# Daviess County
Amateur Radio Operator's
Emergency Communications
Plan and Procedures
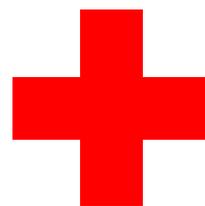
Updated by Jake Jennings KG4EMO
Daviess County Emergency Coordinator
Fall, 2002

Previous revisions
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Reporting Emergencies to Emergency Personnel

Access Autopatch by holding the "Push To Talk" button in, pushing the star. Then dial the number you wish to access.

To access Emergency Speed Dial feature, key repeater and enter the number 9. Then follow with the speed dial number for the agency you wish to contact.

The following speed dial numbers are current:

0 — Ambulance
1 — Owensboro Fire
2 — Daviess Fire
3 — Owensboro Police
4 — Daviess County Sheriff
5 — Kentucky State Police
6 — Daviess County Emergency Management Agency (Richard Payne)
7 — American Red Cross office (Big Rivers Chapter)

"My name is _____. I am talking on an amateur radio at (location).

"I wish to report an (accident, personal injury accident, minor personal injury accident, disturbance, etc). Over."

"It is a (major, moderate, minor) accident. Over."

"It occurred at (time) a.m./p.m. Over."

"Suspects are/are not armed. Over."

Describe person(s). "How many, race, sex, age, height, weight, build, hair, mustache or beard, clothing (from top-down), method of travel, direction of travel. Over."

Describe vehicle(s). "How many, color, year, make, body type, license state and number, attachments, damage, etc. Over."

Hold the PTT button in and push the pound (#) button to hang up. Give call sign, clear patch and repeater.

Emergency Communicator Organizational Chart

Disaster and Emergency Services official or Served Agency official

Amateur Radio Emergency Coordinator (RACES Officer or ARES County EC)
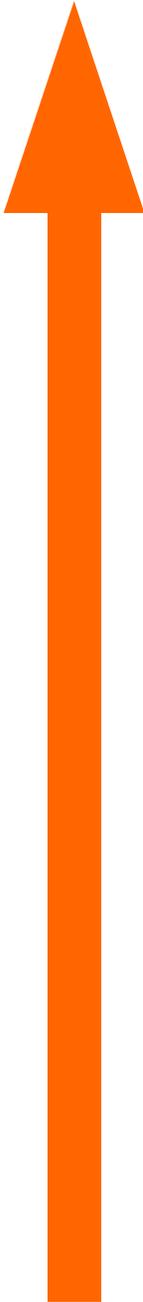
Site Coordinator/Emergency Operations Center I
(Daviess County Courthouse, Daviess County EMA office, second floor)
Command Net Control Station
Operations Net Control Station
SKYWARN Net Control Station
Communicators (SKYWARN Spotters, Damage Assessment Responders, Liaisons, Shadows, Runners, etc.

Site Coordinator/EOC II (Kentucky National Guard Armory)
Operations Net Control Station
Communicators (Liaisons, Shadows, Runners, Damage Assessment Responders)

Site Coordinator/American Red Cross
Operations Net Control Station
Communicators (Liaisons, Shadows, Runners, Damage Assessment Responders)

Site Coordinator/Salvation Army
Operations Net Control Station
Communicators (Liaisons, Shadows, Runners, Damage Assessment Responders)

Site Coordinator/Owensboro Mercy Health System
Operations Net Control Station
Communicators (Liaisons, Shadows, Runners, Damage Assessment Responders)

Site Coordinator/Federal Emergency Management Agency
Operations Net Control Station
Communicators (Liaisons, Shadows, Runners, Damage Assessment Responders)

