

ARKANSAS AUXCOMM SKYWARN



STANDARD OPERATING PROCEDURE

Revision 5.0

February 2026

CHANGE SUMMARY

REVIEW/REVISION	DATE	POC
Change 3.4 (Creation)	6/9/2025	WXOX
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ARKANSAS AUXCOMM SKYWARN MISSION STATEMENT

Our mission shall be to provide a reliable conduit for ground truth and situational awareness from observers in the field to support the operations of the National Weather Service Weather Forecast Offices responsible for the citizens of the state of Arkansas. Through timely and accurate communication, devoid of hyperbole, free from divisiveness, and embracing the highest standards, integrity, professionalism and technical expertise we are dedicated to serving the National Weather Service-

STANDARD OPERATING PROCEDURE (SOP) PURPOSE AND USER GUIDE

The Arkansas AUXCOMM SKYWARN Standard Operating Procedure is intended as a resource for amateur radio operators interested in participating in SKYWARN nets held on the Arkansas AUXCOMM SKYWARN system. Familiarity with this document is necessary and will help anyone wishing to understand their role in reporting severe weather-related data to the National Weather Service. This is a living document, and changes will occur as the need arises. You can find out about changes in this document by taking part in the Arkansas AUXCOMM SKYWARN Test Net or looking for the latest revision at www.arkansasauxcomm.org

This document has been written with the intent to provide information to Net Control Operators, Storm Spotters and Repeater Owners/Trustees. Language is necessarily restrictive and is tailored for the “worst case scenario” weather event. Participants should be familiar with these standards so they are best prepared for the worst case, but take part in every net with the mindset that Net Control will set the required tone based on the workload and the seriousness of the situation.

Suggested Study: At a minimum:

Net Control Operators: Be familiar with the entire document

Storm Spotters: “Storm Spotters”, “Net Operations Procedures”, and “Appendix 3”

Repeater Owners/Trustees: “Program Overview”, “General Net Operations”, and “Appendix 2”

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1. Program Overview:

PURPOSE

Arkansas AUXCOMM SKYWARN provides radio communication between individual storm spotters, and the National Weather Service. The primary and preferred means of communication is via amateur radio to the National Weather Service office. This means of communication will be supplemented and backed up using NWS slack as necessary.

LEADERSHIP PERSONNEL

The Arkansas AUXCOMM SKYWARN network is led by the Arkansas AUXCOMM Volunteer Coordinator.

NETWORK

The Arkansas AUXCOMM SKYWARN network consists of hundreds of amateur radio operators throughout the state. These operators communicate ground truth, damage reports, and other requested data at the direction of the Arkansas AUXCOMM SKYWARN Net Control Operator (NCO). The NCO is appointed by and assigned to their duties by the Volunteer Coordinator or his designee. **Arkansas AUXCOMM SKYWARN is not affiliated with any amateur radio club or organization.** All properly trained, licensed amateur radio operators are encouraged to participate.

Operations of the AllStarLink network via the KB5LZK Allmon3 control system will be taught to each net control during training and practiced during each test net. Either net control, someone designated to assist, or both should monitor the Allmon3 to have visibility over the network's operation during all AUXCOMM nets. Each net control will have their own login and password to the Allmon3 and will use that access to regulate the network during SKYWARN operations. The Allmon3 can be accessed at <http://137.184.95.125/allmon3>

Network design and technical standards can be found in Appendix 2 near the end of this document.

2. General Net Operations

SKYWARN NET OPERATIONS

The Arkansas AUXCOMM SKYWARN Net can be operated from any capable amateur radio station. This activation will be done in coordination with the Volunteer Coordinator or their designee who will staff net control operators to cover the forecast threat period. Data for the net operation will be accessed through NWS slack and reports will be submitted to NWS via the same web application.

ARKANSAS AUXCOMM SKYWARN NET ACTIVATION/DEACTIVATION CRITERIA

The Arkansas AUXCOMM SKYWARN net will be activated on the affiliated repeater systems subject to the following criteria. When any of the following criteria are met the Arkansas AUXCOMM SKYWARN net will begin.

1. Issuance of a Particularly Dangerous Situation (PDS) Severe Thunderstorm Watch or Tornado Watch.
2. First issuance of a Tornado Warning in the affected County Warning Area (CWA) or an indication (credible report or radar indication) of the imminent issuance of a Tornado Warning in the CWA.

3. Severe Thunderstorm Warnings that cover a significant part of the CWA (i.e. squall line situation)
4. Severe Thunderstorm Warning issued with enhanced wording. ("Particularly Dangerous Situation", "Destructive", "Tornado: Possible", etc.)
5. At request of the Warning Coordination Meteorologist regardless of the weather situation.
6. By order of the Volunteer Coordinator or his designee.

The Arkansas AUXCOMM SKYWARN net will be deactivated on the affiliated repeater systems subject to the following criteria.

1. Once severe weather has exited the area covered by the repeater system, and in consultation with the Volunteer Coordinator or his designee.

3. Storm Spotters

Basic Storm Spotter Training

Storm spotters are the heart of the Arkansas AUXCOMM SKYWARN network. Spotters provide vital ground truth, damage reports and other requested data to the National Weather Service office. Basic storm spotter training is available in person via the National Weather Service. These opportunities are posted in announcements on the NWS website corresponding to the county warning area of residence. Online training can be found at <https://www.meted.ucar.edu>. Spotters are encouraged to educate themselves to a high degree regarding dangerous weather conditions.

Amateur Radio Storm Spotter Training

Arkansas AUXCOMM SKYWARN operates a training net every third Tuesday of the month at 6:30 PM local time on the Arkansas AUXCOMM SKYWARN radio network. This training net is an opportunity to test your radios, ask questions, and during some nets, listen to a brief educational presentation that will help you be a better spotter. This net also allows spotters to learn and practice net protocols. Attendance and participation are highly encouraged.

