A indicates all methods of contact for personnel assigned to the incident (radio frequencies, phone numbers, pager numbers, etc.), and functions as an incident directory.

Preparation. The ICS 205A can be filled out during check-in and is maintained and distributed by Communications Unit personnel. This form should be updated each operational period.

Distribution. The ICS 205A is distributed within the ICS organization by the Communications Unit and posted as necessary. All completed original forms must be given to the Documentation Unit. If this form contains sensitive information such as cell phone numbers, it should be clearly marked in the header that it contains sensitive information and is not for public release.

Notes:

a. The ICS 205A is an optional part of the Incident Action Plan (IAP).
b. This optional form is used in conjunction with the ICS 205.
c. If additional pages are needed, use a blank ICS 205A and repaginate as needed.

TABLE C- II. ICS 205A Communications List		
Block Number	**Block Title**	**Instructions**
1	**Incident Name**	Enter the name assigned to the incident.
2	**Operational Period** • Date and Time From • Date and Time To	Enter the start date (month/day/year) and time (using the 24-hour clock) and end date and time for the operational period to which the form applies.
3	**Basic Local Communications Information**	Enter the communications methods assigned and used for personnel by their assigned ICS position.
	• Incident Assigned Position	Enter the ICS organizational assignment.
	• Name	Enter the name of the assigned person.
	• Method(s) of Contact (phone, pager, cell, etc.)	For each assignment, enter the radio frequency and contact number(s) to include area code, etc. If applicable, include the vehicle license or ID number assigned to the vehicle for the incident (e.g., HAZMAT 1, etc.).
4	**Prepared by** • Name • Position/Title • Signature • Date/Time	Enter the name, ICS position, and signature of the person preparing the form. Enter date (month/day/year) and time prepared (24-hour clock).

COMMUNICATIONS LIST (ICS 205A)

1. Incident Name:	**2. Operational Period:** Date From: Date To: Time From: Time To:

3. Basic Local Communications Information:		
Incident Assigned Position	Name (Alphabetized)	Method(s) of Contact (phone, pager, cell, etc.)

4. Prepared by: Name: _____ Position/Title: _____ Signature: _____

ICS 205A	**IAP Page _____**	Date/Time: _____

C.4 ICS 213RR RESOURCE REQUEST MESSAGE

RESOURCE REQUEST MESSAGE (ICS 213 RR)

1. Incident Name:				**2. Date/Time**		**3. Resource Request Number:**	
Requestor	**4. Order** (Use additional forms when requesting different resource sources of supply.):						
	Qty.	Kind	Type	Detailed Item Description: (Vital characteristics, brand, specs, experience, size, etc.)	Arrival Date and Time		Cost
					Requested	Estimated	
	5. Requested Delivery/Reporting Location:						
	6. Suitable Substitutes and/or Suggested Sources:						
	7. Requested by Name/Position:			**8. Priority:** ☐ Urgent ☐ Routine ☐ Low		**9. Section Chief Approval:**	
Logistics	**10. Logistics Order Number:**					**11. Supplier Phone/Fax/Email:**	
	12. Name of Supplier/POC:						
	13. Notes:						
	14. Approval Signature of Auth Logistics Rep:					**15. Date/Time:**	
	16. Order placed by (check box): ☐ SPUL ☐ PROC						
Finance	**17. Reply/Comments from Finance:**						
	18. Finance Section Signature:					**19. Date/Time:**	
ICS 213 RR, Page 1							

Figure C- 5. ICS 213RR Resource Request Message

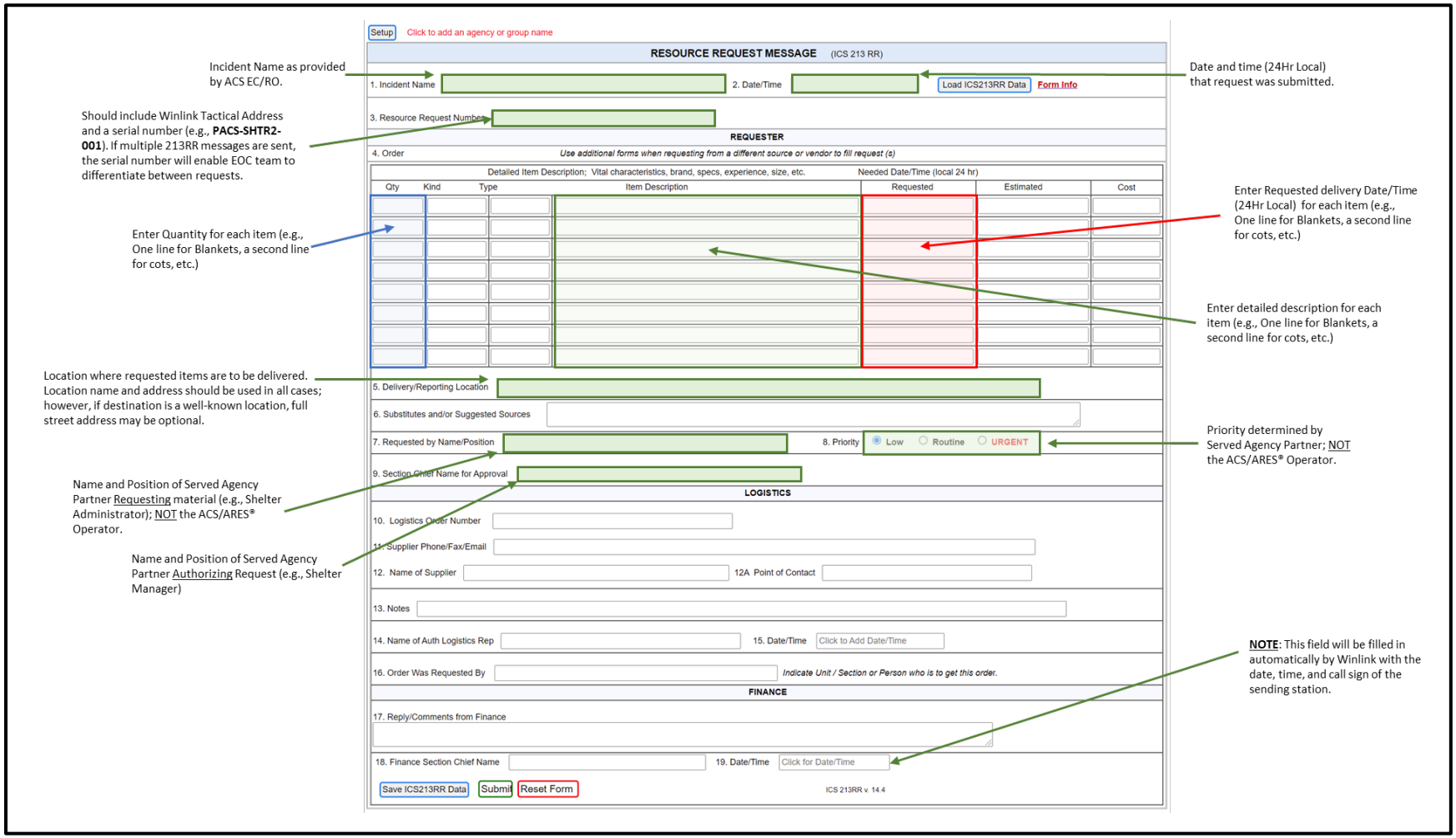


Figure C- 6. Winlink ICS 213RR with instructions

C.5 ICS 213 GENERAL MESSAGE

ICS 213
General Message

Purpose. The General Message (ICS 213) is used by the incident dispatchers to record incoming messages that cannot be orally transmitted to the intended recipients. The ICS 213 is also used by the Incident Command Post and other incident personnel to transmit messages (e.g., resource order, incident name change, other ICS coordination issues, etc.) to the Incident Communications Center for transmission via radio or telephone to the addressee. This form is used to send any message or notification to incident personnel that requires hard-copy delivery.

Preparation. The ICS 213 may be initiated by incident dispatchers and any other personnel on an incident.

Distribution. Upon completion, the ICS 213 may be delivered to the addressee and/or delivered to the Incident Communication Center for transmission.