Emergency Coordinator's Checklist

1. Check that you, your family and property are safe and secure before you respond as a volunteer. Upon receiving a request for assistance, record the name of the individual making the request, their title, telephone number and the name of the agency making the request. Log the time and essential information regarding the incident, such as the location, situation details and locations to be staffed. Determine if there are any special instructions regarding routes and access to the affected area. Be certain you are absolutely clear on all information.
2. Activate "Telephone Alert Plan (see attached telephone call down tree) and advise communicators to check into the Resource Net to offer assistance.
3. Appoint a Resource Net Control Station and give them the situation details.
4. Appoint a Comand Net Control Station and give them the situation details and check yourself into the net.
5. Appoint applicable Site Coordinator(s) and applicable Operations Net Control Station(s) and give them the situation details.
6. Appoint liaisons, if applicable, for communications between:

Disaster and Emergency Services (DES) and WVJS
DES and Kentucky National Guard
DES and Owensboro Mercy Health System (OMHS)
DES and Kentucky Emergency Section Net (3.960 mHz)
DES and surrounding county emergency coordinators:

Evansville 147.970 (linked system)	DES and National Weather Service
Marion 147.285	DES and REACT Net 462.675
Madisonville 146.61	DES and CB Net Channel 9, 27,065
Providence 147.33	DES and convalescent centers
Dixon 147.255	DES and American Red Cross
Henderson 145.49	DES and Salvation Army
Drakesboro 146.82	DES and Internet (http://sbcomp.com/mirc/)
Boonville (Ind.) 147.075	DES and Federal Emergency Management Agency
Rockport (Ind.) 147.91	American Red Cross and Salvation Army
Hartford 147.375	American Red Cross and OMHS
Hawesville 147.105	Salvation Army and convalescent centers
Cannelton (Ind.) 145.325	Salvation Army and FEMA
Leitchfield 147.225	American Red Cross and FEMA
Central City 146.64	OMHS and FEMA
Muhlenberg County 146.745	American Red Cross (Local) and ARC (National)
DES and Daviess County Road Department	Salvation Army and Salvation Army Team

All Shifts

7. Check all equipment and connections.

8. Check into the Resource Net 40 minutes before your scheduled time to report to your assignment and determine if there are any special instructions regarding routes and access to the affected area and any equipment and supplies are needed.

9. Deploy to assignment in time to arrive at your assigned area 20 minutes early for a thorough briefing from the previous shift, if applicable. Bring your Emergency Jump Box.

Briefing:

What radio frequencies are you using?

Any other radio, power or antenna details?

Where is the location of other communicators, their tactical call sign, name and FCC call sign?

Where is the location and telephone number of a nearby telephone?

What are the names of the officials you are serving and how to find and recognize them?

What is your station's purpose?

What is going on in general?

What changes are expected?

Any pending activity? (Messages sent and replies expected. Who gets replies?).

Where is the rest room, water, food, etc.

10. Call Command Net Control Station and check out the person you are relieving and check yourself into the net. Use tactical call sign (location, Site Coordinator) while observing FCC 10-minute ID rule.

11. Set up schedule for Emergency Coordinators and Site Coordinators for continuous 24-hour coverage. (Use Resource Net).

12. Help Site Coordinators do their jobs.

13. Work with adjacent jurisdictions to help allocate resources.

14. Brief next Coordinator.

15. Check schedule for your next shift time and location.

16. Call Resource Net and offer further assistance, if applicable.

Standing Down Shift

Notify all Site Coordinators to "Stand Down."

Check yourself out of the Command Net.

Collect all log sheets (in chronological order) and deliver to the Emergency Coordinator or the RACES Officer (with a copy to all the officials you are serving.

Put all station equipment away.

Clean up your station and put furniture back in place.

Check out with the served agency at your location.

Frequencies

146.690–	Resource Net
147.210+	Command Net (Multi-agency, multi-jurisdictional).
146.865–	Operations Net (Disaster and Emergency Services).
144.500	Tactical Net (Disaster and Emergency Services Emergency Operations Center).
147.42	Operations/Tactical Net (American Red Cross)
147.265	Operations/Tactical Net (Salvation Army)

Command Net Control Station
And
Operations Net Control Station's
Checklist

Activating Shift

Check that you, your family and your property are safe and secure before you respond as a volunteer.
Check all equipment and connections.
Turn off the "time-out" function on the repeater.

