



Pinellas County ACS SKYWARN® Operations Plan and Standard Operating Procedures

13 October 2023 Revision (A)

Abstract

This document defines the Pinellas County ACS SKYWARN® Operations Plan and Standard Operating Procedures to be used by all members of Pinellas County SKYWARN® during training exercises and SKYWARN® activation events.

Pinellas County ACS SKYWARN® Operations Plan and Standard Operating Procedures © 2022, 2023 by Michael H Drake is licensed under CC BY-NC 4.0. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc/4.0/>

Michael H. Drake
WA1RYQ

FOREWORD

This document defines the Pinellas County (PinCo) Auxiliary Communications Service (ACS) SKYWARN® Operations Plan and Standard Operating Procedures used by all members of PinCo SKYWARN® during training exercises and activation events. The document defines the organizational structure of PinCo SKYWARN®, the detailed steps required by all SKYWARN® members to activate and deactivate SKYWARN®, and the procedures used to identify and report severe weather events.

A detailed description of SKYWARN® networks, frequencies, modes, and contingency plans are also included.

The document is divided into eight sections and three appendices.

Section 1. Scope

Section 2. Applicable Documents

Section 3. Organizational Structure

Section 4. Activation and Deactivation

Section 5. Severe Weather Reports

Section 6. Event Specific Operation

Section 7. Frequency Allocation and Usage

Section 8. Bibliography

Appendix A – Acronyms, Abbreviations, and Definitions

Appendix B – Website References

Appendix C – Network Operating Procedures

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

Pinellas County ACS SKYWARN® Operations Plan
Rev (A)
13 October 2023

ARES® (Amateur Radio Emergency Service®) is a program of, and both logos are registered trademarks of the American Radio Relay League, Incorporated.

Skywarn® and the Skywarn® logo are registered trademarks of the National Oceanic and Atmospheric Administration, used with permission.

APRS® is a software program and registered trademark of Bob Bruninga, WB4APR.

Record of Changes

REVISION	DESCRIPTION	DATE
REV (-)	Initial Release	07/15/2022
REV (A)	<ul style="list-style-type: none">• Corrected minor formatting and spelling issues.• Deleted References to ARES.• Updated, in section 2.1, version number and release date for the <i>Pinellas County ACS Emergency Communications Plan and Standard Operating Procedures</i>.• Replaced Pinellas County with PinCo throughout the document.• Added PinCo to list of Abbreviations in Appendix A.2.• Added <i>PinCo ACS groups.io</i> to list of website references in Appendix B.• Changed the title of Column 1 in Table II from <i>Function</i> to <i>Channel Name</i>. This better aligns with the definitions used for the ICS 205.• Changed the title of column 1 in Table III, Table IV, and Table V from <i>Function</i> to <i>Assignment</i>. This better aligns with the definitions used for the ICS 205.	10/13/2023

Table of Contents

<u>PARAGRAPH</u>	<u>PAGE</u>
FOREWORD	i
Record of Changes	iii
1 Scope	1
2 Applicable Documents	2
2.1 Related Documents	2
2.2 Reference Documents	2
3 Organizational Structure	3
3.1 Warning Coordination Meteorologist	3
3.2 Director of Pinellas County Emergency Management	3
3.3 PinCo ACS Radio Officer	3
3.4 PinCo SKYWARN® Coordinator	3
3.5 PinCo SKYWARN® Net Control Station	4
3.6 PinCo SKYWARN® Spotter	5
4 Activation and Deactivation	6
4.1 Activation of SKYWARN® within Pinellas County	6
4.1.1 Activation Levels	6
4.1.2 SKYWARN® Activation Level 4 – GREEN	7
4.1.3 SKYWARN® Activation Level 3 – YELLOW	8
4.1.4 SKYWARN® Activation Level 2 – RED	12
4.1.5 SKYWARN® Activation Level 1 – BLACK	15
4.2 Regional Activation of SKYWARN®	17

Pinellas County ACS SKYWARN® Operations Plan

Rev (A)

13 October 2023

4.2.1	Regional SKYWARN® Activation Levels	17
4.2.2	Interaction between Pinellas County and Regional SKYWARN® nets	18
5	Severe Weather Reports	20
6	Event Specific Operation.....	23
6.1	Tropical Storms and Hurricanes	23
6.2	Policy Statement Regarding Storm Chasing.....	24
7	Frequency Allocation and Usage	25
7.1	Pinellas County SKYWARN® Frequency Allocation and Usage	25
7.1.1	Primary Pinellas County SKYWARN® Repeater System	25
7.1.2	Back-up Pinellas County SKYWARN® Repeater System.....	25
7.2	Regional SKYWARN® Frequency Allocation and Usage	27
7.2.1	Regional SKYWARN® Repeater System.....	27
7.2.2	Regional SKYWARN® Contingency Operations	27
8	Bibliography	28
A	Appendix A – Acronyms, Abbreviations, and Definitions	A-1
A.1	Acronyms.....	A-1
A.2	Abbreviations	A-2
A.3	Definitions	A-2
A.3.1	Alert Pinellas	A-2
A.3.2	Coastal/Lakeshore Flood Warning.....	A-2
A-A.3.3	County Warning Area.....	A-3
A.3.4	Emergency Managers Weather Information Network.....	A-3
A.3.5	Flash Flood Warning	A-3

Pinellas County ACS SKYWARN® Operations Plan

Rev (A)

13 October 2023

A.3.6	Hurricane Warning.....	A-3
A.3.7	Hurricane Watch	A-3
A.3.8	Meteorologist In Charge (MIC)	A-4
A.3.9	NWSChat	A-4
A.3.10	Severe Thunderstorm Warning	A-4
A.3.11	Severe Thunderstorm Watch.....	A-4
A.3.12	Severe Weather Statement	A-5
A.3.13	SKYWARN® Net Control	A-5
A.3.14	SKYWARN® Network.....	A-5
A.3.15	SKYWARN® Spotter	A-5
A.3.16	Special Marine Warning.....	A-5
A.3.17	Tampa Bay Weather (TBW)	A-6
A.3.18	Tropical Storm Warning.....	A-6
A.3.19	Tropical Storm Watch	A-6
A.3.20	Tornado Emergency	A-6
A.3.21	Tornado Warning	A-6
A.3.22	Tornado Watch	A-7
A.3.23	Warning Coordination Meteorologist (WCM)	A-7
A.3.24	Weather Service Forecast Office (WSFO)	A-7
B	Appendix B – Website References.....	B-1
C	Appendix C – Network Operating Procedures.....	C-1

Table of Figures

<u>FIGURE</u>	<u>PAGE</u>
Figure 1. Regional SKYWARN® Net - Severe Weather Report	19
Figure 2. NWS Hail Reporting Guide	21
Figure 3. WD4SCD Repeater Site Locations	26
Figure C- 1. Condition 3 – YELLOW Announcement Script	C-2
Figure C- 2. Condition 3 – YELLOW Announcement Script (Cont.)	C-3
Figure C- 3. Condition 2 – RED Announcement Script	C-4
Figure C- 4. Condition 2 – RED Announcement Script (Cont.)	C-5
Figure C- 5. Condition 2 – RED Announcement Script (Cont.)	C-6
Figure C- 6. RED to YELLOW Transition Script.....	C-7
Figure C- 6. Condition 1 – BLACK Announcement Script	C-8
Figure C- 7. BLACK to RED Transition Script.....	C-9
Figure C- 8. SKYWARN® Deactivation Script	C-10

Table of Tables

<u>TABLE</u>	<u>PAGE</u>
Table I. SKYWARN® Activation Levels	7
Table II. Pinellas County VHF Repeaters	9
Table III. W4ACS Repeater System Frequencies	25
Table IV. WD4SCD Repeater System Frequencies	26
Table V. NI4CE Repeater System.....	27

1 SCOPE

The purpose of the SKYWARN® program in Pinellas County Florida is to provide the National Weather Service (NWS) Forecast Office at Tampa Bay with timely and accurate reports of severe weather phenomena so that a timely warning can be issued to the public of dangerous weather conditions that include tornadoes, hail, flooding, and damaging thunderstorm winds.