Notes:

- The ICS 213 is a three-part form, typically using carbon paper. The sender will complete Part 1 of the form and send Parts 2 and 3 to the recipient. The recipient will complete Part 2 and return Part 3 to the sender.
- A copy of the ICS 213 should be sent to and maintained within the Documentation Unit.
- Contact information for the sender and receiver can be added for communications purposes to confirm resource orders. Refer to 213RR example (Appendix B)

Block Number	Block Title	Instructions
1	**Incident Name** (Optional)	Enter the name assigned to the incident. This block is optional.
2	**To** (Name and Position)	Enter the name and position the General Message is intended for. For all individuals, use at least the first initial and last name. For Unified Command, include agency names.
3	**From** (Name and Position)	Enter the name and position of the individual sending the General Message. For all individuals, use at least the first initial and last name. For Unified Command, include agency names.
4	**Subject**	Enter the subject of the message.
5	**Date**	Enter the date (month/day/year) of the message.
6	**Time**	Enter the time (using the 24-hour clock) of the message.
7	**Message**	Enter the content of the message. Try to be as concise as possible.
8	**Approved by** • Name • Signature • Position/Title	Enter the name, signature, and ICS position/title of the person approving the message.
9	**Reply**	The intended recipient will enter a reply to the message and return it to the originator.
10	**Replied by** • Name • Position/Title • Signature • Date/Time	Enter the name, ICS position/title, and signature of the person replying to the message. Enter date (month/day/year) and time prepared (24-hour clock).

Figure C- 7. ICS 213 Instructions

Communications Log (ICS 309)

1. Incident Name	2. Operational Period Date From: Date To: Time From: Time To:
3. Radio Net Name / Tactical Call Sign / Location	4. Radio Operator (Name, Call Sign)

5. COMMUNICATIONS LOG

Time 24Hr Local	Call Sign/ID		Msg # / Precedence / Origin	Message Subject/Notes
	FROM	TO		

6. Prepared By (Name, Call Sign)	7. Date & Time Prepared	8. Page of

PACS ICS 309

Figure C- 8. ICS 309 Communications Log

Appendix D

D APPENDIX D – PINELLAS ACS TACTICAL CALL SIGNS AND WINLINK ADDRESSES

This section of the document contains a list of tactical call signs and Winlink tactical addresses used by Pinellas ACS.

TABLE D- I. Pinellas ACS Tactical Call Signs and Winlink Addresses – Officers			
Position No	**Position**	**Voice Tactical Call Sign**	**Winlink Tactical Address**
1	Tactical-Resource Net Control Station	NET CONTROL (TACTICAL)	N/A
2	Shelter Net Control Station	NET CONTROL (SHELTER)	N/A
3	Deputy Radio Officer – Operations	OPS CHIEF	N/A
4	Operations Deputy	OPS DEPUTY	N/A
5	Deputy Radio Officer – Logistics	PINELLAS LOGISTICS	PACS-LOG
6	North County Dispatch	NORTH DISPATCH	N/A
7	South County Dispatch	SOUTH DISPATCH	N/A
8	Deputy Radio Officer – Administrative	ADMIN	PACS-ADMIN
9	Deputy Radio Officer – Net Manager	NET MANAGER	PACS-NETMAN
10	ARES Mutual Assistance Team 1 Lead	ARES TEAM 1	PACS-MAT1
11	ARES Mutual Assistance Team 2 Lead	ARES TEAM 2	PACS-MAT2

TABLE D- II. Pinellas ACS Tactical Call Signs and Winlink Addresses – Evacuation Shelters			
Shelter No	**Shelter Name**	**Voice Tactical Call Sign**	**Winlink Tactical Address**
1	Bauder Elementary School	BAUDER ELEMENTARY	PACS-SHTR1
2	Belleair Elementary School	BELLEAIR ELEMENTARY	PACS-SHTR2
3	Boca Ciega High School	BOCA CIEGA HIGH	PACS-SHTR3
4	Campbell Park Elementary School	CAMPBELL PARK ELEMENTARY	PACS-SHTR4
5	Carwise Middle School	CARWISE MIDDLE	PACS-SHTR5
6	Clearwater Fundamental Middle School	CLEARWATER MIDDLE	PACS-SHTR6
7	Dunedin Community Center	DUNEDIN COMMUNITY	PACS-SHTR7
8	Dunedin Elementary School	DUNEDIN ELEMENTARY	PACS-SHTR8
9	Dunedin Highland Middle School	DUNEDIN MIDDLE	PACS-SHTR9
10	East Lake High School	EAST LAKE HIGH	PACS-SHTR10
11	East Lake Middle School	EAST LAKE MIDDLE	PACS-SHTR11
12	Fairmount Park Elementary School	FAIRMOUNT ELEMENTARY	PACS-SHTR12
13	Gibbs High School	GIBBS HIGH	PACS-SHTR13
14	Gulfport Elementary School	GULFPORT ELEMENTARY	PACS-SHTR14
15	High Point Elementary School	HIGH POINT ELEMENTARY	PACS-SHTR15
16	Jamerson Elementary School	JAMERSON ELEMENTARY	PACS-SHTR16
17	John Hopkins Middle School	JOHNS HOPKINS MIDDLE	PACS-SHTR17

TABLE D- II. Pinellas ACS Tactical Call Signs and Winlink Addresses – Evacuation Shelters			
Shelter No	**Shelter Name**	**Voice Tactical Call Sign**	**Winlink Tactical Address**
18	Largo High School	LARGO HIGH	PACS-SHTR18
19	Lealman Exchange	LEALMAN EXCHANGE	PACS-SHTR19
20	Lealman Innovation Academy	LEALMAN ACADEMY	PACS-SHTR20
21	McMullen Booth Elementary School	MCMULLEN BOOTH ELEMENTARY	PACS-SHTR21
22	Melrose Elementary School	MELROSE	PACS-SHTR22
23	Mildred Helms Elementary School	MILDRED HELMS	PACS-SHTR23
24	New Heights Elementary School	NEW HEIGHTS ELEMENTARY	PACS-SHTR24
25	Oak Grove Middle School	OAK GROVE MIDDLE	PACS-SHTR15
26	Palm Harbor CSA	PALM HARBOR COMMUNITY	PACS-SHTR26
27	Palm Harbor Middle School	PALM HARBOR MIDDLE	PACS-SHTR27
28	Palm Harbor University High School	PALM HARBOR HIGH	PACS-SHTR28
29	Ross Norton Recreation Center	ROSS NORTON	PACS-SHTR29
30	Sanderlin K-8 Elementary School	SANDERLIN	PACS-SHTR30
31	Sexton Elementary School	SEXTON	PACS-SHTR31
32	Skycrest Elementary School	SKYCREST ELEMENTARY	PACS-SHTR32
33	St. Petersburg College Midtown Campus	ST PETE COLLEGE MIDTOWN	PACS-SHTR33
34	Thurgood Marshall Middle School	THURGOOD MARSHALL	PACS-SHTR34

TABLE D- III. Pinellas ACS Tactical Call Signs and Winlink Addresses – County Agencies			
No	**Location Name**	**Voice Tactical Call Sign**	**Winlink Tactical Address**
1	Pinellas EOC	PINELLAS EOC	PACS-EOC
2	Campus Police HQ Communications Center		
3	Sheriff Office and County Jail	PINELLAS SHERIFF	PACS-JAIL
4	St. Petersburg EOC	ST PETE EOC	PACS-STPETE
5	Largo EOC	LARGO EOC	PACS-LARGO
6	SunStar	SUNSTAR	PACS-SUNSTAR
7	Oldsmar EOC	OLDSMAR EOC	PACS-OLDS
8	Clearwater PD EOC and Command vehicle	CLEARWATER EOC	PACS-CLRWTR
9	CERT and Red Cross Liaison		
10	Salvation Army St. Petersburg (SPARC)		
11	Clearwater CERT and ARC Liaison Clearwater Office		
12	CERT Beaches		
13	CAP Liaison		
14	AF MARS Liaison		

TABLE D- III. Pinellas ACS Tactical Call Signs and Winlink Addresses – County Agencies			
No	**Location Name**	**Voice Tactical Call Sign**	**Winlink Tactical Address**
15	Lealman Fire District	LEALMAN FIRE	PACS-LEAFIRE
16	Seminole Fire Department EOC	SEMINOLE FIRE	PACS-SEMFIRE
17	Volunteer Resource Center		
18	ARC Clearwater Office	RED CROSS CLEARWATER	PACS-CWARC
19	Pinellas PodRunner	POD RUNNER	EMA-POD2

Appendix E

E APPENDIX E – NETWORK OPERATING PROCEDURES

This section of the document contains the Net Control Scripts and operating procedures used by Pinellas ACS during an activation event.

