

# ALASKA SKYWARN PROGRAM

MAR 2022

## ABSTRACT

The AK SKYWARN Amateur Radio Support Team exists to provide communication services for the collection and dissemination of severe weather reports. Designed to support the National Weather Service and its mission to protect life and property by improving warning accuracy.

Harry Lind Alaska SKYWARN Program Manager

## **INTRODUCTION:**

SKYWARN is a volunteer program of trained and coordinated severe weather observers that was established by NOAA/National Weather Service (NWS). SKYWARN has between 350,000 and 400,000 trained severe weather spotters. These volunteers help keep their local communities safe by providing timely and accurate reports of severe weather to the National Weather Service.

### **ORGANIZATION NAME:**

The organization will be known as AK SKYWARN Amateur Radio Support Team, in the course of routine operations AK SKYWARN for short identity and for legal identification purposes.

### **PURPOSE/MISSION STATEMENT:**

This guide establishes procedures for the NWS SKYWARN program in Alaska. Alaska receives a wide variety of weather events that can vary from severe thunderstorms to severe temperatures and flooding, sometimes all at the same time. Unlike weather spotters/observers in the Lower-48 that may only require expertise in one element of weather events, such as severe thunderstorms, Alaska spotters/observers need expertise in nearly all aspects of severe weather events.

The AK SKYWARN Amateur Radio Support Team exists to provide communication services for the collection and dissemination of severe weather reports. Designed to support the National Weather Service and its mission to protect life and property by improving warning accuracy.

### **REFERENCES and RESOURCES:**

(\*Required) Note: Access to some UCAR courses require registration. There is no fee required.

NWS SKYWARN: SKYWARN (weather.gov)

Role of a SKYWARN Spotter: Role of the SKYWARN® Spotter (ucar.edu)

\*NWS SKYWARN Basic Spotter Training: <u>COMET / MetEd Lesson Viewer (ucar.edu)</u>

NWS SKYWARN Convective Basics Course: <u>Module Description:Skywarn Spotter Convective Basics</u> (ucar.edu)

\*NWS Anchorage Spotter Program: <u>Anchorage Forecast Office Spotter Program (weather.gov)</u>

\*NWS Fairbanks Spotter Program: <u>NWS Fairbanks Spotter Program (weather.gov)</u>

Introduction to the Atmosphere: Met 101: Introduction to the Atmosphere (ucar.edu)

Introduction to Meteorology: <u>COMET / MetEd Lesson Viewer (ucar.edu)</u>

Weather Spotter's Field Guide: <u>SGJune6-11(1).pdf (weather.gov)</u>

Winter Storms: <u>Winter Storms.indd (weather.gov)</u>

Winter Safety: <u>WinterSafety-OnePager-2-27-19.pdf (weather.gov)</u>

Thunderstorm Safety: <u>ThunderstormSafety-OnePager-11-29-18.pdf (weather.gov)</u>

Flood Safety: <a>FloodSafety-OnePager-11-29-2018.pdf</a> (weather.gov)

Weather Glossary: NWS JetStream - Weather Glossary: A's

Storm Reports: https://inws.ncep.noaa.gov/report/

State wide Satellite Map reports: https://www.weather.gov/afc/satellite

### **RESPONSIBILITIES:**

SKYWARN is a registered program with NOAA/NWS who retain all rights to the use of its logo and name. To better organize the structure of the SKYWARN program and to ensure efficient operation and adequate network staffing during SKYWARN activations, the Alaska NWS Warning Area has been broken down into 3 Operating Areas. The boundaries of these Operating Areas are generally based on WFO boundaries. Administration of the SKYWARN program is allotted to the specific NWS Forecast office covering specific geographic area. For Alaska there are three Weather Forecast Offices (WFOs) and areas, WFO Juneau, WFO Anchorage, and WFO Fairbanks. Currently there are two SKYWARN networks established, the WFO Anchorage network and WFO Fairbanks network. Network coordinators; the WFO Anchorage network of SKYWARN spotter is maintained by Don Bush/KL7JFT, and the WFO Fairbanks network is maintained by Harry Lind/AL6F. A DMR talkgroup, TG31022, has been established to give Alaska SKYWARN spotters a mode to collect/forward weather elements/events as they occur and establish a weekly/monthly Net. The AK SKYWARN TG 31022 was established and owned by Harry Lind/AL6F, and is within the Brandmeister DMR system, and follows all Brandmeister rules for use. The 3rd WFO will be assigned a Network Coordinator, once one volunteers.