WARNING

It is the expectation and the responsibility of storm spotters to ensure their own safety. Your safety is first and foremost. Do not put yourself in danger to provide a storm report. Storm chasing or mobile spotting are not requested or condoned by the Arkansas AUXCOMM SKYWARN network or the National Weather Service.

CAUTION:

Spotters are required to know and adhere to good amateur practice. They also must understand and follow the instructions of net control and the contents of this SOP because of the seriousness of the work being done. Violation of these requirements can be grounds for being suspended or banned from participation in the net.

The need for learning opportunities is understood and everyone will be afforded the opportunity to learn from occasional mistakes but reading and understanding the most current revision of this SOP in its entirety is mandatory and required of our volunteers.

4. Net Control Operators

Net Control Operator Authority

The Volunteer Coordinator maintains a list of amateur operators who are designated to serve as net control operators. While the net is in operation, the Net Control Operator is vested with responsibility for control of the net. As such, their instructions are final and are not open for debate. Compliance with their instructions is required.

Net Control Operators are highly trained and required to appear and behave with the utmost level of professionalism. Net Control Operators are required to know, adhere to, and enforce compliance with the Arkansas AUXCOMM SKYWARN SOP and use good judgment and sound reasoning in the operation of the net.

Training and Selection

Training consists of NWS SKYWARN Storm Spotter Training, hands-on training in net control operations during Arkansas AUXCOMM SKYWARN Test Nets, observation of active Arkansas AUXCOMM SKYWARN nets, and, finally, supervised operation of an Arkansas AUXCOMM SKYWARN net during an active severe weather event.

The position of net control operator is open to any properly licensed amateur radio operator subject to the satisfactory completion of training. The selection of net control operators is at the sole discretion of the Volunteer Coordinator or his designee.

Access to AUXCOMM Radio Network

Access to the AUXCOMM radio network is essential to be a net control operator. Net control operators should have multiple ways to reach the AUXCOMM radio network at their disposal. Examples include a base radio and antenna, a hand held radio into a local repeater, an AllStarLink capable hotspot node and radio, or phone application that allows access to the AllStarLink network (i.e. RepeaterPhone on iOS, DVSwitch on Android)

Use of NWS slack

Access to NWS slack is provided by our NWS partners for the use of our SKYWARN net control operators. There are some non-net control operators that currently have access to NWS slack, but recently NWS has restricted access to this privilege to net control operators only.

NWS slack is a channel for NWS operational purposes only. Treat your access to NWS slack seriously. We do not joke around or socialize on NWS slack, even if others do. It is for business only. Abuse of this privilege will result in revocation and could result in damage to the relationship between amateur radio and the NWS. For new net control operators, the Volunteer Coordinator will assure your access as part of your training process so that you will be ready to operate an Arkansas AUXCOMM SKYWARN net.

5. Specific ARKANSAS AUXCOMM SKYWARN Net Operations Procedures

Net Activation

Until the criteria for net activation are met, the net will not yet be in operation. Repeater systems in the affected area will be monitored until such time as the activation criteria is met. Immediately after the criteria are met, Net Control will transmit the following on the repeater system:

“ALL STATIONS PLEASE STAND BY FOR ACTIVATION OF THE ARKANSAS AUXCOMM SKYWARN NET.”

ON AIR CHECK-INS

Check-ins are of some value during a SKYWARN net as they are a source of information as to spotter position and serve as an opportunity for individual stations to test equipment ahead of the need to contact net control with reportable criteria. Unfortunately, check-ins can interfere with net operations if they are conducted at an inopportune time. As such, on-air check-ins will only be accepted at the discretion and instruction of net control.

CAUTION

Under **NO circumstances** will on-air check-ins be taken during an active Tornado Warning situation.

When check-ins are appropriate, the net control will ask for check-ins. Follow the following template when checking into the Arkansas AUXCOMM SKYWARN net. “Doubles” are anticipated, net control may ask for clarification. Please remember to give information at a pace that is easily hand-copied for net control.

“NET CONTROL”

“This is (first name), (call sign), (call sign phonetically) in (city)” (append “mobile” or “APRS” as necessary)

Each station should pause a second or two between check-ins to allow net control to break in, if necessary. Should net control need to break in they will key up and say “STAND-BY.” Upon hearing “STAND-BY” all check-ins will immediately cease until net control again asks for them to begin.

Check-ins will be acknowledged at the discretion of net control based on weather situation and workload. You can also verify your check in at your discretion on ham.live.

If you relocate from your previously stated spotting location, be sure to let net control know your new position if it has changed **markedly**. Use common sense and do not give a “play by play.” It is also not necessary to call net control to ask for permission to secure your station. Your willingness to participate is very much appreciated.

As a reminder, check-ins are not necessary and are entirely at the discretion and instruction of net control. The weather situation and workload at the station may preclude check-ins for the entirety of the net. The net control will identify during times when check-ins will **not** be allowed in the following manner:

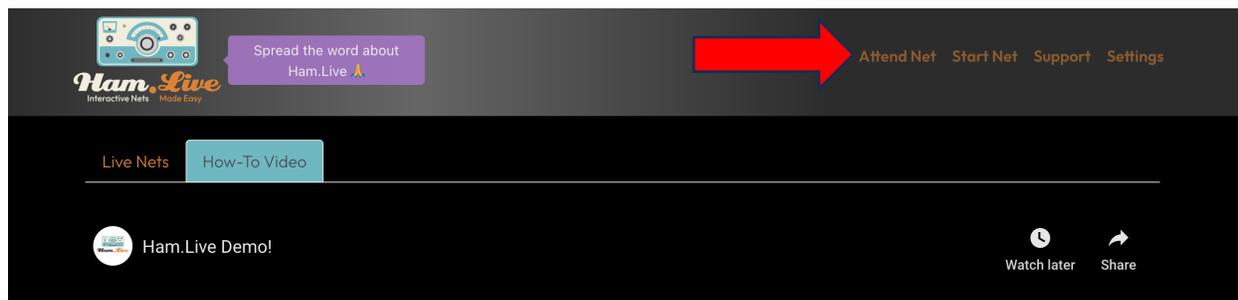
“THIS IS WX0X, ARKANSAS AUXCOMM SKYWARN, **NO CHECK-INS**”