Each activation level has its own unique set of stand-alone NCS scripts and operating procedures. Readers will note a significant amount of duplication in the scripts and procedures created for each activation level. This is purposeful. During an emergency, this design allows users to focus on a single section of the document rather than jumping back and forth between sections.

Please follow the directions listed below when using the script.

a. The text within quotes should be broadcast to the net as written.
b. Notes within the script provide additional information to the NCS. They are displayed in **Blue** and should not be broadcast to the net.
c. The place holders (*Call sign*) and (*Name*) should be replaced with the FCC Call Sign and name of the individual identified in the script.
d. The **ACTION** statements within the script describe the actions to be performed by the NCS or the station called by the NCS. They are displayed in Red and should not be broadcast to the net.

ACTIVATION LEVEL 3

ALERT

E.1 ACS/ARES® LEVEL 3

This section documents the Activation and Deactivation procedures for ACS/ARES® Activation Level 3.

E.1.1 ACS/ARES® LEVEL 3 ACTIVATION

Pinellas ACS/ARES® will be activated to Level-3 when an official of ACS/ARES® is notified by a served agency partner, WCF ARES® leadership, or the Pinellas County DEM that assistance may be needed soon. No specific timeframe for activation is normally associated with this notification.

E.1.1.1 NET CONTROL STATION PROCEDURES

When notified by the EC/RO or his/her designee that ACS/ARES® Activation Level 3 has been established, the assigned NCS for the ACS/ARES® Tactical-Resource net will perform the following actions.

a. Using the NCS script shown in Figure E- 1, announce the establishment of the Tactical-Resource net on the W4ACS repeater system. The announcement should be repeated once per hour, traffic permitting.
b. Once net establishment is complete, confirm that the alternate NCS is on frequency. If the alternate NCS is not on frequency, contact the Net Manager and request assistance in locating and assigning an alternate.

This is an informal net in which other amateur traffic may be passed and is considered a Watch Net. Any station may call any other station without the permission of the NCS. However, the NCS is still responsible for the proper operation of the net and should exert control if traffic management or discipline becomes an issue.

LEVEL 3 ANNOUNCEMENT SCRIPT

This is (*Call sign*) and I am the net control station for the Pinellas County ACS/ARES® Tactical-Resource Net."

"Pinellas ACS/ARES® is now at activation **Level 3 – ALERT**."

"Activation Level 3 means that one or more served agencies may need Pinellas County ACS/ARES® support in the near future."

ACTION - Announce reason for activation level 3

"Additional information will be provided as it becomes available."

"All Pinellas ACS/ARES® stations are requested to take the appropriate steps needed to prepare for possible activation and deployment. Refer to the Pinellas ACS/ARES® Emergency Communication Plan for additional information. Please continue to monitor this frequency for additional information."

"The local time is now _____" (**Use 24-hour format**)

"This is an informal net. Net Check-ins are *not* required."

END OF SCRIPT

Page 1 of 1

Figure E- 1. NCS Level 3 Announcement Script

***NOTE**: Since this is an informal net, a roster of net participants does not need to be created.*

E.1.2 ACS/ARES® LEVEL 3 DEACTIVATION

Deactivation will occur when the organization requesting ACS/ARES® support notifies ACS/ARES® that its assistance is no longer required. If more than one organization has requested support from ACS/ARES®, full deactivation will not take place until all requesting organizations indicate that support is no longer required.

E.1.2.1 NET CONTROL STATION PROCEDURES

When notified by the EC/RO or his/her designee that ACS/ARES® is being deactivated, the assigned NCS for the ACS/ARES® Tactical-Resource net will perform the following actions.

a. Use the announcement script shown in Figure E- 2 to announce the net is being deactivated.

ACS/ARES® DEACTIVATION ANNOUNCEMENT SCRIPT

"This is (*Call sign*) and I am the Net Control Station for the Pinellas County ACS/ARES® Tactical-Resource Net."

"The Pinellas County ACS Radio Officer has been directed to ***Deactivate*** ACS/ARES®."

"The local time is now _____" (**Use 24-hour format**)

"I would like to thank everyone for their assistance and participation in the net. All net participants are free to secure."

"This is (*Call sign*). The net is now closed and the frequency available for normal Amateur use."

END OF SCRIPT

Figure E- 2. Level 3 Deactivation Script

ACTIVATION LEVEL 2

STANDBY

E.2 ACS/ARES® LEVEL 2

This section documents the Activation and Deactivation procedures for ACS/ARES® Activation Level 2.

E.2.1 ACS/ARES® LEVEL 2 ACTIVATION

Pinellas ACS/ARES® will be activated to Level-2 when an official of ACS/ARES® is notified by a served agency partner, WCF ARES® leadership, or the Pinellas County DEM that a need for assistance is **imminent.**

E.2.1.1 NET CONTROL STATION PROCEDURES

When notified by the EC/RO or his/her designee that ACS/ARES® Activation Level 2 has been established, the assigned NCS for the ACS/ARES® Tactical-Resource net will perform the following actions.

a. Using the NCS script shown in Figure E- 3and Figure E- 4, announce the establishment of the Tactical-Resource net on the W4ACS repeater system. The announcement should be repeated every 30-minutes, traffic permitting.

NOTE: *It is important for the NCS and alternate NCS to keep an accurate and up to date record of all network participants, their current location, and ability to mobilize to a deployment site. During an NCS shift change, this information will need to be transferred to the on-coming NCS.*

b. Following the Level 2 announcement, use the NCS script shown in Figure E- 15 and Figure E- 16 to call for net check-ins.

c. Once net establishment and check-in is complete, the NCS will perform the following actions.

(1) If the alternate NCS is not on frequency, contact the Net Manager and request assistance in locating and assigning an alternate.

(2) Assign one or more net participants to announce on the other repeaters documented in the ICS 205 that Pinellas ACS is now operating at Level 2 Activation.

(3) Recruit a net participant to audio tape (Record) the net.

(4) Repeat the net announcement and request additional check-ins once every 30-minutes, traffic permitting.

LEVEL 2 ANNOUNCEMENT SCRIPT

"This is (*Call sign*) and I am the Net Control Station for the Pinellas County ACS/ARES® Tactical-Resource Net."

"Pinellas ACS/ARES® is now at activation **level 2 – STANDBY**."

"Activation Level 2 means that there is a high probability that Pinellas County ACS/ARES® will be fully activated in the near future."

ACTION - Announce reason for activation level 2

"Additional information will be provided as it becomes available."

"All ACS/ARES® stations are requested to take the appropriate steps needed to prepare for activation and deployment. Refer to the Pinellas ACS/ARES® Emergency Communication Plan for additional information. Please continue to monitor this frequency for additional information."

"The local time is now _____" (**Use 24-hour format**) "

"This is a directed net. To participate in this net, you *must* be a member of ACS/ARES® and your radio must be capable of transmitting a sub-audible tone of 156.7 Hz."

Page 1 of 2

Figure E- 3. NCS Level 2 Announcement Script

LEVEL 2 ANNOUNCEMENT SCRIPT (Cont.)

"This net is *only* handling **Emergency** and **Priority** traffic."

"Any station with Emergency traffic please call now."

ACTION - Acknowledge check-ins by call sign and process traffic as required.

"Any station with Priority traffic please call now."

ACTION - Acknowledge check-ins by call sign and process traffic as required.

"Please listen to and follow the directions of Net Control. All stations are asked to remain on frequency until released by net control. If you need to leave the net, please wait for a pause in transmissions, transmit your callsign, wait to be acknowledged, and then request release."

Note: When first establishing the net, use the NET CHECK-IN SCRIPT shown in the in Figure E- 15 and Figure E- 16 to call for net check-ins.

Note: If this is a periodic (30-minute) announcement, call for additional net check-ins.

END OF SCRIPT

Page 2 of 2

Figure E- 4. NCS Level 2 Announcement Script (Cont.)

E.2.2 ACS/ARES® LEVEL 2 DEACTIVATION

Level 2 Deactivation will occur when the organization requesting ACS/ARES® support notifies ACS/ARES® that its assistance is no longer required. If more than one organization has requested support from ACS/ARES®, full deactivation will not take place until all requesting organizations indicate that support is no longer required.