Each Operating Area is directed by a Network Coordinator. In the event of a vacancy in that position, the personnel within that Operating Area will report directly to the Amateur Radio Coordinator until the position is filled. The basic duties of the Network Coordinator are outlined in this manual. The Network Coordinator oversees his group of qualified, trained Net Control Stations and ensures that at least two Net Control Operators (or the Network Coordinator) are available to start a net at all times, 24 hours a day, throughout the year. These nets are self-starters due to the large area we need to cover.

#### **COOPERATION AMONG OPERATING AREAS:**

It is often possible for a Net Control Operator (NCO) in one Operating Area to access the assigned repeater, simplex freq, or HF frequency in a neighboring Operating Area. Network Coordinator and their Net Control Operators are expected to cooperate with one another by

taking whatever actions are necessary to ensure neighboring nets are covered with a qualified Net Control Operator as needed. Net Control Operator volunteers shall provide a list of designated repeaters which he/she can access from the location(s) from which they will be serving as NCO, and shall provide updates to this list as station or repeater changes modify station capabilities. Network Coordinator whose territories lie at the outer boundaries of Alaska WFOs are strongly encouraged to become familiar with and forge a positive, cooperative relationship with neighboring SKYWARN amateur radio teams.

## **CORE VALUES:**

AK SKYWARN Amateur Radio Support Team operates under seven Core Values which guide everything we do:

Dedication. We serve the NWS and each other with a spirit of commitment and dedication to our common mission to protect life and property.

Education. We value each other's' interests, skills, and experiences and we actively and publicly share our talents and our knowledge.

Integrity. We act honestly and in the best interest of the NWS and SKYWARN in everything we do.

Respect. We recognize the duties each person on the team has volunteered to perform and we appreciate their hard work, even when things go wrong.

Teamwork. No one person can carry the weight of the SKYWARN program. It takes many people working together with diverse skills and a common goal to achieve success.

Community Involvement. We share our educational resources and our intellectual assets freely with the communities we serve and strive to be good neighbors and partners in the amateur radio world.

Continuous Improvement. We aim to do a lot of things right and want to be the best, but in order to truly be the best we need to accept that sometimes we'll fail, and that's okay as long as we learn something from it and make ourselves stronger.

## **LEGAL STRUCTURE:**

The team currently operates without formal legal structure. Each member is volunteering his or her time and resources. Team members report to the WFO directly to their area and copy to their

Area Coordinator. While there is some formal leadership structure to the team, it is not its own distinct legal entity.

## FINANCIAL STRUCTURE:

The team independently manages its own finances. Equipment owned and operated by the NWS at its facilities is the responsibility of the NWS office unless otherwise specified by agreement between the NWS office management and the owner of the equipment, if loaned or donated. Occasional funding for equipment needs is accomplished through the normal budget and procurement process at the NWS, though the primary source of equipment and supplies remains individual donations from team members and partners.

The giving of cash or cash-equivalent donations to the team is formally discouraged. Individuals and organizations wishing to donate physical goods such as radio equipment, accessories, or supplies should do so to the NWS. This may be accomplished through the team's leadership structure or by direct contact with the SKYWARN Program Manager.

Lacking any financial structure or assets, the SKYWARN Amateur Radio Support Team is unable to reimburse its leadership, members, or other individuals for any equipment, supplies, services, or other purchases, or for mileage, insurance, or any other expenses.

### ASSETS AND LIABILITIES:

In general, unless prior agreements withstanding, all equipment installed at NWS stations are the property of the United States Department of Commerce/NOAA/NWS. Certain incidental supplies, such as binders, notebooks, pens, paper, food, beverages, etc. at the SKYWARN amateur radio station are supplied by and at the sole expense of the purchasing Amateur Radio Coordinator, Area Manager, Responder, Net Control Operator, or other individual(s), and become the property of the SKYWARN Amateur Radio Support Team.