Preamble:

"CQ, CQ, CQ. This is <u>Call Sign</u>. CQ, CQ, CQ. This is (<u>Call Sign Alphabetically</u>). An emergency alert is hereby issued at the request of (<u>Served Agency</u>). This (<u>Served Agency/Command or Operations Net</u>) is now in session at (<u>Time</u>). This is a directed net. Please transmit only at the direction of this Net Control Station. Only stations with Emergency traffic should break into this net. Break in by saying, "Break, Break." The purpose of this net is to provide information to the (<u>Served Agency</u>) in accordance with their requests. The following information has been requested from participating stations.

_____

_____

_____

All Shifts

Check into the Resource Net 40 minutes before your scheduled time to report to your assignment and determine if there are any special instructions regarding routes and access to the affected area and any equipment and supplies are needed.
Deploy to assignment in time to arrive at your assigned area 20 minutes early for a thorough briefing from the previous shift, if applicable. Bring your Emergency Jump Box.

Briefing:
What radio frequencies are you using?
Any other radio, power or antenna details?
Where is the location of other communicators, their tactical call sign, name and FCC call sign?
Where is the location and telephone number of a nearby telephone?
What are the names of the officials you are serving and how to find and recognize them?
What is your station's purpose?
What is going on in general?
What changes are expected?
Any pending activity? (Messages sent and replies expected. Who gets replies?).
Where is the rest room, water, food, etc.

Check yourself into the net. Use tactical call sign (location, Site Coordinator) while observing FCC 10-minute ID rule.
Monitor your assigned frequency(cies) AT ALL TIMES.
Enter assigned frequency(cies) on message log. (See attached DES message log sheet).
Use message log to record messages handled.
Use DES message form to handle messages. Use ARRL message form for messages going through the National Traffic System. Seek information for all blanks. See attached message forms.

"Are there any stations with Emergency or Priority traffic? We will now take stations who want to check into the (Served Agency/Command or Operations Net) with, or without, traffic."

List and dispatch traffic. Move stations holding traffic off the Net frequency to deliver traffic if traffic is heavy.

Periodically identify the Net as follows:
"This is (Call Sign), Net Control /station for (Served Agency/Command or Operations Net). Are there any stations wanting to check into the net, with or without, traffic?"

Brief the next emergency communicator.
Call the Resources Net and offer further assistance, if applicable.

Standing Down Shift
When the Site Coordinator informs the Net Control Station when have been asked to stand down., close the Net with the following announcement:

"This is (Call Sign), Net Control Station for the (Served Agency/Command or Operations Net), thanking all stations who have participated in this net. Your help has been greatly appreciated. All stations may now secure. This net is now secured at (time). I am now returning the frequency to normal amateur use. This is (Call Sign). Clear."

Turn on timeout function on the repeater.
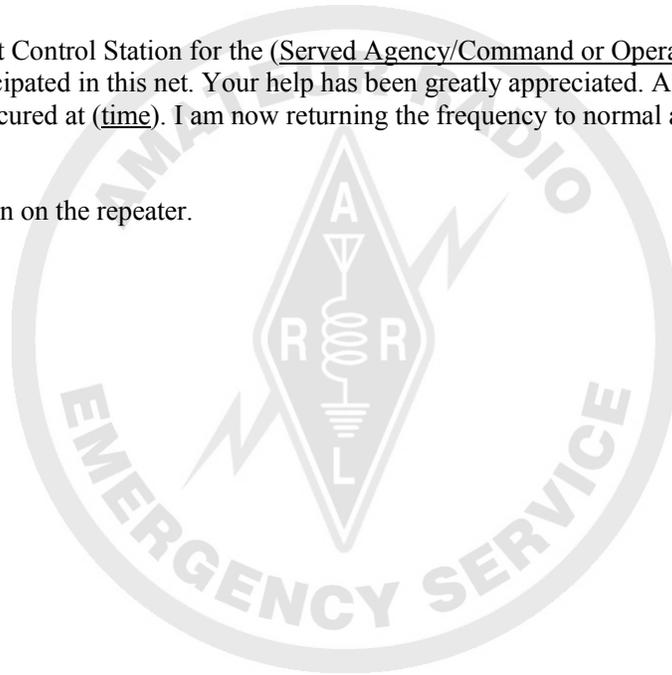
Resource Net Control Station's Checklist