CAUTION

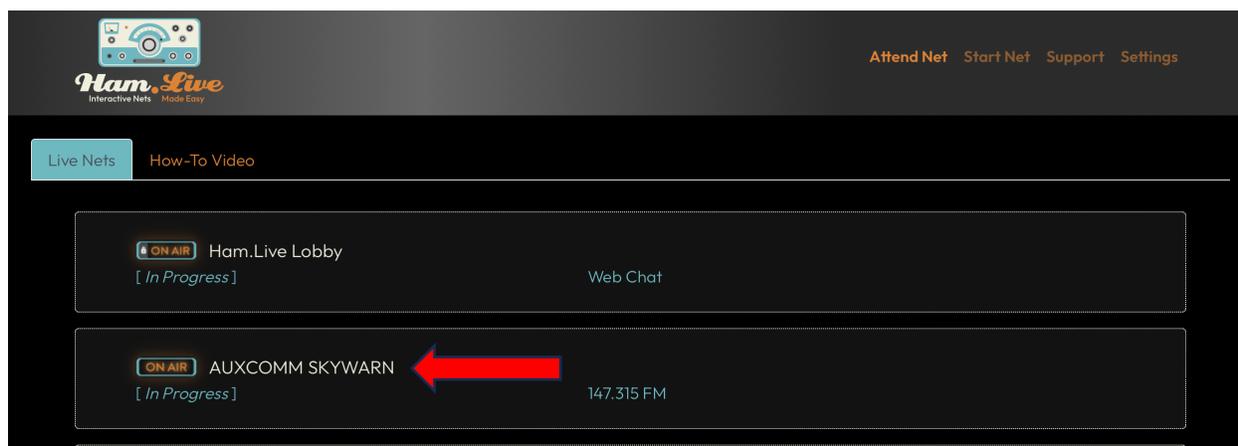
Every station that participates in the Arkansas AUXCOMM SKYWARN net is responsible for listening before transmitting. The repeated violation of the check-in policy is grounds to be suspended or banned from participating in the net.

INTERNET CHECK-INS

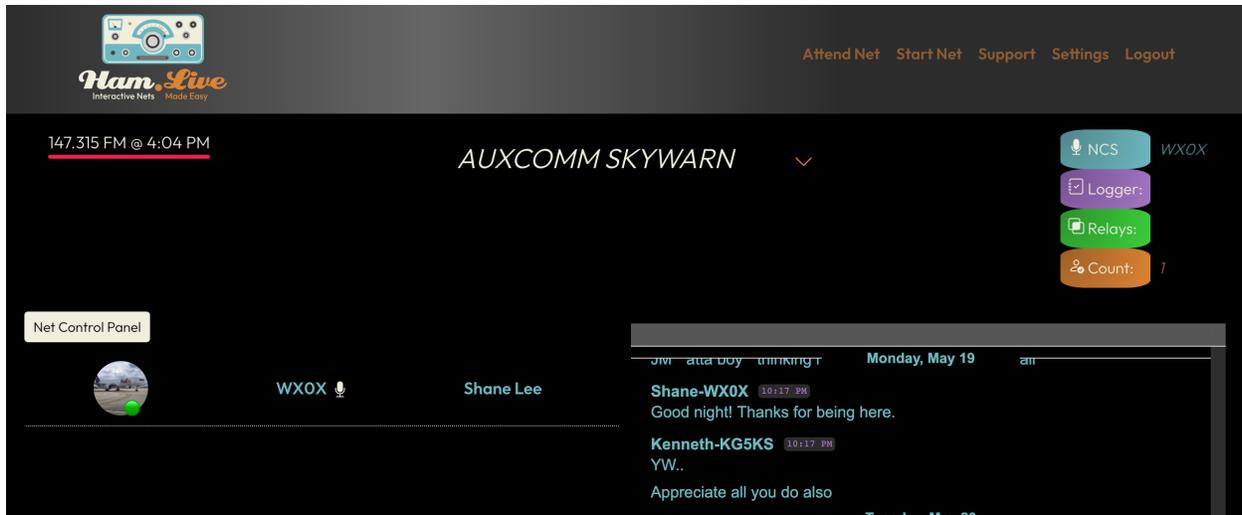
Arkansas AUXCOMM uses a free internet service to allow for check-ins to the net via internet. To the maximum extent possible, the Arkansas AUXCOMM SKYWARN net would prefer online check-ins unless you are mobile. If you would like to check into the net using the website, log on to the URL “ham.live”.



Once inside ham.live, click on “Attend Net.” You will be prompted to enter your e-mail address. Once you have entered your e-mail address, go to your e-mail and find the message that was sent to your mailbox. Click on the link there and that link will take you back to ham.live as seen below. Click on “AUXCOMM SKYWARN” and you will be forwarded to the net lobby.



Check-ins can be seen on the left. You will find your callsign and name there. On the right, you will see net control’s callsign, the logger’s callsign (if any), and the count of stations checked in. Net control operators will do their best to assure all check-ins whether on-air or online make it onto the ham.live log, as workload permits. **Do not use the chat room feature as a place to make SKYWARN reports.** Net control may or may not notice those reports. Severe weather-related pictures CAN be placed there for net control, however. Also, the chat feature can be used to let the net control know you have secured your station, as necessary.



STORM REPORTING

The primary purpose of the Arkansas AUXCOMM SKYWARN network is to collect storm reports for the National Weather Service. As such, the quality and completeness of each report is of primary concern.

Making a good report is something that takes thought. Pause before transmitting to formulate your thoughts and speak clearly and calmly.

Report only what you see. If you are uncertain, tell the net control that you are not sure. Report the weather phenomenon you are seeing using guidelines you received in your SKYWARN spotter training.

Report your location in reference to a well-known intersection, community or locality. Be as accurate as possible regarding your location without unnecessarily giving too much detail. Listen to see if net control needs to ask questions of you before moving away from the radio as more information may be necessary.

