# Illinois State ARES
## Emergency Operations All Hazards

ARES/AUXCOMM Incident Operating Practices
Steven W. Warner, WA9SWW
Section Emergency Coordinator

**March 2026**

# PREFACE

Welcome to the updated Illinois State ARES Emergency Operations All Hazards Communication Plan. The planning group of ARES officials strive to keep this document updated and as relevant as possible. This plan is meant to be used as a reference document for Emergency Managers, Hospital Administrators, fire, and police department leadership, as well as any amateur radio operator called to assist in emergency situations with or without ARES affiliation. This plan is not meant to replace any current operational plans by any organization, but only as a reference to use if needed. Coordination between governmental and non-governmental groups is vital in emergencies and this plan is designed to assist in those efforts.

Exciting additions to the plan this year are the newly assigned frequencies for Hospital Emergency Communications. Our local hospitals are affiliates of ownership groups located many miles away. Hospital EMCOMM will provide a mechanism to verify building status via VHF simplex to a local EMA or amateur radio operator who can then relay via HF to others in their group. 75 meter, 40 meter, VHF 2 meter simplex, and data frequencies are included under the Statewide Communications section. We will exercise this communications plan in the future. This document is meant to be dynamic and will be updated when additions are identified.

73,

WA9SWW
Steve W. Warner MPA, PDS
ARES Section Emergency Coordinator-Illinois Section
February, 2026

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# ILLINOIS STATE ARES

## Emergency Operations All Hazards ● ARES/AUXCOMM Incident Operating Practices

*"In preparing for battle I have always found that plans are useless, but planning is indispensable."*
Dwight D. Eisenhower

## Purpose

**Authority:** This document describes how the Illinois Amateur Radio Emergency Service ARES will operate during a large-scale incident. During an incident, the ARES Illinois Section Emergency Coordinator (SEC) or his/her designated representative will take a leadership role in assisting in coordinating statewide ARES emergency amateur radio communications. Emergency coordinators, amateur radio operators, incident commanders, event planners, and other interested stakeholders are welcome and encouraged to use this information to expand their communications planning and training exercises. Amateur radio zones, regions, clubs, and individuals are encouraged to develop plans of their own by the fair use of this document for guidance. Outside of the ARES organization, the content of this document is provided for educational and informational purposes only.

**Incident Command:** In a large-scale incident, it is expected that an Incident Command employing the FEMA ICS infrastructure will be executed. The SEC or other ARES authority should contact the appropriate ICS authority to make them aware of this Plan and the ability of ARES to assist them with other communications needs as necessary. In a large-scale incident, efforts should be made to locate the ARES State primary Net Control Station (NCS) within the Command Center and the NCS operators assigned as part of the ARES/AUXCOMM unit. If this is not feasible, some other method should be established to have direct communications between the NCS and the Command Center. Regardless, the directions of the Incident Command **always** take precedence over the specific suggestions contained in this document.

**Other Organizations:** There are other entities which have communications assets for use in a large-scale incident, *e.g.* IEMA HF, CERT, FEMA (CISA) SHARES, Red Cross, Salvation Army, MARS, etc. *(See Appendix B, Other Organizations)*. Our purpose is to closely articulate with these served agencies in an environment of open and ongoing strategic planning; using their strengths to assist us and our ability in return to assist them by filling in the gaps. The optimal process in a large-scale incident is tactical coordination of combined efforts through the Incident Command. However, in some cases it may be appropriate for the ARES SEC, or their appointed representative, to reach out directly to these other organizations. If an individual ARES member is approached by one of these other organizations, that individual should assist them in contacting the SEC, Zone Manger, or DEC.

**Ownership:** The contents of this document are controlled by the ARRL Illinois Section Emergency Coordinator (SEC). Changes or modifications to this document shall be approved by the Illinois SEC. This communications plan shall be reviewed and may be revised or superseded as additional verified information becomes available.

**Area of Responsibility:** This document covers the Illinois Statewide ARES Communications Plan. ***This document is not meant to supersede any local incident response plans that may be in effect.***

**Zones:** To create an optimal span of control, Illinois is geographically divided into three zones. It is not the intent to isolate any one or a group of counties from another but to facilitate a better span of control within the Incident Command structure. Using this document as a guide, these three zones may develop their own plans for intra-zone and regional communications tailored to their area unique situation.

**Zone Manager:** If the zone does not have its own incident plan establishing a zone manager, the first senior ARES official DEC, ASEC, etc. to establish communications will assume the interim role of the zone manager. Once communications systems are stabilized, control may be shifted to others, or a zone-wide Unified Command may be established.

**Illinois Zones:**

| | |
|---|---|
| North Zone | IEMA regions 2, 3 and 4 |
| Central Zone | IEMA regions 6 and 7 |
| South Zone | IEMA regions 8, 9 and 11 |

**Personal Safety/Your Station:** In any incident, your first and foremost responsibility is the safety of you and your family.

1. Confirm that you and your local family are out of immediate danger. Plan for long duration of incident, and consider that conditions may worsen.

2. Confirm that your power source is stable. Does the voltage remain between 113 and 127 at 60 cycles per second? 120 volts AC is preferred. If poor conditions exist, *or are anticipated,* evaluate and arrange for suitable back-up power (*e.g.* generator, battery, solar, wind, or hydro) as soon as possible.

3. Turn off any unused radio transmitting devices, to avoid interference with your critical communication devices and to save power.