### ABILITY TO FURTHER ORGANIZE:

Nothing in this manual shall be construed as to restrict the ability to further organize the team. There would be substantial benefit into incorporating the team as a non-profit organization, and the SKYWARN Amateur Radio Coordinator has the ability to restructure the team accordingly.

### **TRAINING REQUIREMENTS:**

Two courses, as a minimum, are required to become a SKYWARN weather spotter, the NWS SKYWARN Basic Spotter Course and the NWS Spotter Program course. Note: Although the WFO Anchorage and WFO Fairbanks office training is listed, only the training for the area a spotter is located is required. See links above for access. Certificates of completion will be provided to the SKYWARN network coordinators who will make them available to the respective

WFO for the person certified. Spotter training is valid for three years, by which time the Spotter must attend either Basic or Advanced SKYWARN Spotter training to remain certified.

Due to the nature of the team's operations, all members must hold a valid amateur radio license of the class appropriate to their position as specified in this manual and must remain in good standing with the Federal Communications Commission for the duration of their participation in this program.

To ensure interoperability with other emergency service organizations, SKYWARN volunteers wishing to serve in the Responder or Network Coordinator roles must complete the FEMA IS-100, IS-200, IS-700, and IS-800 training on the National Incident Management System (NIMS) and Incident Command System (ICS). This training is available online and certificates are provided in PDF format which should be kept on file with the Network Coordinator's team records.

FEMA Courses (Note: FEMA registration is required to obtain FEMA student ID):

IS-100: <u>FEMA - Emergency Management Institute (EMI) Course | IS-100.C: Introduction to the Incident</u> <u>Command System, ICS 100</u> IS-200: <u>FEMA - Emergency Management Institute (EMI) Course | IS-200.C: Basic Incident Command</u> <u>System for Initial Response, ICS-200</u> IS-700: <u>FEMA - Emergency Management Institute (EMI) Course | IS-700 B: An Introduction to the</u>

IS-700: <u>FEMA - Emergency Management Institute (EMI) Course | IS-700.B: An Introduction to the</u> <u>National Incident Management System</u>

IS-800: <u>FEMA - Emergency Management Institute (EMI) Course | IS-800.D: National Response</u> <u>Framework, An Introduction</u>

## **CONTACT INFORMATION:**

### SKYWARN coordinators for team activities:

WFO Anchorage area: Don Bush/KL7JFT

Email: <u>dbush@gci.net</u>

Winlink: KL7JFT

WFO Fairbanks area: Harry Lind/AL6F

Email: <u>mntns2oceans@hotmail.com</u>

Winlink: AL6F

WFO Juneau area: Larry Walter/KL7IWC

Email: <u>KL7IWC@aol.com</u>

Winlink: KL7IWC

### National Weather Service SKYWARN Coordinators:

For NWS, the Warning Coordination Meteorologist (WCM), is the coordinator for all NWS SKYWARN contacts within their respective WFO zone. Additional information and map shown on Appendix B.

WFO Anchorage Forecast Office: (907) 266-5105

WFO Fairbanks Forecast Office: (907) 458-3700

WFO Juneau Forecast Office: (907) 790-6800

## **NET CONTROL OPERATOR TRAINING:**

All amateur radio team members serving in the Net Control Operator (NCO), Responder,

Network Coordinator, or Program Manager roles must complete a Net Control Operator training course covering a minimum of the following topics:

- 1. Overview of SKYWARN and the amateur radio team.
- 2. Understanding of when and how SKYWARN activates.
- 3. Calling a net and keeping track of check-ins.
- 4. Identifying severe weather.
- 5. Asking probing questions to fully develop a spotter report.
- 6. Identifying and properly handling potentially fraudulent reports.
- 7. Dealing with interference and malicious activity.
- 8. Handling Sensitive Information
- 9. Dealing with periods of high traffic.
- 10. Coexisting with other nets on the same frequency.

11. Properly logging all reports received into the SKYWARN Report Management System (RMS).

12. Determining which reports need to be manually relayed to the NWS WFO and properly relaying those reports.

- 13. When and how to switch to a directed net.
- 14. Dealing with repeater outages and other technical issues.
- 15. Working with linked nets via DMR or D-STAR.
- 16. Securing the net.

