

NWS Albuquerque SKYWARN Reporting Guidelines

(Revised August 2020)

<http://www.weather.gov/media/abq/dss/SKYWARNSpotterGuide.pdf>

Spotters, CoCoRaHS volunteers and cooperative observers may call in or submit on-line reports, plus request activation or check status of our amateur radio operations anytime using the toll-free **SKYWARN number 1-888-386-7637**. This number may also be used for search and rescue, HAZMAT, fires and other emergency or situations needing specialized weather information. It is not intended for routine weather forecast calls.

Please try to report severe thunderstorm hail and high winds, flash flooding, or any weather you consider a significant threat to public safety (heavy snow, springtime high winds and dust storms, or dense fog) as soon as possible. If you can't report immediately then please make a delayed report even if a day or so later. We welcome second hand reports of flash flooding, hail and high winds especially from rural areas.

All reports, even if delayed, are important to our warning and advisory verification programs. The NWS Albuquerque forecast staff may be very busy or handling multiple warning events when you call so please help avoid confusion by identifying yourself immediately as a SKYWARN spotter (including your call sign if an amateur radio operator). Also, please use the report format as listed below. NWS Albuquerque does not utilize "spotter IDs" per se, but rather your first and last name.

A good report includes the following information:

- ✓ **Who** - "This is John Smith, WX5SKY, SKYWARN spotter from Lincoln County."
- ✓ **What** - "Reporting three-quarter inch sized hail and one-half inch rain the past 20 minutes."
- ✓ **Where** - "At my location 3 miles north of Nogal".
- ✓ **When** - "Three quarter inch hail began about 3pm and ended about 305pm."
- ✓ **Other significant information** - "I have heard reports that hail has broken lots of car windows in Alto and that Highway 48 is covered about 2 inches deep with small hail just north of Ruidoso and the streets are curb full with runoff."
- ✓ **Callback information** - "I am monitoring the 123.45 repeater or call at home 505-123-4567."

A spotter may actually make a series of reports: one at the beginning of the event, another report during the event when additional criteria are met (one half inch hail increases to one inch or larger) and a final end of event or summary report.

What events to report?

Severe Thunderstorms:

- ✓ *whenever hail is 1/2 inch or larger, or small hail is accumulating in depth 1 inch or deeper*

- ✓ another report for *hail* increasing to 1 inch diameter (severe criteria) or larger after the initial report
- ✓ *wind* from thunderstorms of 50 mph or higher, and another report if a gust reaches or exceeds 58 mph (severe criteria) after the initial report
- ✓ *storm damage* from any wind speed, microburst or tornado
- ✓ funnel cloud or tornado observed or
- ✓ locally reported supercell identification features (presence or absence of wall cloud and its characteristics such as rotation, persistence; forward or rear flank downdrafts)

Heavy rain/flash flooding:

- ✓ whenever rain is accumulating at a rate of 1 inch per hour or higher (i.e. 0.25 inch/15 minutes) or
- ✓ rain has accumulated 1/2 inch no matter the duration and each additional increment of 1/2 inch an end of storm total rainfall
- ✓ whenever significant arroyo runoff is observed or either local roads or low water crossings become dangerously flooded or
- ✓ any rain amount or local flooding that significantly impacts travel or public safety

Non-thunderstorm high wind events: (usually springtime but occasionally following a winter storm)

- ✓ sustained winds reach 40 mph or greater, or gusts of 50 mph or higher, duration of several hours
- ✓ any observed or locally reported high wind event damage
- ✓ any wind or blowing dust that significantly impacts travel or public safety

Heavy snow:

- ✓ whenever new snow is accumulating at a rate of 1 to 2 inch per hour or
- ✓ accumulation of 2 inches regardless of duration and each additional increment of 2 inches
- ✓ an end of storm total new snow accumulation and total depth on the ground or
- ✓ any snow or ice amount that is significantly impacting local travel or public safety

Total snow depth on the ground and new snow depth are separate elements. Suppose you have 5 inches already on the ground and then get 4 inches of new snow to yield a total snow depth of 9 inches. You would report 4 inches new snow with a total depth of 9 inches on the ground. The water equivalent of snow is the melted or measured liquid water value for new snow. Ten inches of snow to one inch of water is often quoted as a water equivalent estimation standard. However, this is generally too "wet" for New Mexico's drier snow and ratios around 15 to 1 are often more reasonable.

NWS Albuquerque Amateur Radio SKYWARN program

The NWS Albuquerque office, located on the west side of the Albuquerque Sunport airport, has both 2M and 70CM amateur radio. Vanity call WX5ABQ (WX weather, region 5, and ABQ international identifier for Albuquerque airport and NWS office) is normally used whenever the station is on the air.

For SKYWARN, we primarily use the MegaLink repeater system which provides coverage into most of the NWS ABQ office county warning area or the northern two-thirds of New Mexico. We may also use several of the Upper Rio FM Society repeaters (146.940 or 146.900) as well as other local repeaters from near Santa Fe (147.200 or 147.300), Los Alamos (145.190), Bernalillo-Rio Rancho (147.100), Belen (146.700) and Socorro (146.680) whenever severe weather threatens along the Rio Grande Valley and over west central New Mexico.

Although we do have a number of staff licensed to operate the WX5ABQ amateur station, there are times when these licensed forecasters are not on duty or else other duties prevent us from monitoring the amateur radio. A guest operator may then be called out to assist. If you can't raise us direct on the radio, you may check station status or request station activation with a phone call to the toll-free SKYWARN number 1-888-386-7637 or via the Upper Rio FM auto-patch using codes 365 or 9365 (after hours emergency phone patch).

Spotters can contribute snow and road condition reports as well as heavy rain and severe thunderstorm reports. We encourage both home location reporting and reports from spotters that may be traveling across the state.

Have you designated a central contact point within an amateur spotter group? It's usually best to have one to two folks designated as primary group contact points. This helps us request spotter activation and then manage reports during an event. It's left up to the group to decide whether to communicate as a group on a local repeater or simplex and then have someone relay reports to us via MegaLink, other repeater or by phone. Please announce and identify your Net Control Station to WX5ABQ when operating as ARES or as organized groups using local repeaters, and identify which frequency the group uses so we may monitor when possible.

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