4. Prepare status reports for your area, based upon previous training standards, and prepare to transmit them when requested. Utilize form ICS 213 if possible, or ARRL Radiogram.

5. Best Practices
- The best practice is to utilize a dedicated radio and antenna system, when possible, rather than switching modes or frequencies.
- Attempt to get additional operators at your site to avoid overload and to work shorter shifts.
- Do not scan frequencies of importance.
- Headphones/headsets are recommended.

6. Prioritize times to listen or transmit on various frequencies, based on the following standards:
- VHF Voice:          Every hour, starting at the top of the hour, for 15 minutes.
- HF Voice:           Every hour, starting at 15 minutes after the top of the hour, for 15 minutes.
- Winlink:            HF/VHF − Leave all sessions open for peer-to-peer coverage.
- Traffic Handling:   Each 15-minute period may be extended if traffic handling is necessary.

7. Review your station for taller or higher gain antenna systems, as time allows.

8. The Net Control Operator should complete forms: ICS 203, ICS 207, ICS 211, ICS 214, and ICS 309. Other team members should complete forms: ICS 211, ICS 213, ICS 213RR, ICS 214, ICS 309, Status Reports, and ARRL Radiograms when required.

9. Prior to the incident conclusion, an ICS 225 should be completed for each participating person by the supervisory position (*e.g.* Auxiliary Communication Manager, Communication Unit Leader, Communication Technician, Technical Specialist, or Net Control Operator).

10. Use the minimum RF power necessary for communication. Always conserve power and minimize interference to others.

11. Consider deployment if you are available, but only if requested. Do not self-deploy.

## Incident Communications

Each incident is unique. This plan lists the amateur radio assets that may be available across Illinois and how to use those assets in an incident. An incident may require the need for both local and statewide amateur radio communications.

The goal in all cases is effective and reliable communication. When necessary, the guidance in this document can be modified to better accomplish the goal.

**Net Control**
During an incident, the SEC, DEC, ASEC, Zone Manager or his/her appointed representative will designate net control for various networks. However, in the event of an area-wide disaster where no one has yet assumed net control, the first person who discovers the emergency should assume net control duty until relieved.

*If the volume of traffic increases to the level where it affects timely communications, the net control station should move traffic off to available repeaters or simplex frequencies as designated in this Plan.*

## Local Communications

***The first actions undertaken in an incident are to initiate and establish local radio communications. If a zone or region has an incident communications plan, follow the guidance of that plan. For those areas with no plan, one may follow the guidance provided below.***

**Repeaters:** First attempt to communicate should be on one of your zone-designated repeaters *(See Appendix A, ICS 217a)*. If those repeaters are functional, monitor that system. You may be directed to monitor other frequencies or to pass traffic, and so on. If net control has not been initiated, establish net control using the guidelines above. If those repeaters are not functional, attempt to establish communications on the zone-designated simplex frequency as discussed below.

**Simplex:** If the zone repeaters are not functional, attempt to establish communications of the zone simplex 2M frequency listed in the Statewide ICS 217a. This frequency may require a relay station to reach all stations. Net control should consider establishing alternate net control stations which are geographically located to cover the entire zone. If no communications have been established on the zone-designated frequency, use 146.520 MHz, the national calling frequency, to initially set up communications. However, you should plan to move off this frequency once a stable net has been established.

**Zone HF:** Each zone is assigned a primary HF frequency. In cases where the zone-designated repeaters are not functioning and there are significant gaps in 2M simplex zone coverage, HF may be the most effective method of providing zone wide coverage. Use the Zone HF frequencies listed in the Statewide ICS 217a to establish communications *(See Appendix A, ICS 217a)*. It should be noted that HF use may limit access by those not possessing the appropriate amateur radio license or HF equipment. When it is feasible, operators should monitor both the zone-designated HF and VHF frequencies for possible traffic.

**Digital Voice:** There may be instances where regular communications are unavailable, but digital voice networks are available through repeaters. These digital networks could be very effective in intra-zone and long-distance communications.

**Illinois ARES Digital Voice Net Talkgroups:**
Below are the routine Illinois ARES digital voice net talkgroups. However, in an emergency any available talkgroup can be used to establish communications.

ILLINOIS LINK Wires x 21565
BRANDMEISTER DMR 31171
TGIF DMR 31171
DMR+ REFLECTOR 4636
P25 31171
NXDN 31171
YSF REFLECTOR ILLINOIS LINK 83132
DSTAR XLX 334G, DCS 334G, XRF 334G, XLX 312C
YCS REFLECTOR 311-40
FCS REFLECTOR 311-40
M17 REFLECTOR 334 G

**Data:** Each zone is assigned frequencies for intra-zone data communications. *(See Appendix A, State ICS 217a)*. The primary means of data communications is Winlink/ARDOP peer-to-peer. NCS should use these data frequencies as appropriate to the situation.

**Statewide HF:** In the case where after attempting the above no intra-zone communications have been established, a call should be made on statewide ARES frequencies 3905 kHz LSB or 7227 kHz LSB. Confirm your location, your status, and the fact that you have been unable to establish local communications. You may be directed to continue to monitor this frequency or directed to another frequency.