Net Control Operator training is valid for a period of three years but more frequent specialized training may be required in the event of significant changes in operating procedure.

Reserve Net Control Operators | those NCO's who have not logged at least one report in an 18-month period, will be required to complete the Net Control Operator training program annually.

Training may be delivered either in a classroom setting, online, or via teleconference, and the Amateur Radio Coordinator should determine if a post-training assessment is required to validate trainees have learned the necessary skills prior to certifying or re-certifying them as Net Control Operators.

Net Control Operator training is valid for a period of three years but more frequent specialized training may be required in the event of significant changes in operating procedure.

## **RESPONDER TRAINING:**

Responders are required to complete all Net Control Operator Training as well as a Responder training program covering the following topics:

- 1. Understanding when and how to respond to the WFO.
- 2. Preparing for a response to the WFO, including what to pack.
- 3. Gaining access to the WFO and the SKYWARN Radio Desk.
- 4. Signing in and out of the SKYWARN Radio Desk.
- 5. Storage of personal belongings at the WFO.
- 6. Operation of all radio equipment at the radio desk.
- 7. Locating and installing reserve radio equipment.
- 8. Locating SKYWARN reference materials on the SKYWARN computer.
- 9. Understanding and controlling linked repeater systems.
- 10. Identification and use of Auxiliary SKYWARN Repeaters.

11. Working with NWS employees to stay abreast of severe weather threats and specific areas NWS employees need reports from.

- 12. Properly and selectively relaying reports from nets to NWS employees.
- 13. Utilizing APRS and Winlink to manually retrieve log entries from the SKYWARN RMS.

Responder training should be conducted one-on-one with new Responders on-site at the WFO with the coordination of the SKYWARN Program Manager. Responder training is valid for three years unless considerable changes in equipment or operating procedure dictate more frequent training.

### **NETWORK COORDINATOR TRAINING:**

New Network Coordinators should receive training on the following topics:

- 1. Understanding the various SKYWARN activation assessment and planning tools.
- 2. Understanding activation time frames and net staffing requirements.
- 3. Utilizing the Team Roster to locate Net Controllers to staff a net.

4. Working with other Net Coordinators and the Program Manager to and additional Net Controllers.

- 5. How to give an effective outreach presentation and utilize all available outreach resources.
- 6. Recruiting new Net Controllers.
- 7. Working with the SKYWARN Program Manager to arrange spotter training classes.
- 8. Effectively communicating with Net Controllers and other SKYWARN team members.
- 9. Effective leadership skills.

Training should be one-on-one and the depth of the training could vary widely depending on the Network Coordinator's background and leadership experience.

### **TRAINING RECORDS:**

Network Coordinators will forward copies to the Program Manager. Network Coordinators are responsible for ensuring everyone on their team maintains current training as required by their position and the current training curriculum. As team members obtain additional or refresher training, the Network Coordinator shall report this to the Program Manager for documentation in the team's records.

## **ONGOING TRAINING AND RE-CERTIFICATION:**

Periodic refresher training shall be required at least once every three years for all training elements with the exception of the NIMS/ICS components, for which refresher training shall be required based on FEMA guidelines.

## **NET ACTIVATION CRITERIA:**

The team is "on standby" 24 hours a day, 7 days a week and should be able to provide emergency communications services and collection of spotter reports any time of the day or night.

To better utilize its human resources the team has implemented three sets of activation criteria which specify the circumstances under which routine report collection services will be provided to the NWS.

In general, amateur radio support services will be provided between 6 AM and 10 PM local time, according to the **DAYTIME ACTIVATION CRITERIA**. **NIGHTTIME ACTIVATION CRITERIA** apply to operations outside these hours, and there is also a separate **SKYWARN RADIO DESK ACTIVATION CRITERIA**.