This document defines the PinCo ACS SKYWARN® Operations Plan and Standard Operating Procedures used by all members of PinCo SKYWARN® during training exercises and activation events. The document defines the organizational structure of PinCo SKYWARN®, the detailed steps required by SKYWARN® members to activate and deactivate SKYWARN®, and the procedures used to identify and report severe weather events. A detailed description of SKYWARN® networks, frequencies, modes, and contingency plans are also included.

This document augments the *Pinellas County ACS Emergency Communications Plan and Standard Operating Procedures* document. If a conflict exists between the two documents, the *Pinellas County ACS Emergency Communications Plan and Standard Operating Procedures* document takes precedence.

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

2 APPLICABLE DOCUMENTS

2.1 RELATED DOCUMENTS

The *Pinellas County ACS SKYWARN® Operations Plan and Standard Operating Procedures* document was developed to support the communication plans listed below.

- a. ARRL® ARES® Plan; January 2019
- b. Pinellas County ACS Emergency Communications Plan and Standard Operating Procedures; Rev (C), October 2023
- c. West Central Florida Section ARES® Communications Plan, March 2011
- d. Pinellas County ACS Training Plan

2.2 REFERENCE DOCUMENTS

Additional information about SKYWARN® can be found in the following documents.

- a. Weather Spotter's Field Guide, NOAA, 2011

3 ORGANIZATIONAL STRUCTURE

This section lists the key positions within the Pinellas County SKYWARN® program.

3.1 WARNING COORDINATION METEOROLOGIST

The Tampa Bay Warning Coordination Meteorologist (WCM) at the NWS Forecast Office in Ruskin is responsible for administering the SKYWARN® program in the fifteen-county WCF area.

3.2 DIRECTOR OF PINELLAS COUNTY EMERGENCY MANAGEMENT

The Director of Pinellas County emergency management is responsible for all SKYWARN® operations within Pinellas County and has delegated the responsibility for SKYWARN® operations to the PinCo ACS Radio Officer.

3.3 PINCo ACS RADIO OFFICER

The PinCo ACS Radio Officer (RO) is the appointee of the Pinellas County Department of Emergency Management (DEM) and is responsible for administering and coordinating Amateur Radio communications among the served agencies and fellow citizens of Pinellas County. The PinCo ACS RO appoints the PinCo SKYWARN® Coordinator.

3.4 PINCo SKYWARN® COORDINATOR

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

- a. Serve as the primary PinCo ACS point of contact and liaison with the National Weather Service.
- b. During each activation event and training activity:
 - (1) Execute the *Pinellas County ACS Emergency Communications Plan*, and the *Pinellas County SKYWARN® Operations Plan*.

- (2) Notify the PinCo ACS RO of significant events and issues that require additional assistance to resolve.
- c. Recruit and oversee the training of SKYWARN® operators in accordance with the *Pinellas County ACS Training Plan*.
- d. Maintain a list of trained PinCo SKYWARN® operators. This list should specify the level of training each SKYWARN® operator has achieved and quantify each operator's experience.

3.5 PINCo SKYWARN® NET CONTROL STATION

The duties and responsibilities of a PinCo SKYWARN® Net Control Station (NCS) include but are not limited to the following.

- a. During each activation event and training activity:
 - (1) Establish and maintain an orderly and disciplined radio network.
 - (2) Execute the *Pinellas County ACS Emergency Communications Plan* and the *Pinellas County ACS SKYWARN® Operations Plan*.
 - (3) Notify the PinCo ACS RO of significant events and issues that require additional assistance to resolve.

The minimum requirements to be NCS during a SKYWARN® activation are listed below.

- a. A licensed amateur radio operator trained as a SKYWARN® spotter.
- b. Ability to operate on both the two meter and 70 cm band with a clear signal.
- c. Ability to receive bulletins from the NWS by using one or more of the following methods.
 - (1) NWS Chat
 - (2) National Oceanic and Atmospheric Administration (NOAA) Weather Radio (NWR)
 - (3) Emergency Managers Weather Information Network (EMWIN) receiver.

- d. Ability to operate from a fixed location with access to a working telephone.

The following capabilities are strongly recommended but not a requirement to be an NCS during a SKYWARN® activation.

- a. Ability to quickly switch to emergency power (battery or generator).
- b. Experienced in operating amateur radio nets; preferably trained as a SKYWARN® NCS.

3.6 PINCo SKYWARN® SPOTTER

The duties and responsibilities of a PinCo SKYWARN® Spotter include but are not limited to the following.

- a. During each activation event and training activity:
 - (1) Execute the *Pinellas County ACS Emergency Communications Plan* and the *Pinellas County ACS SKYWARN® Operations Plan*.
- b. Maintain training effectiveness. The NWS recommends attendance at a refresher course every three years. For Website information refer to the training entries in Appendix B.

NOTE: *The NWS no longer issues SKYWARN® Spotter numbers.*

4 ACTIVATION AND DEACTIVATION

This section lists the events that may cause a PinCo SKYWARN® or regional SKYWARN® net to be activated. It describes the four levels of PinCo SKYWARN® activation and details the steps to be performed during activation and deactivation.

4.1 ACTIVATION OF SKYWARN® WITHIN PINELLAS COUNTY

The purpose of the SKYWARN® program in Pinellas County Florida is to provide the NWS Forecast Office at Tampa Bay with timely and accurate reports of severe weather phenomena so that a timely warning can be issued to the public of dangerous weather conditions that include tornadoes, hail, flooding, and damaging thunderstorm winds.

PinCo SKYWARN® will activate when one or more of the events listed below takes place.

- a. A Tornado watch or warning has been issued for Pinellas County.
- b. A Severe Thunderstorm watch or warning has been issued for Pinellas County.
- c. A Severe weather event has been reported by a trained SKYWARN® spotter.
- d. The WCM at the Tampa Bay Forecast Office has requested activation.
- e. During annual statewide severe weather and tornado drills.
- f. During Pinellas ACS drills and exercises if the scenario includes a weather event.

4.1.1 Activation Levels

The four PinCo SKYWARN® activation levels are identified in Table I. The actions to be performed by ACS during each activation level are documented in the following paragraphs.

Pinellas County ACS SKYWARN® Operations Plan
Rev (A)
13 October 2023

Table I. SKYWARN® Activation Levels		
Level	Description	Color Code
1	Tornado/Funnel Cloud Sighted	BLACK
2	Severe Weather Warning	RED
3	Severe Weather Watch	YELLOW
4	Normal	GREEN

4.1.2 SKYWARN® Activation Level 4 – GREEN

Normal amateur radio operations. No specific action required.

ACTIVATION LEVEL 3

YELLOW

4.1.3 SKYWARN® Activation Level 3 – **YELLOW**

This section documents the Activation and Deactivation procedures for SKYWARN® Activation Level 3, **YELLOW**.

4.1.3.1 SKYWARN® Level 3 Activation

PinCo SKYWARN® will be activated to level 3, **YELLOW**, when a severe weather **watch** has been issued for Pinellas County by the NWS. The net control station will request check-ins; however, SKYWARN® level 3 is an informal watch net and normal amateur traffic is permitted. Any station may call any other station without the permission of the NCS.