E.2.2.1 NET CONTROL STATION PROCEDURES

When notified by the EC/RO or his/her designee that ACS/ARES® is being deactivated, the assigned NCS for the ACS/ARES® Tactical-Resource net will perform the following actions.

a. Use the announcement script shown in Figure E- 5 and Figure E- 6 to announce the net is being deactivated.
b. The ACS/ARES® Tactical-Resource net will remain active to assist deployed units through the demobilization period.
c. Once all deployed units have returned from deployment or indicate that they no longer need assistance, the NCS will secure the Tactical Resource net.

ACS/ARES® LEVEL 2 DEACTIVATION ANNOUNCEMENT SCRIPT

"This is (*Call sign*) and I am the Net Control Station for the Pinellas County ACS/ARES® Tactical-Resource Net."

"The Pinellas County ACS Radio Officer has been directed to ***Deactivate*** ACS/ARES®."

"The local time is now _____" (**Use 24-hour format**)

"All members should finalize site activity and communication logs; secure copies of all formal message traffic and ICS documentation; and deliver station records to the Pinellas ACS Admin officer."

"If you received emergency equipment from the Pinellas County EOC, inventory and return equipment to the logistics officer."

"Deployed assets, please notify Net Control when you leave your current location and when you have safely returned home."

"The ACS/ARES® Tactical-Resource net will remain active until all deployed assets have returned to base and emergency equipment has been returned to the Pinellas EOC."

"Net participants operating from home are free to secure."

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Figure E- 5. NCS Level 2 Deactivation Script

ACS/ARES® LEVEL 2 DEACTIVATION ANNOUNCEMENT SCRIPT (Cont.)

Note: *The NCS must keep track of all deployed assets until they have returned to base.*

ACTION – Continue to track deployed assets and assist as required.

Note: *Once all deployed assets have returned from deployment or indicate that they no longer need assistance the NCS is free to secure the net.*

"This is (*Call sign*) and I am the Net Control Station for the Pinellas County ACS/ARES® Tactical-Resource Net."

"Are there any final questions or comments before I secure the net?"

ACTION - Acknowledge and Address Questions

"The local time is now _____" (**Use 24-hour format**)

"I would like to thank everyone for their assistance and participation in the net. All remaining net participants are free to secure."

"This is (*Call sign*). The net is now closed and the frequency available for normal Amateur use."

END OF SCRIPT

Page 2 of 2

Figure E- 6. NCS Level 2 Deactivation Script (Cont.)

ACTIVATION LEVEL 1

ACTIVATE

E.3 ACS/ARES® LEVEL 1

This section documents the Activation and Deactivation procedures for ACS/ARES® Activation Level 1.

E.3.1 ACS/ARES® LEVEL 1 ACTIVATION

Pinellas ACS/ARES® will be activated to Level 1 when an official of ACS/ARES® is notified by a served agency partner, WCF ARES® leadership, or the Pinellas County DEM that communications support is required and that the need is **immediate**.

E.3.1.1 NET CONTROL STATION PROCEDURES

When notified by the EC/RO or his/her designee that ACS/ARES® Activation Level 1 has been established, the assigned NCS for the ACS/ARES® Tactical-Resource net will perform the following actions.

a. Using the announcement script shown in Figure E- 7and Figure E- 8, announce the establishment of the Tactical-Resource net on the W4ACS repeater system. The announcement should be repeated once every 30-minutes, traffic permitting.

NOTE: *It is important for the NCS to keep an accurate and up to date record of all network participants, their current location, and ability to mobilize to a deployment site. During an NCS shift change, this information will need to be transferred to the on-coming NCS.*

b. Following the Level 2 announcement, use the NCS script shown in Figure E- 15 and Figure E- 16 to call for net check-ins.

c. Once net establishment and check-in is complete, the NCS will perform the following actions.

(1) If the alternate NCS is not on frequency, contact the Net Manager and request assistance in locating and assigning an alternate.

(2) Assign one or more net participants to announce on the other repeaters documented in the ICS 205 that Pinellas ACS is now operating at Level 1 Activation.

(3) Recruit a net participant to audio tape (Record) the net.

(4) Repeat the net announcement and request additional check-ins once every 30-minutes, traffic permitting.

LEVEL 1 ANNOUNCEMENT SCRIPT

"This is (*Call sign*) and I am the Net Control Station for the Pinellas County ACS/ARES® Tactical-Resource Net."

""Pinellas ACS/ARES® is now in at **Activation Level 1**."

"Activation Level 1 means that Pinellas County ACS/ARES® has been fully activated."

ACTION - Announce reason for activation

"Additional information will be provided as it becomes available."

"All ACS/ARES® stations are requested to take the appropriate steps needed to prepare for deployment. Refer to the Pinellas ACS/ARES® Emergency Communication Plan for additional information."

"The local time is now _____" (**Use 24-hour format**)

"This is a directed net. To participate in this net, you must be a member of ACS/ARES® and your radio must be capable of transmitting a sub-audible tone of 156.7 Hz."

"This net is *only* handling **Emergency** and **Priority** traffic."

"Any station with Emergency traffic please call now."

Page 1 of 2

Figure E- 7. NCS Level 1 Announcement Script

LEVEL 1 ANNOUNCEMENT SCRIPT (CONT)

ACTION - Acknowledge check-ins by call sign and process traffic as required.

"Any station with Priority traffic please call now."

ACTION - Acknowledge check-ins by call sign and process traffic as required.

"Please listen to and follow the directions of Net Control. All stations are asked to remain on frequency until released by net control. If you need to leave the net, please wait for a pause in transmissions, transmit your callsign, wait to be acknowledged, and then request release."

"The ACS/ARES® Tactical-Resource Net will continue to use the W4ACS repeater system throughout the Activation period. However, if this repeater becomes unusable, the net will move to the WD4SCD repeater. If both repeaters become unusable, the net will continue operation on the simplex frequency of 146.430 MHz."

Note: *When first establishing the net, use the NET CHECK-IN SCRIPT shown in the following panel to call for net check-ins.*

Note: *If this is a periodic (30-minute) announcement, call for additional net check-ins.*

END OF SCRIPT

Page 2 of 2

Figure E- 8. NCS Level 1 Announcement Script (Cont.)

E.3.2 ACS/ARES® LEVEL 1 DEACTIVATION

Level 1 Deactivation will occur when the organization requesting ACS/ARES® support notifies ACS/ARES® that its assistance is no longer required. If more than one organization has requested support from ACS/ARES®, full deactivation will not take place until all requesting organizations indicate that support is no longer required.

E.3.2.1 NET CONTROL STATION PROCEDURES

When notified by the EC/RO or his/her designee that ACS/ARES® is being deactivated, the assigned NCS for the ACS/ARES® Tactical-Resource net will perform the following actions.

a. Use the announcement script shown in Figure E- 9and Figure E- 10 to announce the net is being deactivated.
b. The ACS/ARES® Tactical-Resource net will remain active to assist deployed units through the demobilization period.
c. Once all deployed units have returned from deployment or indicate that they no longer need assistance, the NCS will secure the Tactical Resource net.

ACS/ARES® LEVEL 1 DEACTIVATION ANNOUNCEMENT SCRIPT

"This is (*Call sign*) and I am the Net Control Station for the Pinellas County ACS/ARES® Tactical-Resource Net."

"The Pinellas County ACS Radio Officer has been directed to ***Deactivate*** ACS/ARES®."

"The local time is now _____" (**Use 24-hour format**)

"All members should finalize site activity and communication logs; secure copies of all formal message traffic and ICS documentation; and deliver station records to the Pinellas ACS Admin officer."

"If you received emergency equipment from the Pinellas County EOC, inventory and return equipment to the logistics officer."

"Deployed assets, please notify Net Control when you leave your current location and when you have safely returned home."

"The ACS/ARES® Tactical-Resource net will remain active until all deployed assets have returned to base and emergency equipment has been returned to the Pinellas EOC."

"Net participants operating from home are free to secure."

Page 1 of 2

Figure E- 9. NCS Level 1 Deactivation Script

ACS/ARES® LEVEL 1 DEACTIVATION ANNOUNCEMENT SCRIPT (Cont.)

Note: *The NCS must keep track of all deployed assets until they have returned to base.*

ACTION – Continue to track deployed assets and assist as required.