Secondhand reporting, such as from law enforcement via scanners, can sometimes be valuable. If you report a secondhand report, identify it as secondhand, and give the reporting agency (i.e. Arkansas State Police, Game and Fish, etc.) and the time the report was heard on the scanner. Please refrain from reporting anything from television, YouTube live feeds, the internet, or commercial radio sources.

CAUTION

Reports of storm sirens, heavy rain, lightning, and power outages are not necessary and should not be reported to net control.

The most important reports are those that encompass "REPORTABLE CRITERIA." Reportable criteria are as follows:

1. Tornado
2. Funnel Cloud
3. Airborne Debris associated with a tornadic circulation
4. Wall Cloud (be sure to note whether you can clearly see rotation, if you cannot, tell net control)

5. Hail in excess of 1 inch. (Quarter size or larger)
 - a. Designate hail reports in reference to commonly known objects. If forwarding a picture, consider including a common object (such as a coin) to help with scale reference.
 - i. Pea (1/4 inch)
 - ii. Penny (3/4 inch)
 - iii. Nickel (7/8 inch)
 - iv. Quarter (1 inch)
 - v. Ping Pong Ball (1.5 inches)
 - vi. Golf Ball (1.75 inches)
 - vii. Tennis Ball (2.5 inches)
 - viii. Baseball (2.75 inches)
 - ix. Teacup (3.00 inches)
 - x. Softball (4.00 inches)
6. Wind more than 58 MPH
 - a. Include whether “measured” or “estimated” wind speed in your report. If “estimated” include basis for estimate (diameter of branches broken, etc.)
7. Flooding
 - a. Observed overflow or inundation by water that causes or will cause damage and/or a threat to life.

As always, listen before transmitting. Net controls will state when “ALL REPORTS” will be accepted. Net controls may also request the assistance of a specific station in the affected area. Net control may restrict reporting to “REPORTABLE CRITERIA ONLY” at their discretion as the weather situation changes. It is assumed that during tornado warnings all net operations will be “NO CHECK INS, REPORTABLE CRITERIA ONLY.” Listen up! The only way to know what status the net is in is by listening to net control. In the absence of clear information as to the status of the net, radio silence is always best until you observe reportable criteria.

In rare circumstances, net control may limit reporting to **EMERGENCY TRAFFIC**. Emergency traffic is limited to life threatening situations only. An example of this was the 2014 Mayflower/Vilonia tornado, where a long-track, violent tornado was on the ground for almost 50 miles. In this situation net control will identify and include the words “**EMERGENCY TRAFFIC ONLY.**” Unless you have a first-hand or solid secondhand report of a life or death threat, maintain radio silence.

NET CONDITION	MEANING
<p>“ALL REPORTS” Or Absence of any named net condition</p>	<p>Net control is looking for any reports of severe weather, or specific conditions as stated. Damage reports are welcome.</p>
<p>“REPORTABLE CRITERIA ONLY” or “REPORTABLE CRITERIA ONLY, NO CHECK INS” (Usually during active tornado warnings)</p>	<p>Net control is looking for only items that are on the list of “reportable criteria.” No damage reports at this time, please. Note damage and report to net control later as damage reports are still important, but only after the severe weather in the area passes.</p>
<p>“EMERGENCY TRAFFIC ONLY”</p>	<p>Net control is aware of a life threatening situation and radio transmissions should be limited to emergency traffic. For instance, if there is a damaging tornado on the ground, limit transmissions to those that deal with a life threatening threat (tornado, very large hail, extremely high or destructive wind.)</p>

NET CONTROL HANDLING OF REPORTS

The first step of handling a report is assuring the report is complete. Repeat the received information back to the spotter and ask any questions necessary to be sure you have all the required data. For secondhand reports, get the reporting agency and time. For wind reports, find out if the report is measured or estimated.

It is net control’s responsibility to vet reports coming from storm spotters. Be aware of the weather situation and assess the veracity of the report. Net controls will attempt to filter reports to the NWS so that they are not relaying false or doubtful reports. In the case of a report that is in doubt, ask via radio for another spotter that can confirm the report. When in doubt, use your judgment to decide whether to relay the report to the forecasters, but always relay that you are in doubt as to the veracity of the report when this is true.

In the case of patently false reports, make note of the time and station giving the false report so the situation can be addressed after the completion of the net. Avoid giving any feedback regarding the doubtful or false report over the air.

When in the NWS office, give the report verbally or in writing on a slip of paper to the forecaster involved in watching that storm. In rare circumstances, the reports come in very quickly and the forecasters may request that you increase the volume on the radio to hear the reports directly.

When not at the NWS office, Make reports via NWS slack. As net control be sure you provide the who, what, when, and where in the most detailed and concise way possible. For example: “Funnel cloud reported by ham radio spotter AI5Z at Otto Road and Audubon Road, three miles southwest of Vilonia at 1947 local. He was looking southwest” On tornado reports, consider using ALL CAPS in slack to draw attention.

HANDLING INTERFERENCE

Occasionally, net controllers encounter interference on the net. If the interference is accidental, refer to the KB5LZK Allmon3 to see which connected station is causing the interference. Tolerate the interference if it is not causing severe communication problems. If necessary and using your best judgment as to the proximity of severe weather to the affected repeater, disconnect that station from the network. If time permits and you have the contact information of the repeater trustee, consider sending a message informing them of the disconnect status and giving a description of the problem. Let them know they are welcome to re-connect when they believe the problem has been rectified.

In the case of malicious interference, do not acknowledge the interference. Attempt to ascertain which connected repeater is the source of the interference and inform the trustee if the time and situation permits. If necessary, consider disconnecting the repeater from the network.