**Zone – Statewide Communications:** In a large-scale incident, there may be the need for some stations to serve as relay stations between the zone to the State EOC or other large-area command center. In many cases it may be best to have a single station designated as the zone/State relay station. If this is feasible, the relay station should not be the NCS of the primary zone net but a standby station that can monitor the appropriate statewide frequencies as well as the appropriate zone net.

**Contacting Local Authorities:** Once reliable communications have been established, it is appropriate that local EOCs, Incident Command Centers and municipalities be notified that these communications systems are available for agency use. It may also be appropriate to assign an amateur radio operator at these locations. Contact with local authorities <u>must</u> be coordinated by the Zone Manager, DEC, EC or other appropriate ARES representative.

## Statewide Communications

***Contacts with State authorities are the responsibilities of the SEC, the SM, or their appointed representative.***

**Primary Communications:** 3905 kHz or 7227 kHz **(+/-)** LSB are the primary statewide ARES emergency coordination frequencies. In a large incident, these frequencies should be used exclusively for state-wide coordination. All traffic or other communications should be directed to one of the other State ARES frequencies.

**Primary Frequency Net Control:** In the opening phases of an incident, it may be necessary for one of the first stations on frequency to assume net control of the State primary frequency. However, in order to be effective, it is critical that this Net Control Station (NCS) maintains a clear tactical picture of the overall incident. Therefore, the NCS should be shifted to a station that is physically located at the SEOC or large-area command center, as soon as possible. If this is not possible, a station with direct, reliable communications with the command center should be employed.

Unless otherwise directed, the NCS of the primary ARES State frequency is the coordinating authority for all statewide ARES networks, assigning alternate NCSs, activating and inactivating secondary frequencies and networks as necessary, etc.

**Other State Networks:** All statewide ARES frequencies are listed in the attached Statewide ICS 217a.

**HF Voice:** There are alternate voice frequencies in the 80/75M and 40M bands. These frequencies will be managed and assigned by the SEC, the primary net NCS or others appointed by the SEC.

**Hospital Emergency Communication Frequencies:**
  3780 kHz LSB and 7280 kHz LSB are the statewide Hospital Net frequencies.

  146.500 MHz is the statewide Hospital Net simplex frequency.

**Other Voice Frequencies:**
  146.52000 MHz is the 2M nationwide calling frequency.

  446.0000 MHz is the 70cm nationwide calling frequency.

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*When all other methods fail, the above nationwide calling frequencies may be used to establish communications or to hail outside help.*

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## Data Communications

**Winlink:** Winlink/ARDOP is the primary method of data communications for the Illinois ARES.

**Illinois Winlink 2M Packet:** 145.610 MHz is the designated Illinois Winlink packet frequency. Internet gateways on this frequency have been set up throughout the State. If amateur radio stations can connect to gateways where the internet is functional, this system can be used to send and receive email when other means are unavailable.

**Other 2M Winlink:** The 145.610 MHz channel can be busy and over-utilized. The Statewide ICS 217a lists additional 2M Winlink frequencies. These can be used for peer-to-peer Winlink as assigned by the SEC, primary net NCS or others appointed by the SEC.

**Illinois HF Digital Network**
3570 kHz is the primary HF Illinois Winlink data digital network frequency. It can be used to pass digital traffic within the State.

**Worldwide Winlink/ARDOP HF**
Winlink/ARDOP HF systems allow for the sending and receiving email over long distance via high frequency radio transmission. There are gateways set up around the world for entry into the Web. It may be called upon when all local systems are down. It is important to understand the out-of-area gateways may also be down or limited in number and propagation.

**CW ARES Nets:** The CW Net frequencies in the 80M and 40M bands are listed in the Statewide ICS 217a. CW nets may be established on these frequencies (3538 kHz or 7114 kHz) when appropriate.

**Message Handling:** Stations may be tasked with transmitting various types of messages. The ICS 213 form is the principal template for formal message traffic within the Incident Command System and should be the default message form for agencies that have no specific format *(See Appendix C, ICS 213)*. Additionally, amateur radio operators also need to be skilled in National Traffic System Radiogram message handling *(See Appendix C, ARRL links)*. When handling health and welfare traffic, the ARRL radiogram is usually the most effective and efficient way of passing this traffic *(See Appendix C, Radiogram)*.

Additionally, operators may be tasked with passing messages from municipalities, hospitals and other organizations who are unfamiliar with either the ICS 213 or the radiogram. These organizations may have their own preferred communications forms. The served agency is the ultimate authority on what message format to use. In some cases, the radio operator may assist the served agency in drafting a message so that it can be properly delivered.

All messages whether transmitted, relayed or received should be logged using the ICS 309 Message Log contained in Appendix C. The message log facilitates effective message tracking should follow-up action be required.

*Regardless of format, the key principles of good communications apply: Accuracy, Reliability, & Speed.*

**Accuracy:** <u>Always</u> send the message exactly as it was received. Do <u>not</u> interpret the contents.

**Reliability:** When the originator gives a message to an amateur radio operator, it is expected that the message will be delivered. When accepting a message, the radio operator should verify that there is sufficient information to ensure that the message can be delivered to the appropriate recipient.

**Speed:** Speed is the last consideration; accuracy and reliability always take a higher precedence, but an inordinate delay in the delivery of a message can have serious repercussions. If the delivery of a message is or will be significantly delayed, the radio operator should immediately notify the originator.