Note: *Once all deployed assets have returned from deployment or indicate that they no longer need assistance the NCS is free to secure the net.*

"This is (*Call sign*) and I am the Net Control Station for the Pinellas County ACS/ARES® Tactical-Resource Net."

"Are there any final questions or comments before I secure the net?"

ACTION - Acknowledge and Address Questions

"The local time is now _____" (**Use 24-hour format**)

"I would like to thank everyone for their assistance and participation in the net. All remaining net participants are free to secure."

"This is (*Call sign*). The net is now closed and the frequency available for normal Amateur use."

END OF SCRIPT

Page 2 of 2

Figure E- 10. NCS Level 1 Deactivation Script (Cont.)

E.4 ACS/ARES® SHELTER NET

This section documents the Activation and Deactivation procedures for the ACS/ARES® Shelter Net.

E.4.1 ACS/ARES® SHELTER NET ACTIVATION

If notified by the net manager that evacuation shelters are currently open or scheduled to be open, the assigned NCS for the ACS/ARES® Shelter Net will establish the ACS/ARES® Shelter Net.

E.4.1.1 NET CONTROL STATION PROCEDURES

When notified by the EC/RO or his/her designee that the ACS/ARES® Shelter Net is to be established, the assigned NCS for the ACS/ARES® Shelter net will perform the following actions.

a. Using the announcement script shown in Figure E- 11 and Figure E- 12, announce the establishment of the ACS/ARES® Shelter net on the WD4SCD repeater system. The announcement should be repeated once every 30-minutes, traffic permitting.

NOTE: *It is important for the NCS to keep an accurate and up to date record of all network participants, their current location, and ability to mobilize to a deployment site. During an NCS shift change, this information will need to be transferred to the on-coming NCS.*

b. Following the Shelter Net announcement, use the NCS script shown in Figure E-15 and Figure E- 16 to call for net check-ins.

c. Once net establishment and check-in is complete, the NCS will perform the following actions.

(1) If the alternate NCS is not on frequency, contact the Net Manager and request assistance in locating and assigning an alternate.

(2) Recruit a net participant to audio tape (record) the net.

(3) Repeat the net announcement and request additional check-ins once every 30-minutes, traffic permitting.

SHELTER NET ANNOUNCEMENT SCRIPT

"This is (*Call sign*) and I am the Net Control Station for the Pinellas County ACS/ARES® Shelter Net."

"Pinellas ACS/ARES® is now in at **Activation Level 1** and the Pinellas EOC has opened one or more evacuation shelters."

"Activation Level 1 means that Pinellas County ACS/ARES® has been fully activated."

ACTION - Announce reason for activation

"Additional information will be provided as it becomes available."

"The local time is now _____" (**Use 24-hour format**)

"This is a directed net. To participate in this net, you must be a member of ACS/ARES® and your radio must be capable of transmitting a sub-audible tone. Please refer to the Pinellas County ACS Emergency Communication Plan or the ICS 205 for the subaudible tone appropriate for your location."

"This net is *only* handling **Emergency** and **Priority** traffic.

"Any station with Emergency traffic please call now."

ACTION - Acknowledge check-ins by call sign and process traffic as required.

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Figure E- 11. NCS Shelter Announcement Script

SHELTER NET ANNOUNCEMENT SCRIPT (CONT)

"Any station with Priority traffic please call now."

ACTION - Acknowledge check-ins by call sign and process traffic as required.

Please listen to and follow the directions of Net Control. All ACS/ARES® stations are asked to remain on frequency until released by net control. If you need to leave the net, please wait for a pause in transmissions, transmit your callsign, wait to be acknowledged, and then request release."

Note: When first establishing the net, use the NET CHECK-IN SCRIPT shown in the following panel to call for net check-ins.

Note: If this is a periodic (30-minute) announcement, call for additional net check-ins.

END OF SCRIPT

Page 2 of 2

Figure E- 12. NCS Shelter Net Announcement Script (Cont.)

E.4.2 ACS/ARES® DEACTIVATION

Deactivation will occur when the organization requesting ACS/ARES® support notifies ACS/ARES® that its assistance is no longer required. If more than one organization has requested support from ACS/ARES®, full deactivation will not take place until all requesting organizations indicate that support is no longer required.

E.4.2.1 NET CONTROL STATION PROCEDURES

When notified by the EC/RO or his/her designee that ACS/ARES® is being deactivated, the assigned NCS for the ACS/ARES® Shelter net will perform the following actions.

a. Use the announcement script shown in Figure E- 13and Figure E- 14 to announce the ACS/ARES® Shelter net is being deactivated.
b. The ACS/ARES® Tactical-Resource net will remain active to assist deployed units through the demobilization period.
c. Once all deployed units have returned from deployment or indicate that they no longer need assistance, the NCS will secure the Tactical Resource net.

SHELTER NET DEACTIVATION ANNOUNCEMENT SCRIPT

"This is (*Call sign*) and I am the Net Control Station for the Pinellas County ACS/ARES® Shelter Net."

"The Pinellas County ACS Radio Officer has been directed to ***Deactivate*** ACS/ARES®."

"The local time is now _____" (**Use 24-hour format**)

"All members should finalize site activity and communication logs; secure copies of all formal message traffic and ICS documentation; and deliver station records to the Pinellas ACS Admin officer."

"If you received emergency equipment from the Pinellas County EOC, inventory and return equipment to the logistics officer."

"The ACS/ARES® Tactical-Resource net, operating on the W4ACS repeater, will remain active until all deployed assets have returned to base and emergency equipment has been returned to the Pinellas EOC."

"All deployed assets, please change frequency to the W4ACS repeater system, Check-in to the Tactical-Resource net, and notify the Net Control Station when you leave your current location and when you have safely returned home."

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Figure E- 13. Shelter Net Deactivation Script

SHELTER NET DEACTIVATION ANNOUNCEMENT SCRIPT

"Net participants operating from home are free to secure."

"Are there any final questions or comments before I secure the net?"

ACTION - Acknowledge and Address Questions

"This is (*Call sign*) and I am the Net Control Station for the Pinellas County ACS/ARES® Shelter Net."

"The local time is now _____" (**Use 24-hour format**)

"I would like to thank everyone for their assistance and participation in the net. All remaining net participants are free to secure."

"This is (*Call sign*). The net is now closed and the frequency available for normal Amateur use."

END OF SCRIPT

Figure E- 14. Shelter Net Deactivation Script (Cont.)

E.5 General Net Procedures

This section of the document contains the general net procedures used during ACS/ARES® activation.

E.5.1 NCS Net Check-in Procedures

The NCS will request check-ins to the net during initial net establishment and during NCS shift change. The NCS will use the script shown in Figure E- 15 and Figure E- 16 to request net check-ins.

NET CHECK-IN SCRIPT

"This is (Call sign). I will now take check-ins for the net. When checking into the net, please provide Net Control with your call sign, tactical call sign, deployment status, and Traffic list. Please speak slowly, clearly, and phonetically. Also, please call one at a time and wait for Net Control to acknowledge each station before a new station attempts to check in.

"If the Alternate Net Control Station is on frequency, please call now."

ACTION - Acknowledge check-ins by call sign

"Stations with a prefix that begins with the letter A (Alpha) or the letter K (Kilo) or the letter N (November). Please call now."

ACTION - Acknowledge check-ins by call sign

"Stations with a prefix that begins with the letter W (Whiskey). Please call now."

ACTION - Acknowledge check-ins by call sign

"Stations checking in by Echolink. Please call now."

ACTION - Acknowledge check-ins by call sign

Page 1 of 2

Figure E- 15. NCS Net Check-In Script

NET CHECK-IN SCRIPT (Cont.)

"I will now take check-ins from all stations. Please call now."

ACTION - Acknowledge check-ins by call sign

Not hearing any more stations, we will now proceed with the business of the net."

END OF SCRIPT

Figure E- 16. NCS Net Check-in Script (Cont.)

E.5.2 ALTERNATE NCS PROCEDURES

The alternate NCS will perform the following actions.

a. When directed by the NCS, assume temporary control of the net. This may occur when the NCS needs a short break.

b. Immediately assume the duties of the NCS if the primary NCS encounters a problem that prevents that station from continuing as NCS.

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. Maintain a duplicate net roster and NCS log.