WEATHER STATEMENTS

The reading of weather statements is done by SKYWARN net controls as a courtesy to the spotters in the field and is often the most expedient way for spotters to receive warning of dangerous weather information. Reading weather statements is subject to the following guidelines:

Severe Thunderstorm and Tornado Watch statements will be read in their entirety at the time of issuance if the Arkansas AUXCOMM SKYWARN net is activated. After that, an abbreviated statement will be read periodically at the discretion of net control based on radio traffic and weather situation. Use good judgment. An example of an abbreviated statement is as follows:

“THIS IS WX0X, TORNADO WATCH FOR MUCH OF THE LITTLE ROCK COUNTY WARNING AREA UNTIL 9PM CENTRAL DAYLIGHT TIME.”

Severe Thunderstorm Warning and Tornado Warning statements will be read as follows: Only the **highlighted areas** will be read the first time through the statement. The **red type areas** will be read once more at the end of the transmission. If there are highway mile markers mentioned in the statement, read them the first time through, but use your judgment if the situation is complex (i.e. too many roads/mile markers mentioned, etc.). In the case of a Tornado Emergency issuance, net control should strongly consider putting the net into an EMERGENCY TRAFFIC ONLY status.

BULLETIN - EAS ACTIVATION REQUESTED
 Tornado Warning
 National Weather Service Little Rock AR
 203 PM CDT Fri Mar 31, 2023

The National Weather Service in Little Rock has issued a

* Tornado Warning for...

South central Faulkner County in central Arkansas...
 Central Saline County in central Arkansas...
 Central Pulaski County in central Arkansas...

* Until 230 PM CDT.

* At 203 PM CDT, a severe thunderstorm capable of producing a tornado was located 8 miles west of Salem in Saline County, or 10 miles northwest of Benton, moving northeast at 50 mph.

HAZARD...Tornado and ping pong ball size hail.

SOURCE...Radar indicated rotation.

IMPACT...Flying debris will be dangerous to those caught without shelter. Mobile homes will be damaged or destroyed. Damage to roofs, windows, and vehicles will occur. Tree damage is likely.

* Locations impacted include...

Little Rock...	North Little Rock...
Benton...	Sherwood...
West Little Rock...	Maumelle...
Bryant...	Downtown Little Rock...

Notice that “locations impacted include” are not read. Spotters should know area geography. As such, this information will not be read, nor will it be provided by request. It is **strongly recommended** that spotters not participate in net operations until they have a good knowledge of Arkansas county and city geography.

Generally, about 20-30 minutes after the first issuance, there will be an update statement. Handle the update statements as follows in this example. Read the **highlighted areas** the first time through, and then the **red type** areas the second.

SEE THE NEXT PAGE FOR EXAMPLE

Severe Weather Statement
 National Weather Service Little Rock AR
 224 PM CDT Fri Mar 31, 2023

ARC125-311933-
 /O.CAN.KLZK.TO.W.0043.000000T0000Z-230331T1930Z/
 Saline AR-
 224 PM CDT Fri Mar 31, 2023

...THE TORNADO WARNING FOR CENTRAL SALINE COUNTY IS CANCELLED...

The tornadic thunderstorm which prompted the warning has moved out of the warned area. Therefore, the warning has been cancelled.

A Tornado Watch remains in effect until 800 PM CDT for central Arkansas.

LAT...LON 3470 9246 3483 9251 3497 9227 3472 9214
 TIME...MOT...LOC 1923Z 245DEG 43KT 3478 9243

\$\$

ARC045-119-311930-
 /O.CON.KLZK.TO.W.0043.000000T0000Z-230331T1930Z/
 Faulkner AR-Pulaski AR-
 224 PM CDT Fri Mar 31, 2023

...A TORNADO WARNING REMAINS IN EFFECT UNTIL 230 PM CDT FOR SOUTH CENTRAL FAULKNER AND CENTRAL PULASKI COUNTIES...

At 223 PM CDT, a confirmed large and extremely dangerous tornado was located over West Little Rock, moving northeast at 50 mph.

This is a PARTICULARLY DANGEROUS SITUATION. TAKE COVER NOW!

 Flood Watch/Warning Statements and other statements such as Special Weather Advisories will not be read unless there is a compelling reason to do so (dam breach, severe flooding threatening life or property)

6. CONTINGENCIES

Net Control Contingencies

At times net controllers find themselves in contingency situations, whether it be personal emergencies, sudden illnesses, or even danger from the ongoing weather threat. To the maximum extent possible and subject to availability, the Volunteer Coordinator will staff both a primary net control and a "standby." The "standby" should be geographically separated from the primary, if possible. The "standby" net controller will monitor the net or some other means of communication and should be immediately available to a radio capable of operating the Arkansas AUXCOMM SKYWARN net. Any AUXCOMM net control operator that is near a radio during an active net should be ready to assume net

control duties in the event of unexpected loss of the designated net control station. The primary net controller shall contact the “standby” and assure positive exchange of net control responsibilities. Once normal operations can be resumed, net control will be designated appropriately and the net will continue.

Network Contingencies

If for whatever reason the Arkansas AUXCOMM SKYWARN network fails, net controls will make all attempts to reconnect the system via the Allmon3 system. Also, individual repeater trustees will take actions to reconnect to the KB5LZK hub. If a reconnect to the network is impossible, SKYWARN operations will commence in the affected areas if there is a net control capable station willing to do a local SKYWARN net. If at any time after that moment, the network comes back, the local net control will allow Arkansas AUXCOMM SKYWARN net control to resume operations.

APPENDIX

APPENDIX 1: AUXCOMM TEST NET SCRIPT

WHAT YOU NEED:

1. SKYWARN spotter training course dates and locations. They can be found on the CWA webpages. This can be deleted when there are none on the calendar.
2. Any announcements necessary.
3. A short educational presentation. 3-5 minutes from part of the SOP.
4. The date of the third Tuesday of next month.

GOOD EVENING, EVERYONE, THIS IS (CALL) AND I WILL BE YOUR SKYWARN NET CONTROL FOR TONIGHT'S ARKANSAS AUXCOMM SKYWARN TEST NET.