## Records and Forms

**Documentation**
All logs and record keeping should utilize the ICS forms and adhere to the directions for their use and completion when possible. These ICS forms can be obtained from the following website, https://training.fema.gov/icsresource/icsforms.aspx or additionally from Winlink "Message" templates on the main screen and in the appendices.

Incident planners, and individuals who believe they may become involved in disaster communications, should keep a hard copy of the major ICS communications documents. A copy should also be available on your external hard drive (or thumb drive), as well as other programs and data sources. Examples: ICS 203, 204, 205, 205a, 206, 207, 208, 211, 213, 213RR, 214, 217A, 219, 221, 225, 309 *(See Appendix C)* and area map tiles from Google Earth. Obviously, a printer, extra cartridges, and a laptop computer could also prove useful. All equipment needs to have an auxiliary power source readily available.

## Area Status Report

The Area Status Report format consists of two lines indicating:

1. Ham Call Sign, Local Date/Time of observation (YYMMDDHHMM), County, Location incl. Town.

2. Power, Water, Sewage, Hospital/clinic, Communication, Transportation.
   - Indicate by using first initial of each service (P, W, S, H, C, T) followed by first initial of **Yes, No, Partial.**

   - Source: Use first initial of Police, Fire, Medical, EMA, TV, Radio, Social Media, or Ham after service status.

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*Example message:*

wa9xxx, 2312301730, williamson, carterville/division/grand,

PY, WY, SN, HP, CP, TN, F

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## Illinois State-wide ARES Incident Organization Chart (ICS207)
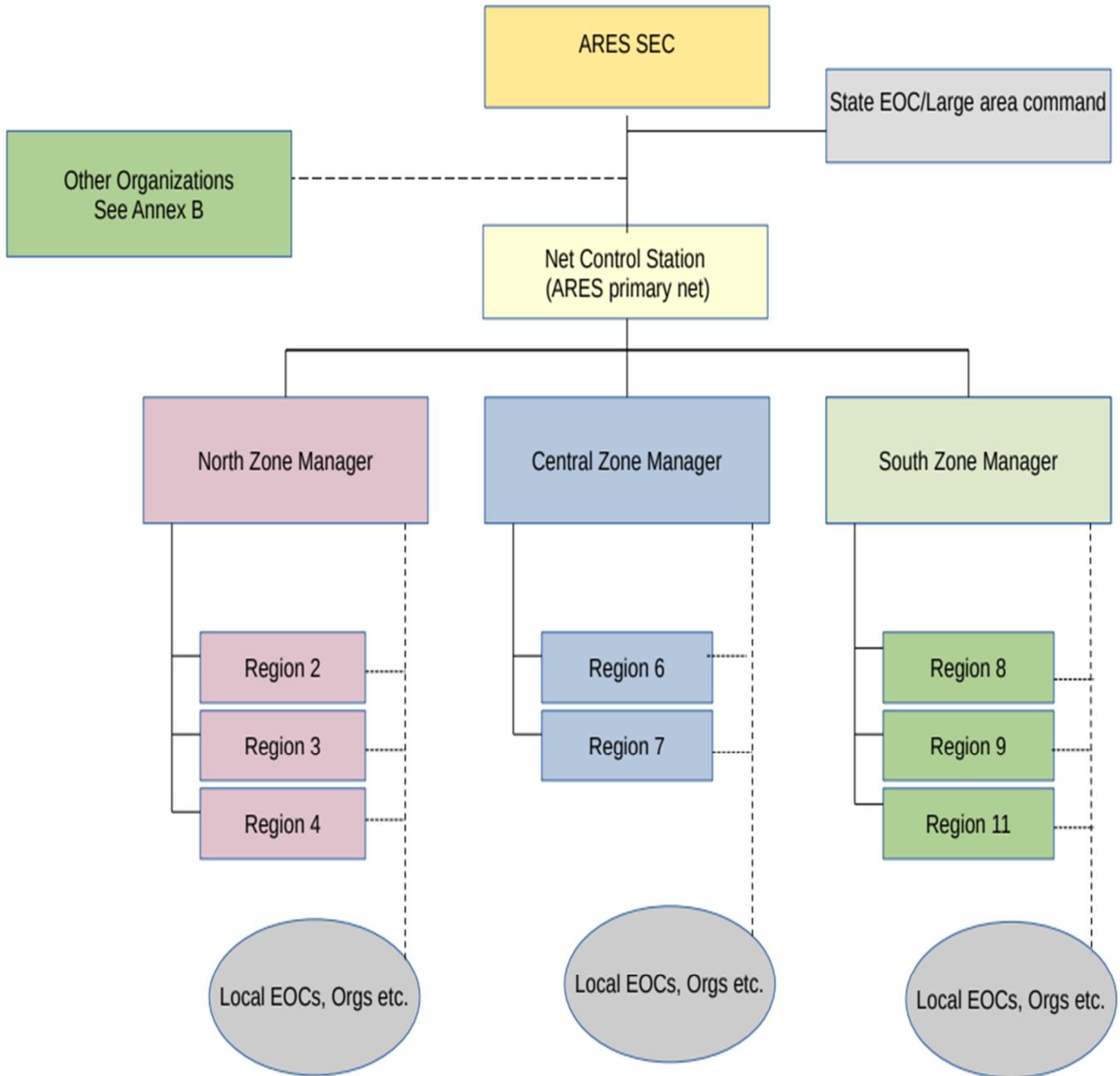
# Illinois ARES Zone Map with Frequencies