E.5.3 NCS SHIFT CHANGE PROCEDURE

The Net Manager will create an NCS/Alternate NCS schedule for each ACS/ARES® Net. It is the responsibility of each NCS and Alternate NCS to immediately notify the Net Manager if they are unable to support one or more scheduled shifts. Fifteen minutes prior to the scheduled NCS shift change, the incoming NCS should call the outgoing NCS and then both stations should implement the procedure listed below.

a. Using the current net repeater or simplex frequency, the incoming NCS will call the outgoing NCS and notify him/her that the incoming NCS is ready to transition the role of NCS.

b. The outgoing NCS will provide the incoming NCS with the following information.

   (1) The current net status.

   (2) Any information that should be provided to the membership via periodic announcement.

   (3) Net roster and NCS log (if internet and/or Winlink are available)

NOTE: *Ideally, the outgoing NCS would provide the incoming NCS and alternate NCS with a copy of the net roster and NCS log. However, this is not always possible. If the internet is operational,*

the NCS should use email to deliver the net roster and log. If the internet is not available, the log and roster should be sent via Winlink.

c. Once the incoming NCS acknowledges receipt of the net data, the outgoing NCS should direct the incoming NCS to assume Net Control.

d. The incoming NCS assumes the role of NCS by using the Announcement Script Listed below to alert the membership of the change in NCS.

(1) Level 1: Figure E- 7. and Figure E- 8.

(2) Level 2: Figure E- 3. and Figure E- 4.

(3) Level 3: Figure E- 1.

(4) Shelter Net: Figure E- 11 and Figure E- 12.

e. The incoming NCS should then re-establish the net by calling for net check-ins using the Check-in script shown in Figure E- 15 and Figure E- 16.

***NOTE**: Activation level 3 is an informal net. A roster of net participants does not need to be created for level 3 activation.*

f. The outgoing NCS should remain on frequency for 10 minutes to assist the new NCS if required.

E.5.4 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.

Appendix F

F APPENDIX F – COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEETS

This section of the document contains the ICS 217A Communications Resource Availability Worksheets for Pinellas County ACS/ARES®. The purpose of the ICS 217A is to identify all the amateur radio repeaters, digipeaters, and simplex frequencies accessible and available for use by Pinellas County during an activation event. It is the master list of all the resources that ***could*** potentially be used. It is not a list of the resources that ***will*** be used.

Individual worksheets have been created for each RF band and function. Each worksheet contains all the information needed to establish and maintain communications using the identified repeater, RMS gateway, or simplex frequency. The form has a frequency band and description field that is common to all the entries on the form and nine fields that uniquely describe each communication resource. Instructions for completing the form are listed in TABLE F- I.

TABLE F- I. ICS 217A Instructions

Title	Instructions
Frequency Band	The frequency band (e.g., 80-Meters, 40-Meters, 6-meters, 2-Meters, 70 cm, VHF, UHF, 700 MHz, or 800 MHz, etc.)
Description	A description of the information entered on the worksheet (e.g., UHF Repeater Systems Accessible from Pinellas County).
Channel Configuration	A general description/purpose of the channel/resource (e.g., Repeater, Linked-Repeater, Simplex, Simplex-Mobile Only, Simplex-Base/Mobile, etc.).
Channel Name/Trunked Radio System Talk Group	The nomenclature or commonly used name for the channel or Talkgroup. When the entry identifies a repeater, the repeater call sign will be entered into this field. When the entry corresponds to a simplex frequency, the intended purpose of the frequency will be entered (e.g., PACS Plan B).

TABLE F- I. ICS 217A Instructions	
Title	**Instructions**
Eligible Users	The discipline or user group to whom this channel/Talkgroup may be assigned (e.g., Amateur, General Mobile Radio Service (GMRS), Law, Fire, Federal Agency, etc.).
RX Freq N or W	The receive frequency as the mobile or portable radio would be programmed using ***xxx.xxxx*** out to four decimal places followed by a "**N**" designating narrowband (12.5Khz Bandwidth or less) or a "**W**" designating wideband emissions[2].
RX Tone / NAC	The receive Continuous Tone Coded Squelch System (CTCSS) subaudible tone, Digital Coded Squelch (DCS), Network Access Code (NAC), Radio Access Number (RAN), or Color Code (CC) for the receive frequency as the mobile or portable radio would be programmed. If no tone/code is required, the field will indicate that the radio should use Carrier Squelch (CSQ).
TX Freq N or W	The transmit frequency as the mobile or portable radio would be programmed using ***xxx.xxxx*** out to four decimal places followed by a "**N**" designating narrowband (12.5Khz Bandwidth or less) or a "**W**" designating wideband emissions.
TX Tone / NAC	The transmit CTCSS subaudible tone, DCS, NAC, RAN, or CC for the transmit frequency as the mobile or portable radio would be programmed. If no Tone/Code is required, Enter CSQ.
Mode A, D, or M	The mode of operation: "**A**" for analog operation, "**D**" for digital operation or "**M**" for Mixed mode operation (e.g., Analog and Fusion).
Remarks	This field can contain any additional information that might be beneficial to the net manager during planning activities. Examples include repeater location, modes of operation (e.g., D-Star, NXDN, P25, Fusion, DMR), Club Name, or a dedicated purpose such as PACS Shelter Net.

[2] Analog FM amateur radio systems operating with a deviation of 5Khz are defined as wideband. Analog FM amateur radio systems operating with a deviation of 2.5Khz are defined as narrowband.

TABLE F- II. Comms Resource Availability Worksheet – Pinellas County VHF Repeaters

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET	Frequency Band	Description
	2-Meters 144.0000 - 148.0000	VHF Repeater Systems Accessible from Pinellas Co

	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
	Lkd Rptr - PACS[3]	W4ACS	Amateur	145.1700W	CSQ	144.5700W	156.7	A	***Pinellas ACS Primary***
	Lkd Rptr - SCD[4]	WD4SCD	Amateur	147.0300W	CSQ	147.6300W	100.0	A	Shelter Net- St Pete
	Lkd Rptr - SCD	WD4SCD	Amateur	147.0300W	CSQ	147.6300W	103.5	A	Shelter Net- North Co
	Lkd Rptr - SCD	WD4SCD	Amateur	147.0300W	CSQ	147.6300W	156.7	A	Shelter Net Mid County
	Lkd Rptr - SCD	WD4SCD	Amateur	147.0300W	CSQ	147.6300W	82.5	A	Shelter Net East County
	Lkd Rptr - SCD	WD4SCD	Amateur	147.0300W	CSQ	147.6300W	146.2	A	Shelter Net West County
	Lkd Rptr - SCD	WD4SCD	Amateur	147.0300W	CSQ	147.6300W	192.8	A	Shelter Net S Pasadena
	Repeater	KA9RIX	Amateur	145.3900W	CSQ	144.7900W	141.3	A	St. Petersburg
	Lkd Rptr NI4CE[5]	NI4CE	Amateur	145.4300W	CSQ	144.8300W	100.0	A	WCF ARES®: NI4CE Verna
	Repeater	KE4EMC	Amateur	146.7000W	CSQ	146.1000W	146.2	A	Dunedin
	Repeater	W4ORM	Amateur	146.8500W	CSQ	146.2500W	146.2	M	FM Analog / Fusion

[3] The W4ACS Repeater is inked to the UHF Repeater W4ACS listed in TABLE F- IV.
[4] The WD4SCD Repeater has a single transmitting site and six receiving sites. Each receive site is linked to the transmitting site via a UHF link.
[5] The NI4CE Repeater is linked to the UHF Repeater NI4CE listed in TABLE F- IV.

TABLE F- II. Comms Resource Availability Worksheet – Pinellas County VHF Repeaters

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET	Frequency Band	Description
	2-Meters 144.0000 - 148.0000	VHF Repeater Systems Accessible from Pinellas Co

	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
	Lkd Rptr – JMH[6]	K4JMH	Amateur	146.9700W	CSQ	146.3700W	146.2/ RAN 1	M	FM Analog / NXDN
	Repeater	WA4AKH	Amateur	147.0600W	CSQ	147.6600W	CSQ	A	SPARC NTS™ Traffic Net
	Repeater	W4AFC	Amateur	147.1200W	CSQ	147.7200W	100.0	A	Upper Pinellas Co ARC
	Repeater	WA4GDN	Amateur	146.6700W	CSQ	146.0700W	146.2	A	Inter-County TB Liaison
	Repeater	KN4GVY	Amateur	145.1100N	CSQ	144.5100N	CC 1	D	F-DARN; DMR; Dunedin

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g., Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

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[6] The K4JMH Repeater is linked to the UHF Repeater K4JMH system listed in TABLE F- IV.