THE ARKANSAS AUXCOMM NETWORK CONSISTS OF LINKED REPEATERS ACROSS THE STATE OF ARKANSAS, VOLUNTEERED BY INDIVIDUALS AND ORGANIZATIONS TO PROVIDE REPORTS OF SEVERE WEATHER CONDITIONS TO THE FIVE NATIONAL WEATHER SERVICE FORECAST OFFICES THAT COVER THE STATE OF ARKANSAS. YOUR PARTICIPATION IN THIS SKYWARN PROGRAM IS GREATLY APPRECIATED. THANK YOU.

(BREAK 3-5 SECONDS)

THE ARKANSAS AUXCOMM SKYWARN TEST NET IS A DIRECTED NET. ALL CALLS SHOULD PASS THROUGH NET CONTROL. TO BEGIN TONIGHT'S NET, I WILL ASK FOR EMERGENCY OR PRIORITY TRAFFIC. IF YOU HAVE EMERGENCY OR PRIORITY TRAFFIC, CALL NET CONTROL

(PAUSE 10 SECONDS...OR HANDLE EMERGENCY OR PRIORITY TRAFFIC)

HEARING NO EMERGENCY OR PRIORITY TRAFFIC, WE'LL MOVE ON WITH THE NET. IF AT ANY TIME YOU HAVE EMERGENCY OR PRIORITY TRAFFIC, CALL NET CONTROL AND IDENTIFY WITH THE WORDS "EMERGENCY" OR "PRIORITY" AND WE WILL PROVIDE IMMEDIATE ASSISTANCE.

(BREAK 3-5 SECONDS)

NOW WE WILL BEGIN THE CHECK IN PROCESS. AS A RESULT OF THE NATURE OF THE ALLSTARLINK SYSTEM, WE ANTICIPATE DOUBLES. NET CONTROL WILL DO THEIR BEST TO SEPARATE OUT CALLS. TO CHECK IN, CALL NET CONTROL, STATE YOUR NAME, CALL SIGN, THEN REPEAT YOUR CALL SIGN PHONETICALLY, GIVE YOUR CITY, COUNTY, AND WHETHER YOU HAVE ANY TRAFFIC FOR THE NET. REMEMBER TO CHECK IN SLOWLY

ENOUGH THAT NET CONTROL WILL BE ABLE TO HAND COPY YOUR INFORMATION AND USE PROPER ITU PHONETICS. IF YOU DO NOT HEAR YOUR CALL ACKNOWLEDGED BY NET CONTROL, TRY AGAIN THE NEXT ROUND.

FIRST, WE WILL RECOGNIZE THOSE WHO CHECKED IN VIA THE HAM.LIVE PRE NET CHECK INS.

(ACKNOWLEDGE HAM.LIVE CHECK INS TO THIS POINT)

THAT CONCLUDES THE HAM.LIVE PRE NET LIST. THOSE OF YOU WHO CHECKED IN VIA HAM.LIVE ARE ALSO WELCOME TO CHECK IN AND BE ACKNOWLEDGED VIA RF

NOW WE WILL BEGIN RF CHECK INS...AND WE WILL ORGANIZE CHECK INS BY COUNTY WARNING AREA...IF YOU ARE FROM THE JACKSON OR SHREVEPORT COUNTY WARNING AREAS, CALL NET CONTROL

(ACKNOWLEDGE CHECK INS)

ARE THERE ANY CORRECTIONS TO THIS LIST OF CHECK INS?

(BREAK FOR FIVE SECONDS)

STATIONS FROM THE MEMPHIS COUNTY WARNING AREA, CALL NET CONTROL

(ACKNOWLEDGE CHECK INS)

ARE THERE ANY CORRECTIONS TO THIS LIST OF CHECK INS?

(BREAK FOR FIVE SECONDS)

STATIONS FROM THE TULSA COUNTY WARNING AREA, CALL NET CONTROL.

(ACKNOWLEDGE CHECK INS)

ARE THERE ANY CORRECTIONS TO THIS LIST OF CHECK INS?

(BREAK FOR FIVE SECONDS)

STATIONS FROM THE LITTLE ROCK COUNTY WARNING AREA, CALL NET CONTROL.

(ACKNOWLEDGE CHECK INS)

ARE THERE ANY CORRECTIONS TO THIS LIST OF CHECK INS?

(BREAK FOR FIVE SECONDS)

ANY STATIONS FROM ANYWHERE THAT WOULD LIKE TO CHECK INTO THE ARKANSAS AUXCOMM SKYWARN TEST NET, CALL NET CONTROL.

(ACKNOWLEDGE CHECK INS)

ARE THERE ANY CORRECTIONS TO THIS LIST OF CHECK INS?

(BREAK FOR FIVE SECONDS)

STORM SPOTTERS ARE KEY TO THE SUCCESS OF THE SKYWARN PROGRAM. THANK YOU FOR ATTENDING TONIGHT'S ARKANSAS AUXCOMM SKYWARN TEST NET. A GOOD SPOTTER IS AN EDUCATED SPOTTER. LOCAL STORM SPOTTER COURSES ON THE CALENDAR FOR THIS MONTH ARE AS FOLLOWS.....

STATE OTHER ANNOUNCEMENTS HERE. IF ANY STATION CHECKED IN WITH TRAFFIC, ACKNOWLEDGE THEM NOW.

TONIGHT'S EDUCATIONAL PRESENTATION IS.....

READ PRESENTATION

THAT CONCLUDES TONIGHT'S PRESENTATION. NOW WE WILL TAKE LATE CHECK INS. ANY STATION WISHING TO CHECK INTO TONIGHT'S TEST NET, CALL NET CONTROL. (TAKE CHECK INS UNTIL THEY TAPER OFF, THEN GIVE A "LAST CALL FOR CHECK INS)

(ACKNOWLEDGE CHECK INS)

ARE THERE ANY CORRECTIONS TO THIS LIST OF CHECK INS?