## DAYTIME ACTIVATION CRITERIA:

The team will make itself available to the NWS upon request under any weather conditions and will self-activate between the hours of 6 am and 10 pm local time under any one or more of the following conditions:

1. Severe Thunderstorm or Snow Watch or Earth Quake/Tsunami warning issued, plus one or more of the following on the SPC Day 1 Convective Outlook:

- (a) Damaging Wind Risk at or above 30%.
- (b) Severe Hail Risk at or above 30%.
- (c) Earthquake/Tsunami Risk at or above 5%.
- 2. Particularly Dangerous Situation (PDS) Severe Thunderstorm Watch issued
- 3. Particularly Dangerous Situation (PDS) Earthquake/Tsunami Watch issued
- 4. Winter Storm Warning issued
- 5. Sever Wind Warning issued

- 6. Avalanche Warning issued
- 7. Flood Warning issued
- 8. Upon request from the NWS

When any of these conditions are met, SKYWARN nets will prepare to activate and will go on the air once severe or potentially severe weather is impacting or about to impact the area, provided such weather conditions are occurring between the hours of 6 AM and 10 PM local time. The team will activate anytime there is a formal request from the NWS.

The team may be placed in a "standby" status when there is a threat of severe weather but the criteria provided here are not met. For example, a Severe Thunderstorm Watch with a 15% Damaging Wind Risk, 15% Severe Hail Risk, and 2% Earthquake/ Tsunami risk may result in a \standby" status to ensure team members are ready to activate in the event of localized hazardous weather which may warrant activation of SKYWARN.

Generally, if the wind, hail, and/or tornado risks levels are met on the Day 1 Convective Outlook, this should place the team in a standby status, with the issuance of a Watch, or the presence of locally severe weather conditions, serving as the trigger for net activation.

## NIGHTTIME ACTIVATION CRITERIA:

Overnight activations of SKYWARN nets, between 10 PM and 6 AM local time, will occur under the following conditions:

- 1. Particularly Dangerous Situation (PDS) Severe Thunderstorm Watch issued
- 2. Particularly Dangerous Situation (PDS) Flood Watch issued
- 3. Extreme Wind Warning issued
- 4. Earthquake/Tsunami Warning issued
- 5. Upon request from the National Weather Service

It bears repeating that any formal request from the NWS for overnight support overrides any specific weather criteria stated here.

## **USE OF LOCAL DISCRETION FOR ACTIVATION:**

Often there are weather situations which warrant activation of a SKYWARN net but fall below the mandatory activation criteria listed in the previous two sections. All currently certified SKYWARN Net Control Operators and Leadership Team members have the authority to start a net at any time. Leadership Team members are encouraged to monitor weather situations closely and evaluate the likelihood of localized severe weather events which may justify calling a net.

Net Control Operators do not need to obtain permission from the Leadership Team

to start a net, however, they are encouraged to consult with their Network Coordinator, or Program Manager prior to going on the air when time permits.

For urgent situations, such as a Tsunami Notification of the Leadership Team is not done to request permission to start a net. Rather, it allows the Leadership Team to locate backup Net Control resources and perform other activities in support of the net, including the generation of activation notifications for other team members, Spotters, and EMCOMM partners.

## HANDLING NETS IN PROGRESS AT END OF DAY:

Any SKYWARN Net which is on the air at the end of the day (that is, the point at which the Nighttime Activation Criteria are set to take effect) is not automatically suspended. Provided there are stations checked in, the net should be continued until such time that it is reasonable to shut it down, or until the Net Control Operator's personal availability or stamina requires a net be closed. Ultimately it us up to the Network Coordinator to determine the most appropriate time to shut down a late evening net unless a request for longer operation has been received from the NWS.

## **SKYWARN SPOTTER ACTIVATION:**

Spotter activation may be initiated by either a WFO or a SKYWARN spotter. In either case, the first step is to notify the specific coordinator for the geographical area of the event. The coordinator will, based on the location of the event, notify spotters from the roster in the area of concern. The coordinator may also establish a Net Control Station (NCS) to collect and transmit information to the WFO of concern. In the event a SKYWARN Net is warranted or requested by either a SKYWARN coordinator or the NCS the following procedures will be followed:

### Procedure for Calling into a SKYWARN Net:

When the Net Control Station (NCS) calls on stations to check in, please follow the following guidelines:

- Identify yourself with your callsign, name and current location.
- Allow the NCS to greet all the stations.
- The NCS will then go down the list, taking the information from each station.
- We want *your* observations!
   WHAT was observed, be as specific as possible
   WHEN it was observed
   WHERE it was observed
- Include direction & distance from a known location
- Don't relay reports that you hear on repeaters in other coverage areas, *unless* the NCS has asked *you* to do so.
- Don't relay information from the WEATHER CHANNEL, TV, radio, etc.