4.1.3.2 Net Control Station Procedures

Any trained SKYWARN® member can activate a SKYWARN® net. The NCS does not need prior authorization from the PinCo ACS RO to establish a SKYWARN® net. When activating the net, the NCS will perform the following actions.

- a. Using the announcement script shown in Figure C- 1 and Figure C- 2, announce the establishment of the SKYWARN® net on the W4ACS repeater system. The announcement should be repeated once every 15 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 all severe weather reported by net participants.*

- b. Once net establishment is complete, the NCS will perform the following actions.
 - (1) Monitor the NWS for new watches, warnings, statements, and updates.
 - (2) If weather conditions permit, assign one or more net participants to announce on the repeaters documented in Table II that PinCo SKYWARN® is now operating at Level 3, **YELLOW**.

Pinellas County ACS SKYWARN® Operations Plan

Rev (A)

13 October 2023

NOTE: *PinCo ACS does not require the NCS or any net participant to create an audio record of net activities. However, individuals may create audio records for personal use or to assist them with event reconstruction and ICS 214 documentation.*

Table II. Pinellas County VHF Repeaters						
Channel Name	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
WA4AKH	147.0600W	CSQ	147.6600W	CSQ	A	SPARC NTS™ Traffic Net
W4ORM	146.8500W	CSQ	146.2500W	146.2	M	FM Analog / Fusion
WD4SCD	147.0300W	CSQ	147.6300W	156.7 ^A	A	Mid County
W4AFC	147.1200W	CSQ	147.6200W	100.0	A	Upper Pinellas Co ARC
K4JMH	146.9700W	CSQ	146.3700W	146.2/ RAN 1	M	FM Analog / NXDN

^A Refer to Table IV for a complete list of the CTCSS tones for the WD4SCD repeater system.

- (3) Broadcast to the net any new watch, warning, statement, or update issued by the NWS.
 - (4) Transition the SKYWARN® net to Level 2, **Red**, if either of the following events take place.
 - (a) The NWS issues a severe weather warning for Pinellas County.
 - (b) A severe weather report is received from a trained SKYWARN® Spotter.
 - (5) Immediately transition the SKYWARN® net to Level 1, **BLACK**, if a Tornado, Funnel Cloud, or Waterspout is reported by a trained SKYWARN® spotter.
- c. Immediately relay all severe weather reports to the NWS Tampa Bay using one of the methods listed below. These methods are listed in highest to lowest priority order.

- (1) NWS SKYWARN® Telephone number: 1-800-282-1228.
 - (2) NWS Chat program.
 - (3) Online: <https://www.weather.gov/tbw/SubmitStormReport>
- d. Notify the PinCo ACS RO in the event of significant weather-related damage which may require the activation of additional ACS resources.
 - e. Collect after-action damage reports and forward them to the NWS in a timely fashion.

4.1.3.3 Spotter Procedures

SKYWARN® Spotters should perform the following actions when the NWS issues a severe weather **watch** for Pinellas County.

- a. Monitor the appropriate SKYWARN® repeater system or simplex frequency.
- b. If a SKYWARN® net is not active, assume the role of NCS and establish a PinCo SKYWARN® net at Level 3, **YELLOW**.
- c. If a PinCo SKYWARN® net is active, perform the following actions:
 - (1) Call the NCS and provide him or her with the following information.
 - (a) FCC Call Sign
 - (b) Geographical location; Include detailed street address.
 - (c) SKYWARN® Spotter number (if applicable) or indicate if you are SKYWARN® trained.
 - (2) Remain on frequency until release by net control.
 - (3) If you must leave the net, wait for a break in traffic, call net control, and request authorization to leave the net.
 - (4) Continue to monitor the NWS and local news outlets for updated information.
 - (5) Immediately report all severe weather events to the NCS in accordance with the guidance documented in section 5.

4.1.3.4 Deactivation

When the weather clears or the watch expires, the NCS should use the script shown in Figure C- 9 to deactivate the SKYWARN® net and return the frequency to normal amateur use.

ACTIVATION LEVEL 2

RED

4.1.4 SKYWARN® Activation Level 2 – RED

This section documents the Activation and Deactivation procedures for SKYWARN® Activation Level 2, **RED**.

4.1.4.1 SKYWARN® Level 2 Activation

PinCo SKYWARN® will be activated to level 2, **RED**, when a severe weather **warning** has been issued for Pinellas County by the NWS or severe weather has been reported by a trained SKYWARN® spotter. This is a directed net, and all traffic should be directed to the NCS. Net traffic should be limited to reports of severe weather only.

4.1.4.2 Net Control Station Procedures

Any trained SKYWARN® member can activate a SKYWARN® net. The NCS does not need prior authorization from the PinCo ACS RO to establish a SKYWARN® net. When activating the net, the NCS will perform the following actions.

- a. Using the announcement script shown in Figure C- 3, Figure C- 4, and Figure C- 5, announce the establishment of the SKYWARN® net on the W4ACS repeater system. The announcement should be repeated once every 5 minutes, traffic permitting.

NOTE: *It is important for the NCS to keep an accurate and up to date record of all severe weather reported by net participants.*

- b. Once net establishment is complete, the NCS will perform the following actions.
 - (1) Monitor the NWS for new watches, warnings, statements, and updates.

Pinellas County ACS SKYWARN® Operations Plan

Rev (A)

13 October 2023

- (2) If weather conditions permit, assign one or more net participants to announce on the other repeaters documented in Table II that PinCo SKYWARN® is now operating at Level 2, **RED**.

NOTE: *PinCo ACS does not require the NCS or any net participant to create an audio record of net activities. However, individuals may create audio records for personal use or to assist them with event reconstruction and ICS 214 documentation.*

- (3) Broadcast to the net any new watch, warning, statement, or update issued by the NWS.
 - (4) Immediately transition the SKYWARN® net to Level 1, **BLACK**, if a Tornado, Funnel Cloud, or Waterspout is reported by a trained SKYWARN® spotter.
- c. Immediately relay all severe weather reports to the NWS Tampa Bay using one of the methods listed below. These methods are listed in highest to lowest priority order.
 - (1) NWS SKYWARN® Telephone number: 1-800-282-1228.
 - (2) NWS Chat program.
 - (3) Online: <https://www.weather.gov/tbw/SubmitStormReport>
 - d. Notify the PinCo ACS RO in the event of significant weather-related damage which may require the activation of additional ACS resources.
 - e. Collect after-action damage reports and forward them to the NWS in a timely fashion.

4.1.4.3 Spotter Procedures

SKYWARN® Spotters should perform the following actions when the NWS issues a severe weather **warning** for Pinellas County.

- a. Monitor the appropriate SKYWARN® repeater system or simplex frequency.

- b. If a PinCo SKYWARN® net is not active, assume the role of NCS and establish a SKYWARN® net at Level 2, **RED**.
- c. If a PinCo SKYWARN® net is active, perform the following actions:
 - (1) Remain on frequency until release by net control.
 - (2) Continue to monitor the NWS and local news outlets for updated information.
 - (3) Immediately report all severe weather events to the NCS in accordance with the guidance documented in section 5.

NOTE: *Spotters should only contact the NCS when they need to report a severe weather event. All other net traffic should be minimized.*

4.1.4.4 Deactivation

When the weather clears or the warning expires, the NCS should use the script shown in Figure C- 6 to transition the net from Level 2, **RED**, to Level 3, **YELLOW**. If all significant weather has left the county, the NCS should use the script shown in Figure C- 9 to deactivate the SKYWARN® net and return the frequency to normal amateur use.