(BREAK FOR FIVE SECONDS)

WITH THAT, WE WILL CONCLUDE TONIGHT'S ARKANSAS AUXCOMM SKYWARN TEST NET AND RETURN THE REPEATER SYSTEM TO NORMAL USE. THE NEXT TEST NET WILL TAKE PLACE ON THE THIRD TUESDAY OF NEXT MONTH, (DATE), AT 6:30 PM ON THE ARKANSAS AUXCOMM SKYWARN NETWORK.

THIS IS (CALL), 73 AND GOOD NIGHT!

Appendix 2: AUXCOMM Network Technical Standards

1. Purpose and Scope

This document establishes the technical and operational standards for participation in the Arkansas AUXCOMM / SKYWARN linked repeater network. The network exists to support emergency communications, severe weather operations, and coordinated SKYWARN activities across the State of Arkansas.

The system utilizes **AllStarLink**, a Voice over IP (VoIP) platform based on the open-source **Asterisk** PBX. These standards are intended to:

- Ensure reliable, intelligible, and predictable communications during routine and emergency operations
- Provide SKYWARN Net Control Operators with a consistent operating environment
- Maintain an organized and clearly understood statewide repeater topology
- Protect the integrity of emergency communications during high-impact events

This appendix applies to all repeater owners, system trustees, control operators, and home-node operators who connect to the Arkansas AUXCOMM network.

2. Network Topology and Control Node

2.1 Primary Coordination Node

AllStarLink Node 65017 serves as the primary Arkansas AUXCOMM / SKYWARN coordination node. During SKYWARN or AUXCOMM activations, participating systems are required to link directly to Node 65017 unless otherwise directed by Net Control.

2.2 Linking Philosophy

- Linking to Node 65017 is **voluntary** and may occur on an *as-needed basis* during anticipated or active SKYWARN or AUXCOMM operations.
 - System trustees retain full authority to connect or disconnect their systems at their discretion.
 - The network is designed to be *event-driven*, scaling dynamically based on weather conditions, incidents, or exercises.
-

3. System Participation Categories

3.1 Full-Time Participating Systems

A subset of repeater systems may operate as **full-time or near full-time participants**, typically connected more than 70% of the week. These systems form the operational backbone of the Arkansas AUXCOMM network.

Expectations for full-time systems include:

- A demonstrated interest in emergency communications and SKYWARN operations
- Coordination with other full-time system owners to maintain an always-ready network
- Willingness to yield routine amateur radio traffic when SKYWARN or AUXCOMM traffic is present
- Responsibility for managing and controlling traffic on their local systems

Routine amateur radio activity is permitted on full-time systems; however, emergency and weather-related traffic shall always take precedence.

3.2 Part-Time, Event-Driven, and Special Systems

Repeater systems, temporary installations, and special event systems are welcome to link into Node 65017 during specific SKYWARN activations, exercises, or incidents.

These systems augment the full-time network and expand geographic and operational coverage during periods of need.

3.3 Home Nodes and Operator Access

Home AllStarLink nodes and personal VoIP access points are permitted and encouraged, provided they meet the same technical and audio-quality standards as repeater systems.

The Arkansas AUXCOMM program recognizes that operators may not always have RF access to a repeater, particularly during severe weather or infrastructure disruptions. Home nodes provide an important redundancy and access path during such events.

4. Network Authority and Oversight

During active SKYWARN or AUXCOMM operations:

- Arkansas AUXCOMM / SKYWARN Volunteer Coordinator retains authority over the network
- **Any connected system may be disconnected from Node 65017 at any time**, for any reason, by:
 - SKYWARN Net Control
 - Volunteer Coordinator or their designee

This authority exists to preserve operational effectiveness, manage interference, and maintain disciplined emergency communications.

5. Technical Standards and Requirements

To ensure reliable and intelligible communications, all participating systems must adhere to the following technical standards:

5.1 Network Audio and Telemetry Control

1. **No courtesy tones, CW IDs, voice IDs, or hang-time tones shall be transmitted over the AllStarLink network.**
 - All courtesy tones, telemetry, and identification functions must remain local to the RF system.
 - RF-linked systems that inject tones, CW ID, or telemetry into the VoIP audio path must disable these features while linked.

5.2 Audio Quality Standards

2. Audio quality must be clear, intelligible, and free from excessive distortion, noise, or clipping.
 - While not all systems have identical hardware capabilities, reasonable effort must be made to properly adjust audio levels.
 - Net Control Stations must be able to clearly copy all traffic without repeated requests for clarification.

5.3 Network Scope Control

3. **Out-of-state linked systems shall not be brought into the Arkansas AUXCOMM / SKYWARN network** without prior approval from:
 - The active SKYWARN Net Control Station, **or**
 - The Volunteer Coordinator

This restriction prevents unintended expansion of the net and protects operational clarity during emergencies.

5.4 Technical Assistance and Support

4. The Arkansas AUXCOMM SKYWARN Group includes multiple individuals with advanced AllStarLink and VoIP experience.
 - Technical assistance is available to system owners who request help with configuration, audio adjustment, or compliance.
 - Cooperation and coordination are strongly encouraged to improve overall network performance.
-

6. Operational Model

The current network architecture is a **hub-and-spoke model**, with participating AllStarLink nodes (repeaters and home nodes) connecting directly to Node 65017 during operations.

- Nodes should avoid daisy-chaining or cross-linking through other systems unless explicitly authorized
- This model minimizes latency, echo paths, and troubleshooting complexity
- Future architectures may evolve as the network grows, but changes will be coordinated and documented

7. Network Reliability, Resilience, and Limitations

7.1 Internet Dependence and Operational Reality

The Arkansas AUXCOMM AllStarLink network relies on Internet connectivity, which may be **fragile, degraded, or unavailable** during severe weather events, infrastructure failures, or widespread disasters.

Accordingly:

- Internet-linked systems should be viewed as a **force multiplier**, not a replacement for local RF operations
- SKYWARN and AUXCOMM operations must always prioritize **local RF nets and local operators** within affected areas
- Net Control Stations should expect partial network participation during major incidents and operate accordingly

Local amateur radio operators, local repeaters, and simplex operations remain the **primary and most resilient communications resource** during emergencies.