Activating Shift

Check that you, your family and your property are safe and secure before you respond as a volunteer.
Check all equipment and connections.
Turn off the "time-out" function on the repeater. Activate the Net with the following:

Preamble:

"CQ, CQ, CQ. This is <u>Call Sign</u>. CQ, CQ, CQ. This is (<u>Call Sign Alphabetically</u>). An emergency alert is hereby issued at the request of (<u>Served Agency</u>). This Resource Net is now in session at (<u>Time</u>). This is a directed net. Please transmit only at the direction of this Net Control Station. The purpose of this net is to record assistance being offered and assistance being requested, coordinate this information and then dispatch the assistance.

All Shifts

Check into the Resource Net 40 minutes before your scheduled time to report to your assignment and determine if there are any special instructions regarding routes and access to the affected area and any equipment and supplies are needed.
Deploy to assignment in time to arrive at your assigned area 20 minutes early for a thorough briefing from the previous shift, if applicable. Bring your Emergency Jump Box.

Briefing:

What radio frequencies are you using?
Any other radio, power or antenna details?
Where is the location of other communicators, their tactical call sign, name and FCC call sign?
Where is the location and telephone number of a nearby telephone?
What are the names of the officials you are serving and how to find and recognize them?
What is your station's purpose?
What is going on in general?
What changes are expected?
Any pending activity? (Messages sent and replies expected. Who gets replies?).
Where is the rest room, water, food, etc.

Call applicable Net Control Station and check out the person you are relieving, if applicable, and check yourself into the net. Use tactical call sign while observing FCC 10-minute ID rule.
Monitor your assigned frequency(cies) AT ALL TIMES. Notify Net Control Station if you have to leave.
Enter assigned frequency(cies) on message log. (See attached DES message log sheet).
Use message log to record messages handled.
Use DES message form to handle messages. Use ARRL message form for messages going through the National Traffic System. Seek information for all blanks. See attached message forms.
Continue the net with the following:
"Are there any stations with Emergency or Priority traffic? We will now take stations who want to check into the Resource Net or to offer or request assistance."

Check stations in and record on two different sheets of paper, whether the station is offering or requesting assistance. Note name, call sign, license grade, status of phone, phone number, approximate times available and specific skills or equipment offered or requested. "Continue monitoring this Resource Net for further instructions."
After the information for assistance has been coordinated, dispatch communicators.
Give communicator:

        The name of the served agency they are serving.

The frequency(cies) to monitor.
The location to report to.
The telephone number of a contact person at the served agency.
The time to be at assignment.
The best route to the assignment.
Any special instructions.

Ask the communicator to report the this Resource Net 40 minutes before assignment to verify the position will be filled as requested.
Report to the person who requested assistance that the assignment has been scheduled.

Periodically, identify the Net as follows: "The is (Call Sign) Resource Net Control Station. Are there any stations wanting to check into the Net to offer or request assistance.
Continue monitoring this Resource Net for further information."

Standing Down Shift

When the Emergency Coordinator informs the Resouce Net Control Station to stand down, clsoe the Net with the following announcement:
"The is (Call Sign) Resource Net Control Station thanking all stations who have participated in this net. Your help had been greatly appreciated. All stations may now secure. This net is now secured at (Time). I am now returning the frequency to normal amateur radio use. This is (Call Sign). Clear."
Turn on the repeater's timeout function.