ACTIVATION LEVEL 1

BLACK

4.1.5 SKYWARN® Activation Level 1 – BLACK

This section documents the Activation and Deactivation procedures for SKYWARN® Activation Level 1, **BLACK**.

4.1.5.1 SKYWARN® Level 1 Activation

PinCo SKYWARN® will be activated to level 1, **BLACK**, when a tornado, funnel cloud, or waterspout is reported by a trained SKYWARN® spotter. While in Condition **BLACK**, ONLY REPORTS OF TORNADOES, FUNNEL CLOUDS, and WATERSPOUTS WILL BE ACCEPTED by the NCS. No other reports of severe weather should be sent to the NCS until after the net reverts to level 2, **RED**.

4.1.5.2 Net Control Station Procedures

Any trained SKYWARN® NCS can activate a SKYWARN® net. The NCS does not need prior authorization from the PinCo ACS RO to establish a SKYWARN® net. When activating the net, the NCS will perform the following actions.

- a. Using the announcement script shown in Figure C- 7, announce on the W4ACS repeater system that the SKYWARN® net is now operating in condition **BLACK**. The announcement should be repeated once every 5 minutes, traffic permitting.
- b. Request confirmation of the tornado, funnel cloud, or waterspout from the reporting station. If confirmation is received, perform the following actions.

NOTE: Any station that knowingly makes a false report of a tornado touchdown has committed a violation of FCC regulations regarding the false reporting of an emergency and WILL be reported to the FCC Field Engineer in Charge for possible legal action.

- (1) Use the following phone number to immediately notify the NWS Tampa Bay.
 - (a) **NWS SKYWARN® Telephone number: 1-800-282-1228.**
- (2) If the spotter has reported a tornado on the ground, perform the following actions.
 - (a) Notify Pinellas County Emergency Management via 911 to report the location of the tornado touchdown and any damage or injuries that may be known at the time of the report.
 - (b) Notify the PinCo ACS RO in the event of significant weather-related damage which may require the activation of additional ACS resources.

4.1.5.1 Spotter Procedures

When the SKYWARN® net is operating at Level 1, **BLACK**, the NCS does not take check-ins to the net. Spotters should contact the NCS only when they need to report a tornado, funnel cloud, or waterspout. These weather events should be reported to the NCS in accordance with the guidance documented in section 5.

4.1.5.2 Deactivation

When no tornado, funnel cloud, or waterspout report has been received by the NCS for a period of 15 minutes, the NCS should use the script shown in Figure C- 8 to transition the net from level 1, **BLACK**, to level 2, **RED**. If all significant weather has left the county, the NCS should use the script shown in Figure C- 9 to deactivate the SKYWARN® net and return the frequency to normal amateur use.

4.2 REGIONAL ACTIVATION OF SKYWARN®

During a large-scale weather event or natural disaster, most of the NWS Tampa Bay Area County Warning Area (CWA) will likely be impacted at the same time. To better manage the flow of information to the NWS, a regional SKYWARN® net will be activated.

During regional net activations, WX4TOR will be the assigned NCS and will be staffed by operators who are fluent in SKYWARN® and emergency net procedures.

A regional SKYWARN® net will activate when one or more of the events listed below takes place.

- a. A Tropical Storm warning has been issued for the Tampa Bay CWA.
- b. A Hurricane warning has been issued for the Tampa Bay CWA.
- c. Any other large scale weather event or natural disaster that impacts most of the Tampa Bay CWA.
- d. The WCM at the Tampa Bay Forecast Office has requested activation.

For additional information about SKYWARN® Regional Nets refer to the [NWS Ruskin Net Control](#) page.

4.2.1 Regional SKYWARN® Activation Levels

Once activated, a Regional SKYWARN® net will operate in either Standby or Active mode.

4.2.1.1 Standby Mode

The Regional SKYWARN® net will be activated to STANDBY mode, when a severe weather watch is issued by the NWS that impacts most of the NWS Tampa Bay Area CWA and no severe weather has yet been reported by a trained SKYWARN® spotter. The NWS Ruskin SKYWARN® NCS will monitor the frequency for reports of severe weather. This is an informal watch net and normal amateur traffic is permitted. Any station may call any other station without the permission of the NCS.

4.2.1.2 Active Mode

A Regional SKYWARN® net will be activated to ACTIVE mode, when a severe weather warning is issued by the NWS that impacts most of the NWS Tampa Bay Area CWA. The NWS Ruskin SKYWARN® NCS will monitor the frequency for reports of severe weather. This is a directed net, and all traffic should be directed to the NCS.

4.2.2 Interaction between Pinellas County and Regional SKYWARN® nets

PinCo SKYWARN® will activate each time the NWS activates a regional SKYWARN® net. PinCo SKYWARN® spotters should monitor the W4ACS repeater, check into the PinCo SKYWARN® net, and report all severe weather events to the PinCo NCS in accordance with the guidelines listed in section 5. The PinCo SKYWARN® NCS will forward all severe weather reports to the Regional SKYWARN® NCS or assign a liaison station to perform this action. PinCo SKYWARN® spotters should **not** sign into the regional SKYWARN® net unless directed to do so by PinCo SKYWARN®. Figure 1 displays the interaction between PinCo SKYWARN® and a regional SKYWARN® net.