7.2 Power and Infrastructure Resilience (Best Practices)

While not mandatory, participating systems are strongly encouraged to implement reasonable resilience measures, including:

- Uninterruptible Power Supplies (UPS) for repeater controllers, VoIP nodes, and network equipment
- Backup power generation where feasible
- Stable, wired Internet connections preferred over cellular or consumer-grade wireless links
- Environmental monitoring and basic system health monitoring where available

These measures improve network availability during prolonged incidents but are not required for participation.

8. Audio and Loop Prevention

8.1 Audio Discipline

Participating systems shall maintain clean, intelligible audio suitable for directed net operations. While minor variations between systems are expected, audio must not impede Net Control or participating stations.

8.2 Loop and Cross-Link Prevention

- Uncontrolled cross-linking, parallel audio paths, or daisy-chained links are prohibited unless explicitly authorized
- Systems with **RF links** shall disable AllStarLink audio when the RF link is active, or disable the RF link when AllStarLink is active, as appropriate, to prevent audio looping
- Home nodes and repeater systems must be configured to prevent feedback loops between RF and VoIP paths

These requirements exist to preserve network stability and prevent disruptive audio conditions during operations.

9. DTMF and Automation Discipline

- DTMF pass-through should be disabled unless explicitly required
- Experimental scripts, macros, or automation shall not be tested while connected during active operations

These controls reduce the risk of accidental disruptions while preserving intentional remote linking as part of normal operations.

10. Identification and Regulatory Compliance

- Each repeater system remains responsible for **FCC-compliant station identification** on its local RF system
- Identification shall not be transmitted over the VoIP network
- Home nodes must identify in accordance with FCC regulations using local voice or CW identification

13. Testing, Exercises, and Readiness

Participants are encouraged to:

- Conduct periodic audio and linking tests

- Participate in scheduled SKYWARN and AUXCOMM exercises
- Verify audio quality and configuration prior to anticipated severe weather

Routine testing improves readiness and reduces troubleshooting during live events.

14. Future Expansion and Evolution

The Arkansas AUXCOMM network is expected to evolve as technologies, coverage needs, and operational requirements change.

- Network architecture, control nodes, and participation models may be expanded or modified
 - Significant changes will be coordinated and documented
 - These standards will be updated as necessary to reflect operational lessons learned
-

15. Compliance and Continuous Improvement

These standards are intended to be practical, achievable, and focused on mission success. As technology, coverage, and operational needs evolve, this document may be updated.

All participating system owners are encouraged to:

- Review these standards regularly
- Provide feedback and recommendations
- Participate in exercises and drills to validate readiness

The shared goal of the Arkansas AUXCOMM network is to provide **reliable, disciplined, and effective communications** in support of public safety, SKYWARN, and emergency management partners statewide.

Appendix 3: Arkansas AUXCOMM SKYWARN Storm Spotter Quick Guide**Purpose:**

Help storm spotters know **when to talk, what to say, and when to stay quiet.**

BEFORE YOU TRANSMIT...REMEMBER:

- **Your safety comes first.**
Do not put yourself in danger to make a report.
- **Listen first.**
Know what's happening on the net.
- **Have your report ready.**
Think before you key up. Speak calmly, slowly and clearly.

WHEN TO TALK

You may transmit **ONLY** when:

- Net Control says **"ALL REPORTS"**, or no net status is given by Net Control at the end of a transmission.
- Net Control says **"REPORTABLE CRITERIA ONLY"** and you have one of the reportable items listed below, or
- You have **EMERGENCY TRAFFIC** (life-threatening situation)

Do NOT transmit if:

- You are checking in and Net Control has said **"NO CHECK-INS"** or there is an active **Tornado Warning**
- Your report does not meet reporting criteria as stated by net control
- You are repeating something you heard online or on TV/Commercial Radio
- Net Control says **"STAND BY"** at any time unless it is a **bona-fide emergency**

WHAT TO REPORT (REPORTABLE CRITERIA)

Report **ONLY what you personally observe**, unless clearly stated as second-hand. If you are unsure, tell Net Control you are unsure.

IMMEDIATELY REPORT:

- **Tornado**
- **Funnel Cloud**
- **Airborne debris with tornado circulation**
- **Wall cloud** (say whether rotation is visible)
- **Hail 1 inch or larger (quarter coin size or bigger)**
- **Measured or estimated winds over 58 mph**
- **Flooding** that threatens life or property

DO NOT REPORT:

- Sirens, Heavy Rain, Lightning, Power Outages, Social Media, TV, YouTube or other Internet reports.

HOW TO MAKE A REPORT (SAY IT LIKE THIS)

1. **Call Net Control, say your name and callsign.**
2. **Give your location**
3. **Describe what you see.**
4. **Stand by for questions.**

Example:

“Net Control, this is John, KX5ABC, in Vilonia. Quarter-size hail at Highway 64 and Main Street, started two minutes ago.”

LOCATION REPORTING

- Use a **well-known town, intersection, landmark or mile marker...or a distance and cardinal direction from one**
- Be accurate but **don’t over-explain**
- If you move *far* from your original check-in location, tell Net Control, but don’t give “play by play”

SECONDHAND REPORTS (USE CAREFULLY)

Allowed **ONLY** if from: Law Enforcement, Fire Department, Emergency Management, Other Emergency Services.

You must include:

- **Source (scanner, in-person, etc.)**
- **Time of Report**
- **Agency Heard**

Example:

“Secondhand report heard on scanner from Arkansas State Police at 1915 local—possible tornado damage 2 miles west of the Arkansas 36/US 64 intersection, east side of Conway.”

*****EMERGENCY TRAFFIC*****

- **Life-threatening situations only**
- If no one’s life is in immediate danger, **it is NOT emergency traffic**
- Say **“EMERGENCY TRAFFIC, (CALLSIGN)”** when calling Net Control

REMEMBER

- If you’re not sure → **don’t transmit**
- If Net Control needs you → **they will call you**
- Silence is better than bad information