Frequencies

146.690–	Resource Net
147.210+	Command Net (Multi-agency, multi-jurisdictional).
146.865–	Operations Net (Disaster and Emergency Services).
144.500	Tactical Net (Disaster and Emergency Services Emergency Operations Center).
147.42	Operations/Tactical Net (American Red Cross)
147.265	Operations/Tactical Net (Salvation Army)

Communicator's Checklist

1. Check that you, your family and your property are safe and secure before you respond as a volunteer.
2. Monitor the Resource Net (146.69-) or if applicable, go to your pre-assigned location.
3. Follow the instructions you receive from the Resource Net or instructions you receive when you arrive at your pre-assigned location.
4. Check all equipment and connections.
5. Check into the Resource Net 40 minutes before your scheduled time to report to your assignment and determine if there are any special instructions regarding routes and access to the affected areas and any equipment and supplies needed.
6. Deploy to assignment in time to arrive at your assigned area 20 minutes early for a thorough briefing from the previous shift, if applicable. Bring your Emergency Jump Box.

Briefing:

       What radio frequencies are you using?
       Any other radio, power or antenna details?
       Where is the location of other communicators, their tactical call sign, name and FCC call sign?
       Where is the location and telephone number of a nearby telephone?
       What are the names of the officials you are serving and how to find and recognize them?
       What is your station's purpose?
       What is going on in general?
       What changes are expected?
       Any pending activity? (Messages sent and replies expected. Who gets replies?).
       Where is the rest room, water, food, etc.

7. Call applicable Net Control Station and check out the person you are relieving, if applicable, and check yourself into the net. Use tactical call sign for your location, while observing FCC 10-minute ID rule.
8. Monitor your assigned frequency(cies) AT ALL TIMES. Notify Net Control if you have to leave.
9. Enter assigned frequeny(cies) on message log. See attached DES message log sheet.
10. Use message log to record messages handled.
11. Use formal message forms to handle messages. Seek information for all blanks. Use ARRL Message form if message will be transmitted through the National Traffic System. See attached ARRL message form.
12. Brief the next Emergency Communicator.
13. Call Resource Net and offer further assistance, if applicable.

Standing Down Shift

When you have been released by the officials you are serving, call the applicable Net Control Station and advise them of the situation. After receiving a "stand down" from the Net Control Station:

Collect all log sheets (chronological order), and deliver to the applicable Site Coordinator (with a copy to officials you are serving).

Put all station equipment away,

Clean up your station and put furniture back in place.

Check out with the served agency at your location.

Frequencies:

146.690–	Resource Net
147.210+	Command Net (Multi-agency, multi-jurisdictional).
146.865–	Operations Net (Disaster and Emergency Services).
144.500	Tactical Net (Disaster and Emergency Services Emergency Operations Center).
147.42	Operations/Tactical Net (American Red Cross)
147.265	Operations/Tactical Net (Salvation Army)

SKYWARN Net Control Station Checklist

If severe weather is probable for the area, check that you, your family and your property are safe and secure before you respond as a volunteer. Monitor the K4HY (147.210) and if no one is already acting at SKY-WARN Net Control Station, then you are the NCS.
Turn off the timeout function on the repeater.

Activating net:
"CQ, CQ, CQ. This is (Call Sign) CQ, CQ, CQ. This is (Call Sign, Alphabetically) An Emergency Alert is hereby issued at the request of the (Daviess County Emergency Management Agency or the National Weather Service). The Daviess County SKYWARN Net is now in session at (time). Please transmit only at the direction of the Net Control Station. Only stations with Emergency traffic should break into the net. Break in by saying, "Break, Break." The purpose of this net to to provide information to the Disaster and Emergency Services and the National Weather Service in accordance with their requests. The following information has been requested from participating stations. Sightings of:

> Tornado, funnel cloud, or wall cloud.
> Hail 1/4-inch hail or larger
> Damaging winds
> Flash flooding
> Very heavy rain

Take check-ins and note the station's name, call sign and mobile capability.
"Are there any stations with priority or emergency traffic?
"We will now take stations who want to check into the Daviess County SKYWARN Net, with or without traffic.
Please standby until your station is called. Please monitor the frequency but do not call the Net Control Station unless you have emergency traffic."