TABLE F- III. Comms Resource Availability Worksheet – Pinellas County 6-M VHF Repeaters

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET	Frequency Band	Description
	6-Meters 50.0000 - 54.0000	VHF Repeater Systems Accessible from Pinellas Co

	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
	Lkd Rptr - ORM[7]	W4ORM	Amateur	53.1500W	CSQ	52.1500W	146.2	A	FM – Pinellas Park

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g., Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

[7] The W4ORM 6-Meter Repeater is linked to the W4ORM UHF Repeater listed in TABLE F- IV.

TABLE F- IV. Comms Resource Availability Worksheet – Pinellas County UHF Repeaters

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET									Frequency Band	Description
									70 cm 420.000 – 450.000	UHF Repeater Systems Accessible from Pinellas Co
	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks	
	Lkd Rptr - PACS[8]	W4ACS	Amateur	443.4000W	CSQ	448.4000W	156.7	A	***W4ACS Pinellas ACS***	
	Lkd Rptr NI4CE[9]	NI4CE	Amateur	442.5500W	CSQ	447.5500W	100.0	A	WCF: NI4CE Riverview	
	Lkd Rptr NI4CE	NI4CE	Amateur	442.8250W	CSQ	447.8250W	100.0	A	WCF: NI4CE Bartow	
	Lkd Rptr NI4CE	NI4CE	Amateur	442.9500W	CSQ	447.9500W	100.0	A	WCF: NI4CE Verna	
	Lkd Rptr NI4CE	NI4CE	Amateur	443.4500W	CSQ	448.4500W	100.0	A	WCF: NI4CE Holiday	
	Lkd Rptr NI4CE	NI4CE	Amateur	443.9500W	CSQ	448.9500W	100.0	A	WCF: NI4CE Lake Placid	
	Lkd Rptr - SAR[10]	SAR Net – AG4UU	Amateur	442.2500W	CSQ	447.2500W	146.2	A	SAR Net Skyway Bridge	
	Lkd Rptr - SAR	SAR Net	Amateur	442.8500W	CSQ	447.8500W	146.2	A	SAR Net Tampa	
	Lkd Rptr - SAR	SAR Net	Amateur	444.8000W	CSQ	449.8000W	100.0	A	SAR Net Sarasota	

[8] The W4ACS UHF Repeater is linked to the W4ACS Repeater listed in TABLE F- II.
[9] NI4CE is a linked Repeater system consisting of each of the UHF Repeater documented in TABLE F- IV and the NI4CE VHF Repeater listed in TABLE F- II.
[10] The AG4UU Repeater is part of a statewide linked repeater system.

TABLE F- IV. Comms Resource Availability Worksheet – Pinellas County UHF Repeaters

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET									Frequency Band	Description
									70 cm 420.000 – 450.000	UHF Repeater Systems Accessible from Pinellas Co
	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks	
	Lkd Rptr – JMH[11]	K4JMH	Amateur	442.2000W	CSQ	447.2000W	146.2/ RAN 1	M	Analog / NXDN – Clearwater	
	Lkd Rptr – JMH	K4JMH	Amateur	444.1500W	CSQ	449.1500W	146.2	A	Dunedin	
	Lkd Rptr – JMH	K4JMH	Amateur	444.4500W	CSQ	449.4500W	146.2/ RAN 1	M	Analog / NXDN – Tarpon Sp	
	Lkd Rptr - ORM[12]	W4ORM	Amateur	442.6250W	CSQ	447.6250W	146.2	M	Analog / Fusion – Seminole	
	Repeater	W4AFC	Amateur	442.7000W	CSQ	447.7000W	110.9	A	Palm Harbor	
	Repeater	W4RNT	Amateur	442.7250W	CSQ	447.7250W	146.2	A	Tampa	
	Repeater	KJ4RUS	Amateur	442.9250W	CSQ	447.9250W	146.2	A	Largo	
	Repeater	WD0DIA	Amateur	443.0500W	CSQ	448.0500W	141.3	A	Clearwater: HEART	
	Repeater	KA9RIX	Amateur	443.4250W	CSQ	448.4250W	146.2	M	Analog FM / DSTAR – Tampa	
	Repeater	W9CR	Amateur	443.5250W	CSQ	448.5250W	146.2/ NAC 293	M	Analog / P25 – Tampa	
	Repeater	KJ4SHL	Amateur	443.7625N	CSQ	448.7625N	RAN 1	D	NXDN – St Petersburg	

[11] K4JMH is a linked repeater system consisting of each of the UHF Repeaters documented in TABLE F- IV and the K4JMH VHF Repeater listed in TABLE F- II.
[12] The W4ORM UHF Repeater is linked to the W4ORM 6-Meter listed in TABLE F- III.

TABLE F- IV. Comms Resource Availability Worksheet – Pinellas County UHF Repeaters

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET									Frequency Band	Description
									70 cm 420.000 – 450.000	UHF Repeater Systems Accessible from Pinellas Co
	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks	
	Repeater	W4ABC	Amateur	443.9250W	CSQ	448.9250W	127.3	A	St. Petersburg	
	Repeater	W9CR	Amateur	444.3750W	CSQ	449.3750W	146.2/ NAC 293	M	Analog / P25 – St Pete	
	Repeater	KA4CNP	Amateur	444.4000W	CSQ	449.4000W	192.8	A	Largo	
	Repeater	WA4AKH	Amateur	444.4750W	CSQ	449.4750W	146.2	A	St Petersburg: SPARC	
	Repeater	W4EFK	Amateur	444.6000W	CSQ	449.6000W	88.5	A	Tampa	
	Repeater	W4RNT	Amateur	444.8125N	CSQ	449.8125N	CSQ	D	DSTAR – Tampa	
	Repeater	KJ4SHL	Amateur	444.9625W	CSQ	449.9625W	CC 1	D	DMR – St Petersburg	
	GMRS Repeater	WRAF954	GMRS	462.5750W	CSQ	467.5750W	141.3/ NAC 575	M	GMRS / P25 – Tampa	
	Repeater	KN4GVY	Amateur	443.9750N	CSQ	448.9750N	CC 1	D	F-DARN[13]; DMR; St Pete	
	Repeater	KN4GVY	Amateur	444.5750N	CSQ	449.5750N	CC 1	D	F-DARN; DMR; Palm Harbor	
	Repeater	KN4GVY	Amateur	444.3750N	CSQ	449.3750N	CC 1	D	F-DARN; DMR; Largo	
	Repeater	KN4GVY	Amateur	443.8250N	CSQ	448.8250N	CC 1	D	F-DARN; DMR; Pinellas Prk	

[13] F-DARN is the Florida Digital Amateur Radio Network. This system is focused on medical facilities to allow interconnectivity during emergency situations.

TABLE F- IV. Comms Resource Availability Worksheet – Pinellas County UHF Repeaters

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET	Frequency Band	Description
	70 cm 420.000 – 450.000	UHF Repeater Systems Accessible from Pinellas Co

	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
	Repeater	KN4GVY	Amateur	444.6250N	CSQ	449.6250N	CC 1	D	F-DARN; DMR; St Pete
	Repeater	KN4GVY	Amateur	442.7000N	CSQ	447.7000N	CC 1	D	F-DARN; DMR; Countryside
	Repeater	KN4GVY	Amateur	444.3500N	CSQ	449.3500N	CC 1	D	F-DARN; DMR; Dunedin
	Repeater	KN4GVY	Amateur	443.3750N	CSQ	448.3750N	CC 1	D	F-DARN; DMR; Clearwater

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g., Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

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TABLE F- V. F-DARN Talkgroup Designations

On-Demand Talkgroups (PTT 15) Timeslot 1			Full-Time Talkgroups Timeslot 2	
Talkgroup	**Description**		**Talkgroup**	**Description**
3112	Florida Statewide		2	F-DARN Rptr System
8801	FDARN TAC 1		9	Local Repeater
8802	FDARN TAC 2			
8803	FDARN TAC 3			
8804	FDARN TAC 4			
8805	FDARN TAC 5			
8806	FDARN TAC 6			
31127	Florida State ARES			

TABLE F- VI. Comms Resource Availability Worksheet – WCF EOC Primary VHF Repeaters