**North Zone**
Districts 2, 3, & 4

**Central Zone**
Districts 6 & 7

**NC9IL**
3.905 / 7.227

**South Zone**
Districts 8, 9, & 11

**Statewide Hospital Net Frequencies**
3780 kHz / 7280 kHz LSB
VHF Simplex 146.500 MHz

Enhanced IL ARES District Map.pptx/pdf
Version of 01-22-2025

**HF Voice**
3935 LSB
7217 LSB
**HF Data**
3585 USB
CF 3586.5
**2M Voice**
146.475

**HF Voice**
3915 LSB
7237 LSB
**HF Data**
3565 USB
CF 3566.5
**2M Voice**
146.550

**HF Voice**
3925 LSB
7247 LSB
**HF Data**
3560 USB
CF 3561.5
**2M Voice**
146.580

Statewide CW
Frequencies
3.538/7.114

# Appendix A

# Communications Resource Availability Worksheets

# Appendix A
## Statewide  ●  ICS 217a  ●  Page 1

| COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET | | | Frequency Band<br>HF/VHF/UHF  (Page 1) | | | Description<br>IL ARES Statewide Frequencies | | |
|---|---|---|---|---|---|---|---|---|
| Pg No | Channel Configuration | Channel Name/Trunked Radio System Talkgroup | Eligible Users | Rx Frequency N or W | Rx Tone/NAC | Tx Frequency N or W | Tx Tone/NAC | Mode A, D or M | Remarks |
| | | Voice Statewide | By Assignment | 3905/7227 kHz | | 3905/7227 kHz | | LSB | Voice |
| | | Data Statewide | By Assignment | 3570 kHz Dial* | | 3570 kHz Dial* | | USB | ARDOP P2P *Ctr 3571.5 kHz |
| | | Voice North | By Assignment | 3935/7217 kHz | | 3935/7217 kHz | | LSB | Voice |
| | | Voice Central | By Assignment | 3915/7237 kHz | | 3915/7237 kHz | | LSB | Voice |
| | | Voice South | By Assignment | 3925/7247 kHz | | 3925/7247 kHz | | LSB | Voice |
| | | HF Data North | By Assignment | 3585 kHz Dial* | | 3585 kHz Dial* | | USB | ARDOP P2P *Ctr 3586.5 kHz |
| | | HF Data Central | By Assignment | 3565 kHz Dial* | | 3565 kHz Dial* | | USB | ARDOP P2P *Ctr 3566.5 kHz |
| | | HF Data South | By Assignment | 3560 kHz Dial* | | 3560 kHz Dial* | | USB | ARDOP P2P *Ctr 3561.5 kHz |
| | | 2M Voice North | By Assignment | 146.475 MHz | | 146.475 MHz | | FM | Simplex Voice |
| | | 2M Voice Central | By Assignment | 146.550 MHz | | 146.550 MHz | | FM | Simplex Voice |
| | | 2M Voice South | By Assignment | 146.580 MHz | | 146.580 MHz | | FM | Simplex Voice |
| | | Data-4 | By Assignment | 3555 kHz Dial* | | 3555 kHz Dial* | | USB | ARDOP P2P *Ctr 3556.5 kHz |
| | | Data-5 | By Assignment | 3550 kHz Dial* | | 3550 kHz Dial* | | USB | ARDOP P2P *Ctr 3551.5 kHz |
| | | Data-6 | Winlink Gateway | 3591 kHz Dial* | | 3591 kHz Dial* | | USB | ARDOP/PACTOR *Ctr 3592.5 kHz |
| | | Data-7 | Winlink Gateway | 3595 kHz Dial* | | 3595 kHz Dial* | | USB | VARA *Ctr 3592.5 kHz |
| | | Data-8 | Winlink Gateway | 7101 kHz Dial* | | 7101 kHz Dial* | | USB | ARDOP/PACTOR *Ctr 7103.5 kHz |
| | | Data-9 | Winlink Gateway | 7102 kHz Dial* | | 7102 kHz Dial* | | USB | VARA *Ctr 7103.5 kHz |
| | | IDEN-1 | Winlink Gateway | 145.610 MHz | | 145.610 MHz | | FM | AX.25 |
| | | IDEN-2 | IL Data Comms | 145.050 MHz | | 145.050 MHz | | FM | Packet P2P |
| | | IDEN-3 | Winlink Gateway | 144.990 MHz | | 144.990 MHz | | FM | VARA |
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The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