Give information about the stations who have checked into the net to the Site Coordinator to coordinate. After the information is coordinated, dispatch the stations to the appropriate spotter locations. Assign monitoring liaisons to surrounding county frequencies and to the KY Emergency Section Net at 3.960 MHz. When giving locations, use directions and distance from a well-known area, not addresses. Give weather reports to the Site Coordinator. If reports of unusual weather are received, ask if any other station in the same area can confirm the sighting.

Periodically identify the Net as follows:
"This is (Call Sign), Net Control Station for the Daviess County SKYWARN Net. Are there any stations who want to check into the net, with or without traffic. Please stand by until your station is called and monitor the frequency, but do not call the Net Control Station unless you have emergency traffic."
After the Site Coordinator informs the SKYWARN Net Control Station to stand down, close the net with the following announcement:

"This is (Call Sign), Net Control Station for the Daviess County SKYWARN Net, thanking all stations who have participated in this net. Your help has been greatly appreciated. All stations may now secure. This net is now secured at (time). I am now returning the frequency to normal amateur use. This is (Call Sign). Clear."

Turn on timeout function on the repeater.
Collect all log sheets (chronological order) and deliver to the appropriate Site Coordinator with a copy to the Daviess County Emergency Management Agency official and the National Weather Service.

Considering the future

The radio, be it a base station, mobile or hand-held is still the main weapon Amateur Operators use when confronting emergency situations.

They are powerful tools, to be sure, but they are not the only ones that can be harnessed in times of crisis. Computers are also coming to the forefront in Amateur Radio and their potential must be considered when planning for disasters.

Digital modes, especially on HF, have the ability to move large amounts of data quickly and reliably. Packet on VHF and UHF can also cover distance, although holes in the system of linked nodes makes this mode a bit more unreliable.

What holds great potential in the immediate area of a natural or man-made crisis is APRS, or the Automatic Position Reporting System.

The packet node atop the Roosevelt House in Owensboro was recently converted into an APRS digipeater. The ins and outs of APRS are beyond the scope of this writing, but this mode of communication has great potential for use in a time of need.

Some examples include:
      1. Being able to track Amateur Operators in real time out in the field, be it weather spotting or working closely with various relief agencies, such as damage assessment for the American Red Cross.
      2. A method of broadcasting the positions, in real time, the locations of key communication centers. For example, the Emergency Operations Center icon included with WinAPRS could be used to mark the location of DCEMA headquarters. Any Amateur Operators APRS equipped and coming into Owensboro from outside the area would be able to locate the EOC on the map without the need for directions. This would help clear the airwaves of some traffic seeking basic information.
      3. Provide a way to post status messages that Amateur Operators connected to the network could access for basic information and conditions.

The APRS system, with its equipment requirements, is not a universal system as yet. The Daviess County EC has a basic APRS set up and does plan to get it up and running if an emergency situation warrants it. I've included this note on APRS in the Emergency Plan as a heads-up to other Amateurs in the area who also have APRS capabilities. Please note the messaging system built into the APRS software is NOT a substitute for checking into and monitoring the Emergency Nets when they are activated.

Also, please keep in mind the city, and county, are moving rapidly toward a new mapping system using coordinates to pin-point positions instead of using addresses. The new system will require some getting used to, but since it is bases on latitude and longitude, the system will be highly accurate and will give all agencies, utilities, volunteer groups and law and public safety groups a common method for determining locations.