- If you relay information from another source, state that source; Police Dept, general public, etc.
- After the storm has passed your location, **DO NOT** tell NCS the storm/event has passed!
- Please be clear and concise.
- Be ready in the event an after actions/event observation may be requested.
- If available use Winlink and send to KL7JFT and/or AL6F

NOTE: Please remember your safety during severe weather!

### **MODES/METHODS FOR CONTACTING SKYWARN:**

For SKYWARN observers/spotters that are not HAM radio operators the use of phone numbers would be the best way to make contacts. For SKYWARN observers/spotters that are HAM radio operators there are numerous paths available via HF/VHF/UHF/D-Star/DMR. Each SKYWARN coordinator will create a guide for use based on availability of repeaters and freq used for a given area. This information will be available to all SKYWARN observers/spotters.

### MAIN COORIDNATING FREQUENCIES:

A talkgroup has been created on DMR for the sole use of trained SKYWARN observers/spotters. It is: AK SKYWARN TG 31022. Although anyone may listen in at any time, the talkgroup will not be used for general use. The purpose of the talkgroup is to allow severe weather information to be passed and collected. The talkgroup may also be used for training as necessary and/or requested. A weekly/monthly net will allow all Alaska Skywarn observers/spotters the opportunity to check in, ask questions, listen for updates regarding SKYWARN and any other information appropriated and coordinated through the SKYWARN coordinators. During any net activation there will be no cursing, nor views regarding political or religious nature expressed. If it doesn't pertain to the SKYWARN program or could be offensive to anyone it does not belong on this net. For long range HF coordination, we will use 3.920 MHZ LSB, our state emergency frequency. For D-Star, currently we will use Reflector 30, until we can find one that may be better suited. As for local nets, the Network Coordinator for that area will set it up with the local area stations and report to the Program Manager, Harry Lund/AL6F so we can include your plan into our appendix.

## **APPENDIX** A

## FAQs

### Do I have to be a licensed ham to be a SKYWARN spotter?

No, you don't have to be a ham. Anyone who is interested can be trained as a SKYWARN spotter. While you don't have to be a ham, it is helpful to be one, as you can immediately communicate your observations to a **SKYWARN** net that is taking place in your location.

### Are SKYWARN spotters paid?

No. All SKYWARN spotters are Volunteers and are not paid.

#### Safety

It is the responsibility of each team member to look out for their own safety. NWS and SKYWARN will never ask a person(s) to put themselves in harms way.

### **Specific Weather Criteria to Report:**

Initially watch local NWS websites for any Warnings/Watches/Advisories that may be expected. That is the best place to start. These products will specify what is expected, heavy rains, flooding, high winds, etc. See Appendix's for additional information.

## **APPENDIX B**

## Warning Coordination Meteorologists

NWS contacts for SKYWARN are shown below for each of the three WFO zones in Alaska.



## APPENDIX C Northern Alaska Hazardous Weather Spotter Guide

#### When Spotter Observations are needed:

Damaging Dust Devils Funnel Clouds or Tornadoes

Is it rotating?

### **Heavy Rainfall**

more than... 0.50" in 1 hour 0.75" in 3 hours 1.00" in 6 hours

### Flooding

(swollen rivers due to rain, snow-melt or ice jam blockage) Roads impassable due to high water Streams or rivers overflowing their banks, any occurring or potential property damage? Mudslides: Roads fully or partially blocked, property destroyed/damaged Breakup: The FIRST occurrence when ice on the river is breaking up and moving.

### Heavy Snowfall

(anytime) 3" in 12 hours or less

### **Freezing Rain or Freezing Drizzle**

Estimate the amount of ice accumulation on the road or surface (fraction of an inch)

### Strong Winds (35 mph or stronger)

How to Estimate Wind Speed: Speed Effect 30-40 mph large trees in motion; whistling in overhead utility lines 40-50 mph Whole trees in motion; garbage cans/similar items blown over 50-65 mph Twigs/Small branches break off tree; Damage to fences/shingles 65-80 mph Large branches break off of trees; shallow rooted trees uprooted 80-100 mph Extensive tree/roof damage; trailer homes overturned

### Volcanic Ash

Place snowboard outside when expecting volcanic ashfall.