Rev. 04/25

# Appendix A
## Statewide ● ICS 217a ● Page 2

| COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET | | | Frequency Band<br>HF/VHF/UHF (Page 2) | | | | | Description<br>IL ARES Statewide Frequencies |
|---|---|---|---|---|---|---|---|---|
| Pg No | Channel Configuration | Channel Name/Trunked Radio System Talkgroup | Eligible Users | Rx Frequency N or W | Rx Tone/NAC | Tx Frequency N or W | Tx Tone/NAC | Mode A, D or M | Remarks |
| | | IL-2A | IL Comms | 146.520 MHz | | 146.520 MHz | | FM | National Calling Frequency |
| | | IL-2B | IL Comms | 147.525 MHz | | 147.525 MHz | | FM | |
| | | IL-2C | IL Comms | 147.570 MHz | | 147.570 MHz | | FM | |
| | | IDEN-4 | IL Data Comms | 441.060 MHz | | 441.060 MHz | | FM | VARA |
| | | ILUHF-A | IL Comms | 446.000 MHz | | 446.000 MHz | | FM | National Calling Frequency |
| | | ILUHF-B | IL Comms | 446.400 MHz | | 446.400 MHz | | FM | |
| | | ILUHF-C | IL Comms | 446.700 MHz | | 446.700 MHz | | FM | |
| | | FRS-1 | By Assignment | 462.5625 MHz | | 462.5625 MHz | | FM | FRS Channel 1 |
| | | CW-1 | By Assignment | 3538/7114 kHz | | 3538/7114 kHz | | CW | CW Net |
| | | CW-2 | By Assignment | 3545/7035 kHz | | 3545/7035 kHz | | CW | CW Net |
| | | GMRS-1 | By Assignment | 462.5625 MHz | | 462.5625 MHz | | FM | GMRS Channel 1 |
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# Appendix A
## North Zone ● ICS 217a

| COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET | | | | | | | | Frequency Band<br>VHF/UHF | | Description<br>State Amateur Radio Repeaters |
|---|---|---|---|---|---|---|---|---|---|---|

| Pg No | Channel Configuration | Channel Name/Trunked Radio System Talkgroup | Eligible Users | Rx Frequency N or W | Rx Tone/NAC | Tx Frequency N or W | Tx Tone/NAC | Mode A, D or M | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 4 | Henry | Galva | North | 145.490 | 225.7 | 144.890 | 225.7 | A/D | Wires-X ID83050 |
| 16 | Whiteside | Sterling | North | 145.625 | 114.8 | 146.025 | 114.8 | A | |
| 4 | Rock Island | Rock Island | North | 146.775 | 100.0 | 146.175 | 100.0 | A/D | C4FM |
| | McHenry | Woodstock | North | 146.835 | 91.5 | 146.235 | 91.5 | A | |
| 14 | Whiteside | Sterling | North | 146.850 | CSQ | 146.250 | 114.8 | A | Auto backup power |
| 14 | Rock Island | Eldridge, Iowa | North | 146.880 | 77.0 | 146.280 | 77.0 | A | |
| 15 | Kankakee | Kankakee | North | 146.940 | 107.2 | 146.340 | 107.2 | A | Echolink |
| 14 | Lee | Dixon | North | 146.970 | CSQ | 146.370 | 82.5 | A/D | Echolink |
| 4 | Knox | Galesburg | North | 147.000 | 103.5 | 146.400 | 103.5 | A/D | C4FM |
| 14 | Carroll | Savanna | North | 147.135 | CSQ | 147.735 | 107.2 | | |
| 9 | Ogle | Chana | North | 147.165 | 146.2 | 147.765 | 146.2 | A/D | APCO P25 NAC 293 |
| 6 | Lake | Libertyville | North | 147.180 | 127.3 | 147.780 | 127.3 | A | |
| 16 | Winnebago | Loves Park | North | 147.195 | CSQ | 147.795 | 114.8 | A/D | C4FM |
| 4 | Knox | Galesburg | North | 147.210 | 107.2 | 147.810 | 107.2 | A/D | C4FM |
| 16 | Stevenson | Freeport | North | 147.390 | CSQ | 147.990 | 114.8 | A/D | C4FM |
| 10 | Cook | Arlington | North | 441.500 | 123.0 | 446.500 | 123.0 | A | |
| 4 | Henry | Kewanee | North | 442.175 | 225.7 | 447.175 | 225.7 | A/D | C4FM |
| 6 | Lake | Libertyville | North | 442.525 | 114.8 | 447.525 | 114.8 | A | |
| 10 | Cook | Palatine | North | 442.800 | 114.8 | 447.800 | 114.8 | A | |
| 6 | Cook | Chicagoland-CC | North | 442.975 | 114.8 | 447.975 | 114.8 | A/D | DMR ID 311731<br>TS linked: TS1 TS2 |
| 6 | Lake | Lake Zurich | North | 443.850 | 114.8 | 448.850 | 114.8 | A | |
| 16 | Bureau | Princeton | North | 444.925 | 118.8 | 449.925 | 118.8 | A/D | Auto backup power, C4FRM Wires-X ID60415 |
| | McHenry | Woodstock | North | 444.075 | 88.5 | 449.075 | 88.5 | A | |
| 4 | Knox | Galesburg | North | 444.450 | 103.5 | 449.450 | 103.5 | A/D | C4FM |
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The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (*e.g.* Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

Rev. 02/26

# Appendix A
## Central Zone ● ICS 217a

| COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET | | | Frequency Band<br>VHF/UHF | | | | | Description<br>State Amateur Radio Repeaters |
|---|---|---|---|---|---|---|---|---|
| **Pg No** | **Channel Configuration** | **Channel Name/Trunked Radio System Talkgroup** | **Eligible Users** | **Rx Frequency N or W** | **Rx Tone/NAC** | **Tx Frequency N or W** | **Tx Tone/NAC** | **Mode A, D or M** | **Remarks** |