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET	Frequency Band	Description
	2-Meters 144.0000 - 148.0000	WCF EOC Primary VHF Repeater Systems

	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
	Repeater	WX4E	Amateur	146.7450W	CSQ	146.1450W	136.5	A	CHARLOTTE County EOC
	Repeater	W4MIN	Amateur	147.0750W	CSQ	147.6750W	100.0	A	DESOTO County EOC
	Repeater	N4EMH	Amateur	146.6250W	CSQ	146.0250W	127.3	A	HARDEE County EOC
	Repeater	W4HEM	Amateur	145.3300W	CSQ	144.7300W	100.0	A	HIGHLANDS County EOC
	Repeater	N4TP	Amateur	147.1050W	CSQ	147.7050W	146.2	A	HILLSBOROUGH EOC
	Repeater	K4GG	Amateur	146.8200W	CSQ	146.2200W	100.0	A	MANATEE County EOC
	Repeater	WA4GDN	Amateur	146.6700W	CSQ	146.0700W	146.2	A	PASCO County EOC
	Lkd Rptr - PACS[14]	W4ACS	Amateur	145.1700W	CSQ	144.5700W	156.7	A	***Pinellas County EOC***
	Lkd Rptr PEM[15]	WC4PEM	Amateur	146.9850W	CSQ	146.3850W	127.3	A	POLK County EOC
	Repeater	N4SER	Amateur	146.7300W	CSQ	146.1300W	100.0	A	SARASOTA County EOC

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g., Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

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[14] The W4ACS VHF Repeater is linked to the W4ACS UHF Repeater listed in TABLE F- IV.

[15] The WC4PEM VHF repeater is linked to the WC4PEM UHF Repeaters listed in TABLE F- VI.

TABLE F- VII. Comms Resource Availability Worksheet – WCF EOC Primary UHF Repeaters

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET									Frequency Band	Description
									70 cm 420.000 – 450.000	WCF EOC Primary UHF Repeater Systems
	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks	
	Repeater	WX4E	Amateur	444.9750W	CSQ	449.9750W	136.5	A	CHARLOTTE County EOC	
	Lkd Rptr - PACS[16]	W4ACS	Amateur	443.4000W	CSQ	448.4000W	156.7	A	***Pinellas County EOC***	
	Lkd Rptr - PEM[17]	WC4PEM	Amateur	443.9000W	CSQ	448.9000W	127.3	A	POLK County EOC	
	Lkd Rptr - PEM	WC4PEM	Amateur	444.6250W	CSQ	449.6250W	127.3	A	POLK County EOC	
	Lkd Rptr - PEM	WC4PEM	Amateur	444.9500W	CSQ	449.9500W	127.3	A	POLK County EOC	
	Repeater	N4SER	Amateur	442.4750W	CSQ	447.4750W	100.0	A	SARASOTA County EOC	
	Repeater	WC4EM	Amateur	443.5500W	CSQ	448.5500W	100.0	A	SARASOTA County EOC	

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g., Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

PACS ICS 217A Word 12/2021

[16] The W4ACS UHF Repeater is linked to the W4ACS VHF Repeater listed in TABLE F- II.

[17] WC4PEM is linked Repeater system consisting of the UHF repeaters listed in TABLE F- VI and the WC4PEM VHF Repeater listed in TABLE F- V.

TABLE F- VIII. Comms Resource Availability Worksheet – Winlink Gateway Stations

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET	Frequency Band	Description
	2-Meters 144.0000 - 148.0000	Winlink Gateway Stations Accessible from Pinellas Co.

	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
	1200 Packet	W4ACS-10	Amateur	145.0900W	CSQ	145.0900W	CSQ	D	Pinellas EOC – EMCOMM Group
	1200 Packet	N4GD-10	Amateur	145.0500W	CSQ	145.0500W	CSQ	D	Central Pinellas – PUBLIC Group
	VARA FM Wide	KJ4RUS-10	Amateur	145.0700W	CSQ	145.0700W	CSQ	D	Central Pinellas – PUBLIC Group
	1200 Packet	KJ4RUS-10	Amateur	145.0700W	CSQ	145.0700W	CSQ	D	Central Pinellas – PUBLIC Group

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g., Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

TABLE F- IX. Comms Resource Availability Worksheet – APRS® Digipeaters

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET	Frequency Band	Description
	2-Meters 144.0000 - 148.0000	APRS® Digipeaters Accessible from Pinellas Co.

	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
	APRS® Digipeater	NI4CE-10 APRS®	Amateur	144.3900W	CSQ	144.3900W	CSQ	D	Verna-Manatee
	APRS® Digipeater	NI4CE-11 APRS®	Amateur	144.3900W	CSQ	144.3900W	CSQ	D	Riverview-Hillsborough
	APRS® Digipeater	NI4CE-14 APRS®	Amateur	144.3900W	CSQ	144.3900W	CSQ	D	Holiday-Pasco
	APRS® Digipeater	KK4ONE APRS®	Amateur	144.3900W	CSQ	144.3900W	CSQ	D	Rocky Point Tampa
	APRS® Digipeater	KK4EQF-12 APRS®	Amateur	144.3900W	CSQ	144.3900W	CSQ	D	Belleair

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g., Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

TABLE F- X. Comms Resource Availability Worksheet – Pinellas County VHF Simplex

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET									Frequency Band	Description
									2-Meters 144.0000 - 148.0000	Pinellas County VHF Simplex
	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks	
	Simplex Traffic	PACS PLAN A	Amateur	146.4300W	CSQ	146.4300W	CSQ	A	Pinellas Plan A / B	
	Simplex Traffic	PACS PLAN B	Amateur	146.4700W	CSQ	146.4700W	CSQ	A	Pinellas Plan B South County	
	Simplex Traffic	VHF NTL Call	Amateur	146.5200W	CSQ	146.5200W	CSQ	A	VHF National Calling Freq.	
	Simplex Traffic	TB Simplex	Amateur	147.5500W	CSQ	147.5500W	CSQ	A	TB Area Simplex Net	
	Simplex Traffic	VHF SSB Call Frq	Amateur	144.2000N	CSQ	144.2000N	CSQ	A	VHF NTL SSB Call Frq USB	
	Simplex Traffic	VHF DSTAR Smplx	Amateur	145.6700N	CSQ	145.6700N	CSQ	D	DSTAR VHF Calling Freq	

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g., Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

TABLE F- XI. Comms Resource Availability Worksheet – Pinellas County UHF Simplex

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET									Frequency Band	Description
									70 cm 420.000 – 450.000	Pinellas County UHF Simplex.
	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks	
	Simplex Traffic	UHF NTL Call	Amateur	446.0000W	CSQ	446.0000W	CSQ	A	UHF National Calling Freq	
	Simplex Traffic	UHF SSB Call Frq	Amateur	432.1000N	CSQ	432.1000N	CSQ	A	UHF NTL SSB Call Frq USB	
	Simplex Traffic	UHF DSTAR Smplx	Amateur	445.6700N	CSQ	445.6700N	CSQ	D	DSTAR UHF Calling Freq	

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g., Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

TABLE F- XII. Comms Resource Availability Worksheet – HF ARES®

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET	Frequency Band	Description
	80,40, and 20-Meters	HF ARES®.

	Channel Configuration	Channel Name/Trunked Radio System Talk group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
	Simplex Traffic	WCF ARES®	Amateur	3.9110	CSQ	3.9110	CSQ	A	Lower Sideband (LSB)
	Simplex Traffic	North FL ARES®	Amateur	3.9500	CSQ	3.9500	CSQ	A	LSB
	Simplex Traffic	South FL ARES®	Amateur	3.9400	CSQ	3.9400	CSQ	A	LSB
	Simplex Traffic	WCF ARES®	Amateur	7.2810	CSQ	7.2810	CSQ	A	LSB
	Simplex Traffic	North FL ARES®	Amateur	7.2420	CSQ	7.2420	CSQ	A	LSB
	Simplex Traffic	South FL ARES®	Amateur	7.2400	CSQ	7.2400	CSQ	A	LSB
	Simplex Traffic	Hurricane Watch	Amateur	7.2680	CSQ	7.2680	CSQ	A	LSB - Night
	Simplex Traffic	Hurricane Watch	Amateur	14.3250	CSQ	14.3250	CSQ	A	Upper Sideband - Day

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g., Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.