Pinellas County ACS SKYWARN® Operations Plan
Rev (A)
13 October 2023

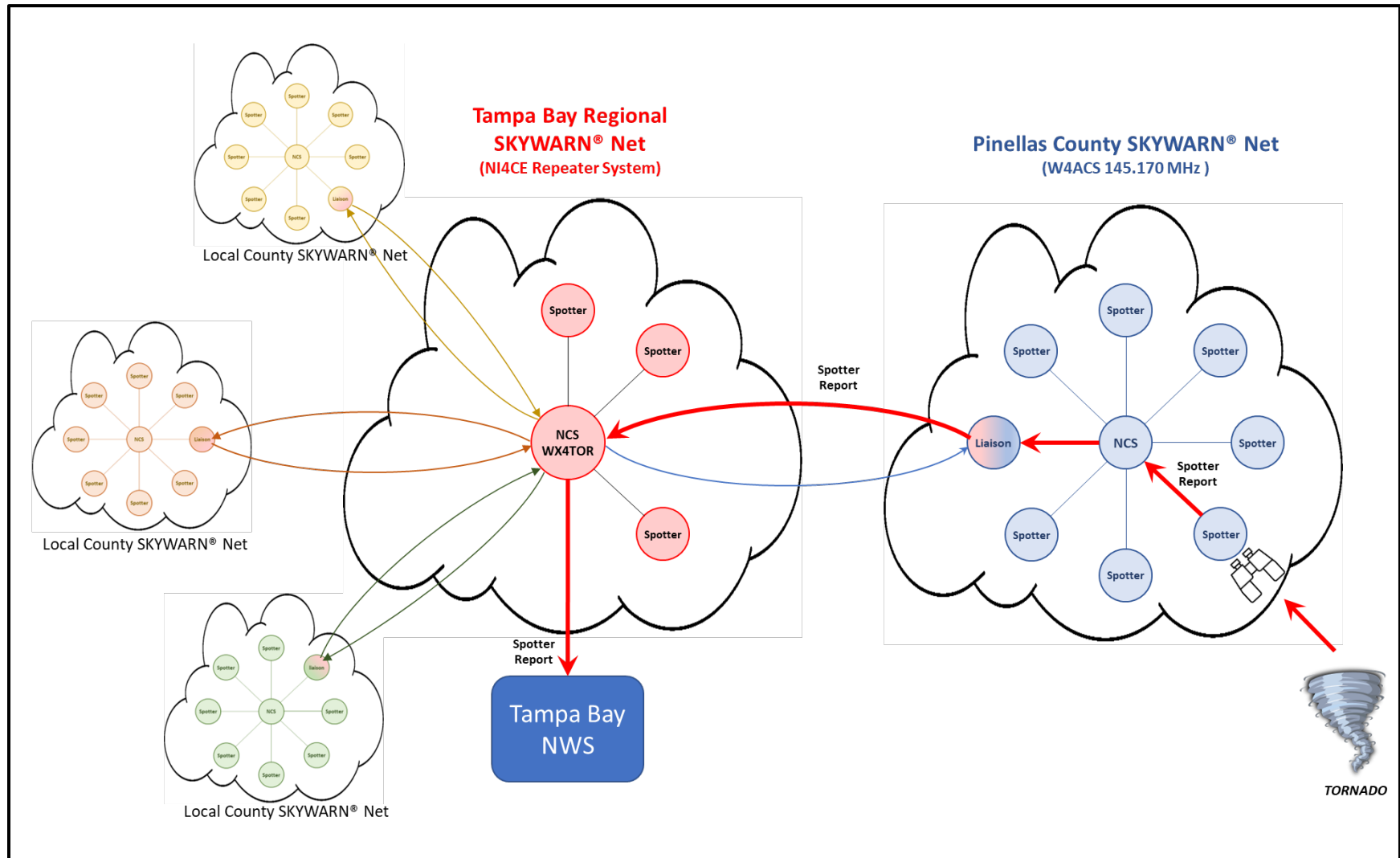


Figure 1. Regional SKYWARN® Net - Severe Weather Report

5 SEVERE WEATHER REPORTS

The accuracy and reliability of the severe weather reports that PinCo SKYWARN® provides to the NWS is wholly dependent on the quality of the information reported to the SKYWARN® NCS by individual SKYWARN® spotters. Therefore, when calling net control with a severe weather report, the SKYWARN® Spotter should provide the following information.

- a. FCC Call sign
- b. SKYWARN® Spotter number (if applicable) or indicate if SKYWARN® trained.
- c. **Time** that the severe weather event was observed; not the time that it was being reported.
- d. A description of the severe weather **Event** that includes the location of the event relative to your position.
- e. The spotter's geographical **Location**. Include detailed street address if possible.

NOTE: *Using the TEL (TIME, EVENT, and LOCATION) method when reporting a severe weather event will ensure that the NWS receives the information that the NWS considers most critical.*

The following severe weather events should always be reported by SKYWARN® spotters.

- a. Tornadoes. Report if the tornado is on the ground and any visible damage. Be sure to include its approximate location relative to your position and the tornado's direction of travel.
- b. Wall clouds and funnel clouds. Report if the cloud is rotating and how long it has existed.
- c. Waterspouts.
- d. Measured winds in excess of 50 mph, or winds causing significant damage. Damage reports should detail the tree and/or structural damage observed.

- e. Hail of any size. Report the size of the largest stone and any damage. Estimate the size by comparing the stone to a common object. Refer to Figure 2. Do not, however, use a marble for your comparison.

How to Report Hail Size

Don't Compare Hail to Marbles!

Why? Not all Marbles are Alike in Size!

Measure Hail With Common Objects

Good Examples of Comparison

Object	Size	Object	Size
Dime/Penny	0.75 inches	Hen Egg	2.00 inches
Nickel	0.88 inches	Tennis Ball	2.50 inches
Quarter	1.00 inches	Baseball	2.75 inches
Half Dollar	1.25 inches	Tea Cup	3.00 inches
Ping Pong Ball	1.50 inches	Grapefruit	4.00 inches
Golf Ball	1.75 inches	Softball	4.50 inches

Figure 2. NWS Hail Reporting Guide

- f. Rain fall accumulations of two or more inches in a single hour or four or more inches in a single day.
- g. Unusual and severe street flooding. Report if the flooding is standing water or flowing. Also report if the water level is continuing to rise, is steady, or is falling.
- h. Unusual or severe coastal flooding.

EXAMPLE 1

"This is WA1RYQ, I am SKYWARN® trained. At 1330 hours local my windshield was damaged by baseball size Hail at the corner of Park Blvd and 137th Street."

EXAMPLE 2

“This is WA1RYQ, I am SKYWARN® trained. I am located at the intersection of 113th Street North and 71st Avenue North. The local time is 17:22 and I am watching a funnel cloud form at the base of a thunderstorm a few miles east of my location. The cloud appears to be moving to the west. No debris is evident at this time.”

6 EVENT SPECIFIC OPERATION

This section details the operation of PinCo SKYWARN® and its interaction with PinCo ACS during tropical storms and hurricanes. The section also provides an overview of the NWS and Pinellas County policy regarding storm chasing.

6.1 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 SKYWARN® and ACS members with several days or even a week of advanced notice that a local activation will occur.

Forty-eight hours prior to the anticipated onset of tropical storm force winds, the NWS will issue a Tropical Storm or Hurricane Watch for the impacted area. Twelve hours later, the NWS will upgrade the Tropical Storm or Hurricane Watch to a warning. During this watch and warning period, PinCo SKYWARN® will not normally activate unless a regional SKYWARN® net is established or a secondary watch or warning is issued by the NWS (e.g., Tornado or Severe Thunderstorm watch or warning).

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 this occurs, PinCo ACS will activate and the **ACS Tactical-Resource net** will become operational on the W4ACS repeater system.

Once the Tactical-Resource net has been established, a separate stand-alone PinCo SKYWARN® net will not be established until after the storm has passed and PinCo ACS has been deactivated. To ensure that the NWS continues receiving timely reports of severe weather, all reports of severe weather should be reported to the Tactical-Resource net NCS. The NCS will either directly notify the NWS of the severe weather or, if a regional SKYWARN® net is active,

assign a liaison station to monitor and forward reports of severe weather to the regional SKYWARN® net.

If the PinCo ACS RO directs the Net Manager to establish a Tactical-Resource net when a SKYWARN® net is already active on the W4ACS repeater, the NCS for the Tactical-Resource net will notify the SKYWARN® NCS that the SKYWARN® net will be combined with the Tactical-Resource net. Once the two nets are combined, all severe weather and after-action damage reports should be reported to the NCS for the Tactical-Resource net.

6.2 POLICY STATEMENT REGARDING STORM CHASING

The SKYWARN® Spotter network is a network of fixed stations spread throughout the Tampa Bay Area CWA for timely reporting of severe weather information. Under no circumstances will any SKYWARN® NCS direct or instruct any spotter to intentionally chase any storm cell or enter an evacuated area solely for the purpose of reporting weather conditions.

As a policy, storm chasing is inherently dangerous and not permitted under these guidelines. Any spotter who chooses to operate in a motor vehicle or move from place to place during severe weather does so at his or her own risk. Neither the NWS nor the Pinellas County DEM shall accept liability for any injury which may result from failing to follow this procedure.

SKYWARN® Spotters may enter evacuated areas only under the direction and specific instruction of the Pinellas County DEM as may be communicated by the PinCo ACS RO or his designee during times of actual emergency when Pinellas County DEM has activated ACS.

7 FREQUENCY ALLOCATION AND USAGE

This section contains a description of Pinellas County and regional SKYWARN® networks, frequencies, modes, and contingency plans.

7.1 PINELLAS COUNTY SKYWARN® FREQUENCY ALLOCATION AND USAGE

The section identifies the primary repeater system used during PinCo SKYWARN® nets and describes the contingency plan that will be implemented in the event of a primary repeater system failure.

7.1.1 Primary Pinellas County SKYWARN® Repeater System

The W4ACS repeater system is the primary repeater used to support the SKYWARN® net. Refer to Table III for operational information.