| Pg No | Channel Configuration | Channel Name/Trunked Radio System Talkgroup | Eligible Users | Rx Frequency N or W | Rx Tone/NAC | Tx Frequency N or W | Tx Tone/NAC | Mode A, D or M | Remarks |
|---|---|---|---|---|---|---|---|---|---|
|  | Woodford | Metamora | Central | 146.610 | 103.5 | 146.010 | 103.5 | A | Linked* |
| 11 | Tazewell | Tremont | Central | 146.670 | 103.5 | 146.070 | 103.5 | A | |
| 12 | Sangamon | Springfield | Central | 146.685 | 94.5 | 146.085 | 94.5 | A | |
| 3 | Clay | Flora | Central | 146.700 | 103.5 | 146.100 | 103.5 | A | |
|  | Peoria | Kickapoo | Central | 146.760 | 103.5 | 146.160 | 103.5 | A | Linked* |
| 15 | Richland | Noble | Central | 146.760 | 94.8 | 146.160 | 94.8 | A/D | C4FM |
| 12 | Morgan | Jacksonville | Central | 146.775 | 103.5 | 146.175 | 103.5 | A | |
| 8 | McLean | Bloomington | Central | 146.790 | 103.5 | 146.190 | 103.5 | A | |
| 12 | Sangamon | Pawnee | Central | 146.805 | 94.8 | 146.205 | 94.8 | A | |
| 12 | Christiam | Taylorville | Central | 146.955 | 79.7 | 146.355 | 79.7 | A | |
| 2 | Iroquois | Crescent City | Central | 147.030 | 103.5 | 147.630 | 103.5 | A | |
| 1 | Menard | Athens | Central | 147.045 | 103.5 | 147.645 | 103.5 | A | |
| 11 | Peoria | Peoria | Central | 147.075 | 156.7 | 147.675 | 156.7 | A | |
| 1 | Bond | Greenville | Central | 147.165 | 103.5 | 147.765 | 103.5 | A/D | APCO P25 NAC 31D EL228190 |
| 9 | Ogle | Chana | Central | 147.165 | 146.2 | 147.765 | 146.2 | A/D | APCO P25 NAC 293 |
| 12 | Shelby | Williamsburg | Central | 147.390 | 203.5 | 147.990 | 203.5 | A/D | APCO P25 NAC 656 |
| 3 | Clay | Flora | Central | 442.075 | CSQ | 442.065 | CSQ | A/D | C4FM |
| 1 | Marion | Centralia | Central | 442.200 | 103.5 | 447.200 | 103.5 | A | |
| 15 | Richland | Noble | Central | 442.375 | 71.9 | 447.375 | 71.9 | A/D | C4FM |
| 12 | Sangamon | Pawnee | Central | 442.600 | 94.8 | 447.600 | 94.8 | A | |
| 12 | Sangamon | Springfield | Central | 443.000 | 94.8 | 448.000 | 94.8 | A | |
|  | Peoria | Peoria | Central | 443.175 | 103.5 | 448.175 | 103.5 | A | Linked* |
| 12 | Sangamon | Springfield | Central | 443.70625 | CC5 | 448.70625 | CC5 | D | DMR |
| 12 | Sangamon | Springfield | Central | 443.78125 | | 448.78125 | | D | D-STAR REF051D |
| 1 | Macon | Decatur | Central | 443.800 | 77.0 | 448.800 | 77.0 | A | |
| 12 | Logan | Mt. Pulaski | Central | 443.825 | 94.8 | 448.825 | 94.8 | A | |
| 12 | Sangamon | Springfield | Central | 444.325 | 94.8 | 449.325 | 94.8 | D | FUSION |
| 12 | Sangamon | Springfield | Central | 444.400 | 103.5 | 449.400 | 103.5 | D | Also DMR CC5 *(external link)* |
| 12 | Sangamon | Cantrall | Central | 444.500 | CC1 | 449.500 | CC1 | D | DMR |
| 2 | Iroquois | Watseka | Central | 444.625 | 103.5 | 449.625 | 103.5 | A | |
| 12 | Menard | Tallula | Central | 444.900 | 151.4 | 449.900 | 151.4 | | WX9CAH-1 node #465002 |

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (*e.g.* Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

# Appendix A
## South Zone  ●  ICS 217a

| | | Frequency Band<br>VHF/UHF | | | | Description<br>State Amateur Radio Repeaters |
|---|---|---|---|---|---|---|

| Pg No | Channel Configuration | Channel Name/Trunked Radio System Talkgroup | Eligible Users | Rx Frequency N or W | Rx Tone/NAC | Tx Frequency N or W | Tx Tone/NAC | Mode A, D or M | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| T | Franklin | Benton | South | 146.805 | CSQ | 146.205 | 88.5 | A | |
| ? | Macoupin | Gillespie | South | 146.820 | CSQ | 146.220 | CSQ | A | |
| T | Union | Alto Pass | South | 146.850 | CSQ | 146.250 | 88.5 | A | |
| 1 | Macoupin | Carlinville | South | 146.865 | 103.5 | 146.265 | 103.5 | A | |
| T | Pope | Herod | South | 146.880 | CSQ | 146.280 | 88.5 | A | |
| 13 | Wabash | Mt. Carmel | South | 146.940 | 94.8 | 146.340 | 94.8 | A | |
| T | Jackson | Ava | South | 147.090 | CSQ | 147.690 | 88.5 | A | |
| 5 | Jefferson | Mt. Vernon | South | 147.135 | 88.5 | 147.735 | 88.5 | A | |
| ? | Indiana | Evansville | South | 147.150 | 91.5 | 147.750 | 91.5 | A | |
| 7 | Massac | Metropolis | South | 147.225 | 123 | 147.825 | 123 | A | |
| T | Johnson | Tunnel Hill | South | 147.345 | CSQ | 147.945 | 88.5 | A | |
| 13 | Lawrence | Sumner | South | 147.375 | 91.5 | 147.975 | 91.5 | A | |
| 13 | Wabash | Mt. Carmel | South | 442.325 | 114.8 | 447.325 | 114.8 | A | |
| 1 | Macoupin | Virden | South | 444.250 | 103.5 | 449.250 | 103.5 | A | Linked Repeater System |
| 13 | Wabash | Mt. Carmel | South | 444.775 | 114.8 | 449.775 | 114.8 | A/D | C4FM |
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The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (*e.g.* Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