### Low Visibilities

1 mile or less (please try to estimate) Blowing Snow, Fog, or Smoke

## Hail

(any size, any time!) Reference hail by coin size and not by marbles!



## **APPENDIX D** Southcentral Alaska Hazardous Spotter Guide

	<ul> <li>What do we</li> </ul>	ather spo	tters report?			
	Great question!	Significant c	or hazardous weather in South	central Alaska	may include:	
Severe weather	· ]	Urban and/	or small stream flooding	Winter we	ather	
<ul> <li>Thus</li> </ul>	inderstorms	•	Roads closed due to high	•	Freezing rain or f	reez
<ul> <li>Wat</li> </ul>	terspouts		water		drizzle	
<ul> <li>Hail</li> </ul>	1	-	Roads impassable due to	•	Thundersnow	
<ul> <li>Win</li> </ul>	nds of 40 mph or		high water	•	6 inches of new si	low
grea	ater	-	Small streams overflowing		12 hours	
			their banks			

Land slides

## **APPENDIX E** Southeast Alaska Hazardous Spotter Guide

Great question! Significant or hazardous weather in Southcentral Alaska may include:

#### Severe weather

- Thunderstorms
- Waterspouts
- Hail
- Winds of 40 mph or

## greater

#### Urban and/or small stream flooding

- Roads closed due to high water
  - Roads impassable due to high water
  - Small streams overflowing their banks
- Land slides

#### Winter weather

- Freezing rain or freezing drizzle
- Thundersnow
- 6 inches of new snowfall in 12 hours

## Reporting Hazardous Weather in Southeast Alaska to the Juneau WFO

Reporting hazardous weather (all year) is essential! Remember that each report, regardless of the method, must include the time and location of the event.

**When to report:** Whenever you see weather that is, or potentially is, damaging or hazardous! Reporting when the forecast is off is also extremely helpful in locations with few automated stations.

**Why spotter reports are important:** The key element of the mission of the National Weather Service is to issue weather-related warnings for the protection of life and property. So, volunteer storm spotters help us achieve this goal by giving us the information on hazardous weather as it's occurring.

How To Submit A Report:

Website: Click the **Storm Report** tile under the map and hit Submit a Weather Report.

Email: juneau.weather@noaa.gov - A great way to share pictures and/or video with us!

**Telephone: 1-877-807-8943** - Be sure to have your spotter number ready so that we can identify who you are!

Facebook: Visit the NWS Juneau Facebook page and post your weather report to our wall.

**Twitter:** Send Twitter reports to the National Weather Service by including the #akwx hashtag or send them directly to <u>@NWSJuneau</u>.

## APPENDIX F ROSTER

(Contact information listed is for the purpose and use of the NWS AK SKYWARN program. No other use is authorized without express permission of team members)

Harry Lind	<u>mntns2oceans@hotmail.</u> com	NORTH POLE	(907) 371-6000
Don Bush	<u>dbush@gci.net</u>	PALMER	(907) 232-8812
Carol Bush	<u>cbush@gci.net</u>	PALMER	(907) 746-6845
Taft Johnson	<u>taftj86@gmail.com</u>	WASILLA	(801) 372-2188
Tabitha Sherm	an <u>tabithainak@gmail.com</u>	LAZY MOUNTAIN	(907) 414-2281
Rich Schwab	KL4RCS@GMAIL.COM	MEADOW LAKES	(907) 841-1672
Kathy O'Keefe	kokalaska@gmail.com	ANCHORAGE	(907) 351-3538
Gary Wheeler	AL1E@protonmail.com	EAGLE RIVER	(907) 229-2333
William A. Jack	son <u>wajackson504@gmail.com</u>	WASILLA	(504) 645-1448
John Ramsey	<u>ramseycl@alaskan.com</u>	PALMER	(907) 631-3784
Scott McCorm	ck <u>kl7slm@outlook.com</u>	WASILLA	(907) 521-8072
James (JD) We	eks <u>AK907Weeks@gmail.com</u>	PALMER	(907) 748-9948
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## **APPENDIX G**



## **APPENDIX H**