NOTE: Each frequency table shown in this section has seven columns. The column definitions are consistent with the definitions used for the Incident Radio Communications Plan, ICS 205. Refer to the Pinellas County ACS Emergency Communications Plan and Standard Operating Procedures document for additional information.

Table III. W4ACS Repeater System Frequencies						
Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
SKYWARN®	145.1700W	CSQ	144.5700W	156.7	A	Linked Rptr
SKYWARN®	443.4000W	CSQ	448.4000W	156.7	A	Linked Rptr

7.1.2 Back-up Pinellas County SKYWARN® Repeater System

The WD4SCD repeater system is the primary back-up repeater system used during SKYWARN® activation events. It 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

Pinellas County ACS SKYWARN® Operations Plan
Rev (A)
13 October 2023

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 IV. Refer to Figure 3 for the location of each WD4SCD repeater site.

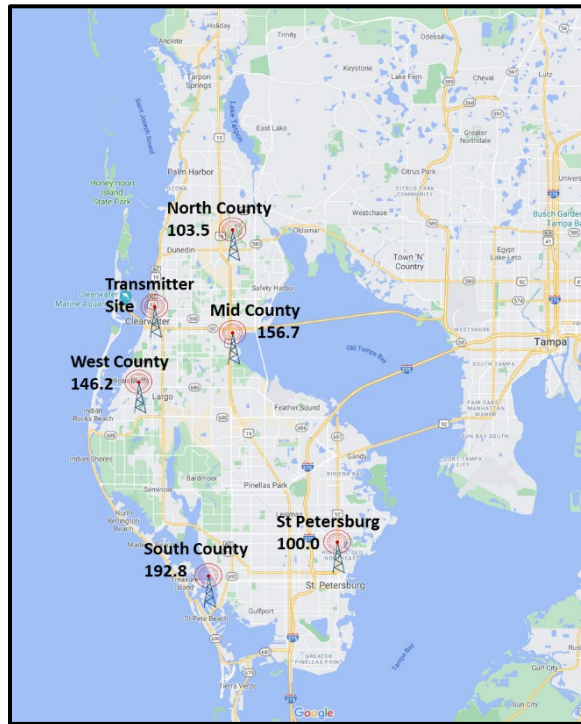


Figure 3. WD4SCD Repeater Site Locations

Table IV. WD4SCD Repeater System Frequencies						
Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
SKYWARN® Backup	147.0300W	CSQ	147.6300W	100.0	A	St Petersburg
SKYWARN® Backup	147.0300W	CSQ	147.6300W	103.5	A	North County
SKYWARN® Backup	147.0300W	CSQ	147.6300W	156.7	A	Mid County
SKYWARN® Backup	147.0300W	CSQ	147.6300W	146.2	A	West County
SKYWARN® Backup	147.0300W	CSQ	147.6300W	192.8	A	South County

7.2 REGIONAL SKYWARN® FREQUENCY ALLOCATION AND USAGE

The section identifies the primary repeater system used during regional SKYWARN® nets and describes the contingency plan that will be implemented in the event of a primary repeater system failure.

7.2.1 Regional SKYWARN® Repeater System

The NI4CE repeater system is the primary repeater system used to support the regional SKYWARN® net. Refer to Table V for operational information.

Table V. NI4CE Repeater System						
Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D, M	Remarks
Regional SKYWARN®	145.4300W	CSQ	144.8300W	100	A	NI4CE Verna
Regional SKYWARN®	443.4500W	CSQ	448.4500W	100	A	NI4CE Holiday
Regional SKYWARN®	442.5500W	CSQ	447.5500W	100	A	NI4CE Riverview

7.2.2 Regional SKYWARN® Contingency Operations

If for any reason the NI4CE repeater system becomes unusable, the **TBD** repeater will serve as backup for wide-area or regional SKYWARN® net coverage.

8 BIBLIOGRAPHY

National Weather Service. (2022, 01 09). *NOAA's National Weather Service*. Retrieved from NWSChat: <https://nwschat.weather.gov/>

National Weather Service. (2022, 01 09). *Weather.gov*. Retrieved from Emergency Managers Weather Information Network - About EMWIN:
<https://www.weather.gov/EMWIN/about>

NOAA's National Weather Service. (2022, 01 29). *NOAA's National Weather Service*. Retrieved from Glossary: <https://w1.weather.gov/glossary/index.php?word=warning>

NOAA's National Weather Service. (2022, 01 29). *NOAA's National Weather Service*. Retrieved from Glossary - Watch: <https://w1.weather.gov/glossary/index.php?word=watch>

NOAA's National Weather Service. (2022, 01 29). *NOAA's National Weather Service*. Retrieved from Glossary - Statement:
<https://w1.weather.gov/glossary/index.php?word=statement>

NOAA's National Weather Service. (2022, 03 13). *NOAA's National Weather Service*. Retrieved from Glossary: <https://w1.weather.gov/glossary/index.php?word=tornado+emergency>

A APPENDIX A – ACRONYMS, ABBREVIATIONS, AND DEFINITIONS

A.1 ACRONYMS

The following acronyms are used in this document.

<u>ACRONYM</u>	<u>DEFINITION</u>
ACS	Auxiliary Communications Service
APRS®	Automatic Packet Reporting System
ARES®	Amateur Radio Emergency Service
CSQ	Carrier Squelch
CTCSS	Continuous Tone Coded Squelch System
CWA	County Warning Area
DEM	Department of Emergency Management
EMWIN	Emergency Managers Weather Information Network
FCC	Federal Communication Commission
MIC	Meteorologist In Charge
NCS	Net Control Station
NOAA	National Oceanic and Atmospheric Administration
NTS™	National Traffic System™
NWR	NOAA Weather Radio
NWS	National Weather Service
NWFO	National Weather Forecast Office
NXDN	Next Generation Digital Network
RAN	Radio Access Number (NXDN)
RO	Radio Officer
SOP	Standard Operating Procedure
TBW	Tampa Bay Weather

<u>ACRONYM</u>	<u>DEFINITION</u>
TEL	Time, Event, Location
WCF	West Central Florida
WCM	Warning Coordination Meteorologist
WSFO	Weather Service Forecast Office

A.2 ABBREVIATIONS

The following abbreviations are used in this document.

<u>ABBREVIATION</u>	<u>DEFINITION</u>
PinCo	Pinellas County
EmComm	Emergency Communications
MHz	Megahertz

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 COASTAL/LAKESHORE FLOOD WARNING

"Flooding that will pose a serious threat to life and property is occurring, imminent or highly likely. Coastal/Lakeshore Flood Warnings are issued using the Coastal/Lakeshore Hazard Message (CFW) product." (NOAA's National Weather Service, 2022)

A.3.3 COUNTY WARNING AREA

A County Warning Area is the geographic area of responsibility assigned to a Weather Forecast Office for issuing local public, marine, aviation, fire, and hydrology forecasts.

A.3.4 EMERGENCY MANAGERS WEATHER INFORMATION NETWORK

“The Emergency Managers Weather Information Network -- [EMWIN](#) -- is a service that allows users to obtain weather forecasts, warnings, and other information directly from the [National Weather Service \(NWS\)](#) in almost real time. EMWIN is intended to be used primarily by emergency managers and public safety officials who need timely weather information to make critical decisions.” (National Weather Service, 2022)

A.3.5 FLASH FLOOD WARNING

“Issued to inform the public, emergency management, and other cooperating agencies that flash flooding is in progress, imminent, or highly likely.” (NOAA's National Weather Service, 2022)

A.3.6 HURRICANE WARNING

“An announcement that hurricane conditions (sustained winds of 74 mph or higher) are expected somewhere within the specified coastal area. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds. The warning can remain in effect when dangerously high water or a combination of dangerously high water and waves continue, even though winds may be less than hurricane force.” (NOAA's National Weather Service, 2022)

A.3.7 HURRICANE WATCH

“An announcement that hurricane conditions (sustained winds of 74 mph or higher) are possible within the specified coastal area. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane watch is issued 48 hours in

advance of the anticipated onset of tropical-storm-force winds.” (NOAA's National Weather Service, 2022)

A.3.8 METEOROLOGIST IN CHARGE (MIC)

Meteorologist In Charge (MIC)—Director of the local National Weather Service Forecast Office.

