

Rural Iowa Amateur Radio Club

SKYWARN program

Standard Operating Procedure



1. Scope

This document provides specific procedures for Rural Iowa Amateur Radio Club (RIARC) to support a severe weather spotter network (SKYWARN). Activities supported include:

- Provide severe weather observations from Fayette and adjacent counties to the National Weather Service and Fayette County Emergency Management.
- Provide storm damage reports in Fayette and surrounding counties to the National Weather Service and Fayette County Emergency Management.

2. Membership

2.1 SKYWARN team membership

The SKYWARN team should consist of people who have received weather spotter training at least once every two years through the National Weather Service. An amateur radio license is not mandatory, but highly suggested for communications. The SKYWARN team leaders will keep a roster of active members.

3. Preparation

All SKYWARN members are encouraged to monitor the developing weather situation through forecasts and outlook products provided through local weather sources including:

- NOAA Weather Radio
- Internet Weather Sources
- Local Media (AM/FM Radio, Television).

4. Activation Procedures

4.1 Request to Activate SKYWARN

A request to activate SKYWARN may be made by the following:

- RIARC SKYWARN team leaders
- Fayette County Emergency Management Agency
- National Weather Service
- Any SKYWARN member who observes threatening weather moving into Fayette or adjacent counties

4.2 Activation Procedure

The following steps should be taken to activate the SKYWARN network:

1. Attempt to notify the SKYWARN team leaders
2. SKYWARN team leaders will designate a net control station.
3. Net control will establish a net on the 147.345+ repeater. An announcement should be made to notify any other amateur radio operators listening who wish to participate that a net is being established on the repeater.
3. The net control station should request listening SKYWARN members to check in identifying their call sign, location, and if in fixed or mobile operation.
4. Non-amateur radio SKYWARN team members should check in with one of the SKYWARN team leaders via telephone.

5. Operational Procedures

5.1 Net Control

The net control station should be run from an amateur radio station that has capabilities to reach the 147.345+ MHz repeater via radio (preferably with emergency power).

The net control station should also have access to telephone to contact non-amateur radio SKYWARN members, the National Weather Service and Fayette County Law Enforcement Center. Emergency Management repeaters to contact Fayette County Emergency Management may be utilized if requested by Emergency Management.

The net control station should have access to a computer with Internet connection with radar software installed (GRLevel3 or equivalent)

5.2 Amateur Radio SKYWARN Net

5.2.1 Standby Net Operation

The net may be operated in Standby mode if severe weather is not an immediate threat to Fayette County. This mode may be used if weather-related traffic is necessary but does not warrant full-time occupation of the repeater. Net control should periodically announce that the net is in Standby mode, and stations may call other stations without permission from net control. It is suggested that extra time is left between transmissions so that priority or emergency traffic can be announced.

5.2.2 Active Net Operation

The net shall be operated in Active mode when severe weather is in progress or imminent. During an active net, the net control station shall limit radio traffic to weather and safety related traffic only. This is considered a formal net, and all radio traffic should flow through the designated net control station. The net control station should request severe weather-related information from spotters in the field, and periodically broadcast minimum reporting criteria for severe weather as necessary to control redundant reports and limit traffic to manageable levels.

5.2.3 National Weather Service Liaison

A method to pass spotter reports to the National Weather Service offices shall be established. The net control station, or another station designated by net control, should serve as a single contact point to avoid duplicate reports. The communication method shall be (in order of preference):

1. Via Slack - NWSChat to the National Weather Service office.
2. Via amateur radio directly to the amateur radio station at the National Weather Service office (if manned).

The main repeaters to try and reach the NWS in LaCrosse are 146.925- 103.5 Cresco and 146.970- 131.8 LaCrosse.

3. Via telephone to the National Weather Service office

5.2.4 Fayette County Emergency Management Liaison

A method to pass spotter reports to Fayette County Emergency Management shall be established. The net control station, or another station designated by net control, should serve as a single contact point to avoid duplicate reports. The communication method shall be (in order of preference):

1. Via Amateur Radio
2. Via EMA Repeaters (155.880) – if authorized by Emergency Management
3. Via telephone

5.3 Reporting Criteria

Severe weather spotters should report:

Severe weather observations that exceed the minimum reporting criteria established by the net control station, including:

- Tornado, funnel cloud, or associated cloud rotation
- Hail greater than 1 inch diameter
- Winds in excess of 58 mph
- Excessive rain
- Frequent lightning
- Flooding
- Storm Damage
- Threats to life or property

Observations should include:

- Time that the condition was observed, if other than current
- Description of the condition
- Location of the reporting station (using common references or distance from nearest town) and relative location of the severe weather condition if different than his location.
- Description of damage, and injuries

Observations should not include “light rain here”, “clear in the west”, etc reports unless requested by net control. Do not report what you are hearing on scanner / ham radio / TV as it’s already been reported. Firsthand reports only.

6. Safety Considerations

The priority of all spotters, whether fixed or mobile, should be safety. RIARC SKYWARN does not specifically request spotters to respond to designated locations to watch for severe weather. SKYWARN members wishing to spot do so at their own risk. Spotters should have communication with one of the SKYWARN team leaders or net control via amateur radio or telephone.

7. Termination

Participation is terminated when the severe weather threat has passed the area. SKYWARN members that wish to terminate prior to the closure of an active net should notify net control. Net control should confirm net termination with all spotters still active for the event.

8. Preparedness

SKYWARN members should prepare themselves for Severe Weather Net operations as follows:

- Make sure the radio to be used is not vulnerable to a lightning strike.
- Providing a source of emergency power for radios in the event of power failure.
- Extra charged batteries
- Keeping abreast of severe weather forecasts and outlooks, such as the Hazardous Weather Outlook issued by the National Weather Service.

RIARC SKYWARN Team Leaders:

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FAYETTE COUNTY SKYWARN SPOTTER LOCATION MAP:

Suggested locations for spotters to view storms from.