A.3.9 NWSCHAT

“NWSTChat is an Instant Messaging program utilized by NWS operational personnel to share critical warning decision expertise and other types of significant weather information essential to the NWS's mission of saving lives and property.” (National Weather Service, 2022)

A.3.10 SEVERE THUNDERSTORM WARNING

“[A Severe Thunderstorm Warning] is issued when either a severe thunderstorm is indicated by the WSR-88D radar or a spotter reports a thunderstorm producing hail one inch or larger in diameter and/or winds equal or exceed 58 miles an hour; therefore, people in the affected area should seek safe shelter immediately. Severe thunderstorms can produce tornadoes with little or no advance warning. Lightning frequency is not a criteria for issuing a severe thunderstorm warning. They are usually issued for a duration of one hour. They can be issued without a Severe Thunderstorm Watch being already in effect.”

“After it has been issued, the affected [National Weather Forecast Office] NWFO will follow it up periodically with Severe Weather Statements. These statements will contain updated information on the severe thunderstorm and they will also let the public know when the warning is no longer in effect.” (NOAA's National Weather Service, 2022)

A.3.11 SEVERE THUNDERSTORM WATCH

“[A Severe Thunderstorm Watch] is issued by the National Weather Service when conditions are favorable for the development of severe thunderstorms in and close to the watch area. A severe thunderstorm by definition is a thunderstorm that produces one inch hail or larger in diameter and/or winds equal or exceed 58 miles an hour. The size of the watch can vary depending on the weather situation. They are usually issued for a duration of 4 to 8 hours. They

are normally issued well in advance of the actual occurrence of severe weather. During the watch, people should review severe thunderstorm safety rules and be prepared to move a place of safety if threatening weather approaches.” (NOAA's National Weather Service, 2022)

A.3.12 SEVERE WEATHER STATEMENT

“A National Weather Service product which provides follow up information on severe weather conditions (severe thunderstorm or tornadoes) which have occurred or are currently occurring.” (NOAA's National Weather Service, 2022)

A.3.13 SKYWARN® NET CONTROL

An amateur radio base station operator trained to record and relay severe weather information to the National Weather Service Forecast Office.

A.3.14 SKYWARN® NETWORK

A system of amateur radio nets and dedicated telephone lines used to report severe weather to the National Weather Service Forecast Office.

A.3.15 SKYWARN® SPOTTER

A volunteer trained by the NWS to recognize severe weather phenomena and report them to the National Weather Service Forecast Office.

A.3.16 SPECIAL MARINE WARNING

“A warning product issued for potentially hazardous weather conditions usually of short duration (up to 2 hours) producing sustained marine thunderstorm winds or associated gusts of 34 knots or greater; and/or hail 3/4 inch or more in diameter; and/or waterspouts affecting areas included in a Coastal Waters Forecast, a Nearshore Marine Forecast, or an Great Lakes Open Lakes Forecast that is not adequately covered by existing marine warnings. Also used for short duration mesoscale events such as a strong cold front, gravity wave, squall line, etc., lasting less than 2 hours and producing winds or gusts of 34 knots or greater.” (NOAA's National Weather Service, 2022)

A.3.17 **TAMPA BAY WEATHER (TBW)**

The name of the local National Weather Service Forecast Office located at Ruskin Florida.

A.3.18 **TROPICAL STORM WARNING**

“An announcement that tropical storm conditions (sustained winds of 39 to 73 mph) are expected somewhere within the specified coastal area within 36 hours.” (NOAA's National Weather Service, 2022)

A.3.19 **TROPICAL STORM WATCH**

“An announcement that tropical storm conditions (sustained winds of 39 to 73 mph) are possible within the specified coastal area within 48 hours.” (NOAA's National Weather Service, 2022)

A.3.20 **TORNADO EMERGENCY**

“An exceedingly rare tornado warning issued when there is a severe threat to human life and catastrophic damage from an imminent or ongoing tornado. This tornado warning is reserved for situations when a reliable source confirms a tornado, or there is clear radar evidence of the existence of a damaging tornado, such as the observation of debris.” (NOAA's National Weather Service, 2022)

A.3.21 **TORNADO WARNING**

“[A Tornado Warning] is issued when a tornado is indicated by the WSR-88D radar or sighted by spotters; therefore, people in the affected area should seek safe shelter immediately. They can be issued without a Tornado Watch being already in effect. They are usually issued for a duration of around 30 minutes.”

“After it has been issued, the affected NWFO will followed it up periodically with Severe Weather Statements. These statements will contain updated information on the tornado and they will also let the public know when warning is no longer in effect.” (NOAA's National Weather Service, 2022)

A.3.22 TORNADO WATCH

“[A Tornado Watch] is issued by the National Weather Service when conditions are favorable for the development of tornadoes in and close to the watch area. Their size can vary depending on the weather situation. They are usually issued for a duration of 4 to 8 hours. They normally are issued well in advance of the actual occurrence of severe weather. During the watch, people should review tornado safety rules and be prepared to move a place of safety if threatening weather approaches.” (NOAA's National Weather Service, 2022)

A.3.23 WARNING COORDINATION METEOROLOGIST (WCM)

Meteorologist at the National Weather Service Forecast Office and who trains and coordinates the SKYWARN® Spotter program.

A.3.24 WEATHER SERVICE FORECAST OFFICE (WSFO)

National Weather Service Forecast Office responsible for local forecasts, radar interpretation, and warning issuance.

B APPENDIX B – WEBSITE REFERENCES

WEBSITE REFERENCES

ACS – Pinellas County: [Pinellas County ACS Home Page](#)

ACS/ARES® [aresdb](#) Database: <http://www.aresdb.com/>

Become a rain observer: <http://www.cocoRaHS.org>

Become an ambassador: <http://weather.gov/tampa/wrn>

Discussion Group – PinCo ACS: [PinCo ACS Groups.io](#)

Emergency Managers Weather Information Network -- <https://www.weather.gov/emwin/>

Facebook – NWS Tampa Bay: <https://www.facebook.com/NWSTampaBay/>

Hurricane Guide: <http://www.pinellascounty.org/emergency/default.htm#hurricaneguide>

Mike’s Weather Page: <https://spaghettimodels.com/>

National Hurricane Center Amateur Radio Station – WX4NHC: <https://w4ehw.fiu.edu/>

National Hurricane Center: <https://www.nhc.noaa.gov/>

National Weather Service: <https://www.weather.gov/>

NWS Radar: <https://radar.weather.gov/>

NWS Ruskin SKYWARN® Amateur Radio Station: <https://www.weather.gov/tbw/wx4tor>

NWS Ruskin SKYWARN® Page: <http://weather.gov/tampa/skywarn>

Sign up for weather alerts: <http://AlertFlorida.com>

Storm Prediction Center: <https://www.spc.noaa.gov/>

Tampa Bay Graphical Hazardous Weather Outlook: <https://www.weather.gov/tbw/ghwo>

Training – Spotter Network: <http://SpotterNetwork.org>

Training – MetED: https://www.meted.ucar.edu/education_training/course/23

Tropical Cyclone Guidance Project: <http://hurricanes.ral.ucar.edu/realtime/current/>

Twitter – NWS Tampa Bay: <https://twitter.com/nwstampabay>

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

Weather Spotter’s Field Guide: <https://go.usa.gov/xnDYC>

Windy.com: <https://www.windy.com/>

C APPENDIX C – NETWORK OPERATING PROCEDURES

This section of the document contains the Net Control Scripts and operating procedures used by PinCo SKYWARN® 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 activation event, 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 holder (*Call sign*) should be replaced with the FCC Call Sign of the individual identified in the script.
- d. The place holders (*Watch description*) and (*Warning description*) should be replaced with a short description of the watch or warning type (e.g., Severe Thunderstorm, Tornado, Flash Flood, etc.).
- e. The place holder (*Location*) should be replaced with the reported position of the tornado, funnel cloud, or waterspout.
- f. 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.

CONDITION **YELLOW** ANNOUNCEMENT SCRIPT

“This is (*Call sign*) and I am the Net Control Station for the Pinellas County SKYWARN® Net.”

“The National Weather Service has issued a (*Watch Description*) watch effective until _____ (*Use 24-hour format*) for Pinellas County.”

ACTION – Read Watch Text

“Pinellas SKYWARN® is at Condition Yellow. Condition Yellow means that severe weather is possible in the next few hours. This is an informal net.”

“This net is accepting reports of severe weather consisting of:

- Tornadoes, rotating wall clouds, funnel clouds, waterspouts,
- Hail of any size,
- Measured wind speeds of GREATER than 50 mph, any damage caused by high winds,
- Measured rainfall of two inches or more per hour,
- Unusual street flooding.”

“When calling net control with a severe weather report, please include your call sign, SKYWARN® Spotter number (if applicable), geographic location, time that the severe weather event was observed, and a description of the severe weather event.”

Figure C- 1. Condition 3 – YELLOW Announcement Script

CONDITION **YELLOW** ANNOUNCEMENT SCRIPT (Cont.)

“Any station with a severe weather report please call now.”

ACTION - Acknowledge Severe Weather Report and notify the NWS.

“All trained SKYWARN® spotters are requested to activate and monitor this frequency for severe weather updates.”

END OF ANNOUNCEMENT

***Note:** When first establishing the net, call for net check-ins using the script shown below.*

“I will now take check-ins to the net. When checking into the net, please provide Net Control with your call sign and SKYWARN® Spotter number (if applicable). Please speak slowly, clearly, and phonetically. Non-Spotter Stations are requested to stand-by until the Net Control calls for other reports. Trained SKYWARN® stations please call now.”

ACTION - Acknowledge check-ins by call sign

***Note:** Repeat the net announcement and request additional check-ins once every 15-minutes, traffic permitting.*

“Do I have any additional check-ins for the net? Please call now.”

END OF SCRIPT

Page 2 of 2

Figure C- 2. Condition 3 – YELLOW Announcement Script (Cont.)

CONDITION **RED** ANNOUNCEMENT SCRIPT

“This is (*Call sign*) and I am the Net Control Station for the Pinellas County SKYWARN® Net.”

“The National Weather Service has issued a (*Warning Description*) warning effective until _____ (*Use 24-hour format*) for Pinellas County.”

ACTION – Read Warning Text

“Pinellas SKYWARN® is at Condition RED. Condition RED means that severe weather is imminent or occurring within Pinellas County. This is a formal net.”

“This net is only accepting reports of severe weather that consist of:

- Tornadoes, rotating wall clouds, funnel clouds, waterspouts,
- Hail of any size,
- Measured wind speeds of GREATER than 50 mph, any damage caused by high winds,
- Measured rainfall of two inches or more per hour,
- Unusual street flooding.”

“When calling net control with a severe weather report, please include your call sign, SKYWARN® Spotter number (if applicable), geographic location, time that the severe weather event was observed, and a description of the severe weather event.”

Figure C- 3. Condition 2 – RED Announcement Script

CONDITION **RED** ANNOUNCEMENT SCRIPT (Cont.)

“Any station with a severe weather report please call now.”

ACTION - Acknowledge Severe Weather Report and notify the NWS.

“All trained SKYWARN® spotters are requested to activate and monitor this frequency for severe weather updates.”

END OF ANNOUNCEMENT

Note: Identify NWSShats stations currently on frequency.

“Any net station who is active on NWSShats please notify net control at this time.”

ACTION - Acknowledge NWSShats stations by call sign

Note: If weather conditions permit, assign one or more net participants to announce on the other Pinellas County repeaters that SKYWARN® is now operating at Level 2, RED.

“Any net station who can make an announce on other Pinellas County Repeaters that SKYWARN® is active, please call net control at this time.”

ACTION - Acknowledge stations by call sign and assign each to a specific repeater(s)

Figure C- 4. Condition 2 – RED Announcement Script (Cont.)

CONDITION **RED** ANNOUNCEMENT SCRIPT (Cont.)

***Note:** Repeat the net announcement once every 5-minutes, traffic permitting.*

END OF SCRIPT

Figure C- 5. Condition 2 – RED Announcement Script (Cont.)

CONDITION RED TO YELLOW TRANSITION SCRIPT

“This is (*Call sign*) and I am the Net Control Station for the Pinellas County SKYWARN® Net.”

“The (*Warning Description*) warning issued by National Weather Service has expired. However, a (*Watch Description*) watch remains in effect until _____ (*Use 24-hour format*). Therefore, the net will now transition to condition **YELLOW**.”

***Note:** Use the announcement script shown in Figure C- 1 and Figure C- 2 to complete the transition to condition YELLOW.*

END OF SCRIPT

Figure C- 6. RED to YELLOW Transition Script

CONDITION **BLACK** ANNOUNCEMENT SCRIPT

“The Pinellas County SKYWARN® net is now in condition **BLACK**. Condition **BLACK** means that a tornado, funnel cloud, or waterspout has been sighted by a trained SKYWARN® Spotter at (*Location*).”

“While in Condition **BLACK**, the NCS will ONLY accept TORNADO, FUNNEL CLOUD, and WATERSPOUT reports. All other stations remain silent.”

“Please direct all traffic and spotter reports to net control. This is (*Call sign*) standing by.”

Note: Repeat the net announcement once every 5-minutes, traffic permitting.

END OF SCRIPT

Figure C- 7. Condition 1 – BLACK Announcement Script

CONDITION **BLACK** TO **RED** TRANSITION SCRIPT

“This is (*Call sign*) and I am the Net Control Station for the Pinellas County SKYWARN® Net.”

“No tornado, funnel cloud, or waterspout report has been received by net control within the last 15 minutes. However, a (*Warning Description*) warning remains in effect until _____ (*Use 24-hour format*). Therefore, the net will now transition to condition **RED**.”

***Note:** Use the announcement script shown in Figure C- 3 and Figure C- 4 to complete the transition to condition RED.*

END OF SCRIPT

Figure C- 8. BLACK to RED Transition Script

SKYWARN® DEACTIVATION ANNOUNCEMENT SCRIPT

“This is (*Call sign*) and I am the Net Control Station for the Pinellas County SKYWARN® Net.”

“The severe weather threat to Pinellas County has diminished, and the NWS has allowed all Watches and Warnings for Pinellas County to expire.”

“Before I secure the net, do I any additional check-ins for the net? Please call now.”

ACTION - Acknowledge check-ins by call sign

“Not hearing any additional stations, the Pinellas County SKYWARN® Net will now be secured.”

“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 C- 9. SKYWARN® Deactivation Script