Rev. 04/25

# Appendix B

# Other Organizations

## Appendix B
## The American Red Cross

The American Red Cross of Illinois (ARC) covers 88 counties across Illinois, Iowa and Missouri. Most of the radio frequency work in the Region is Part 90, Public Safety. On the high frequency bands, the primary focus of the ARC is on SHARES. They also have a national license for OPERATION SECURE. The ARC uses these systems to coordinate with our Federal, State, and Military partners.

On the Amateur Service side, the American Red Cross is licensed in Illinois as N9ARC. The ARC does not have a common net frequency like SATERN or IL ARES. Radio operators should expect to work with ARES on the 60 Meter Interoperability Channels, or to check into the IL ARES CW/SSB nets on 40 or 80/75 Meters.

## Links to Field Operations Guides

Below are links to various communications operations guides. These guides contain frequencies used by various government agencies, asset lists and other useful information. Some of these guides can also be downloaded to smart phones and tablets from the app store for the particular mobile device.

National Interoperability Field Operations Guide (NIFOG), Field Operations Guides (FOGs) | CISA

Illinois Interoperability Field Operations Guide (IIFOG), iifog.pdf (illinois.gov)

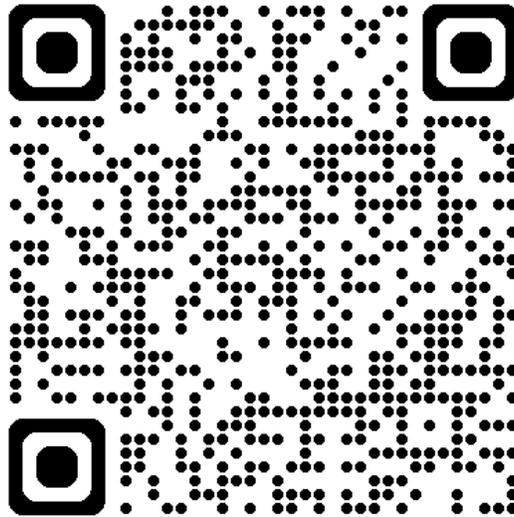AUXFOG/AUXCOMM Interoperability Field Operations Guide, eAUXFOG Mobile App | CISA

https://www.cisa.gov/safecom/field-operations-guides
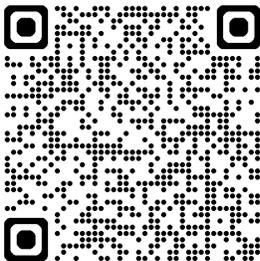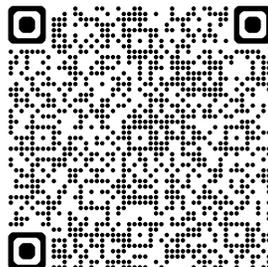
| NIFOG | AUXFOG | IIFOG |
|-------|--------|-------|

# Appendix C

# Message Forms



| ICS FORMS WEB PAGE |
| --- |

# ICS 213

## GENERAL MESSAGE (ICS 213)

| 1. Incident Name (Optional): | | Message Number: | |
|---|---|---|---|
| 2. To (Name and Position): | | | |
| 3. From (Name and Position): | | | |
| 4. Subject: | | 5. Date: | 6. Time |

7. Message:

8. Approved by:  Name: _____ Signature: _____ Position/Title: _____

9. Reply:

10. Replied by:  Name: _____ Position/Title: _____ Signature: _____

| ICS 213 | Date/Time: _____ |
|---|---|

# ICS 213 INSTRUCTIONS

**ICS 213**
**General Message**

**Purpose.** The General Message (ICS 213) is used by the incident dispatchers to record incoming messages that cannot be orally transmitted to the intended recipients. The ICS 213 is also used by the Incident Command Post and other incident personnel to transmit messages (e.g., resource order, incident name change, other ICS coordination issues, etc.) to the Incident Communications Center for transmission via radio or telephone to the addressee. This form is used to send any message or notification to incident personnel that requires hard-copy delivery.

**Preparation.** The ICS 213 may be initiated by incident dispatchers and any other personnel on an incident.

**Distribution.** Upon completion, the ICS 213 may be delivered to the addressee and/or delivered to the Incident Communication Center for transmission.

**Notes:**
- The ICS 213 is a three-part form, typically using carbon paper. The sender will complete Part 1 of the form and send Parts 2 and 3 to the recipient. The recipient will complete Part 2 and return Part 3 to the sender.
- A copy of the ICS 213 should be sent to and maintained within the Documentation Unit.
- Contact information for the sender and receiver can be added for communications purposes to confirm resource orders. Refer to 213RR example (Appendix B)

| Block Number | Block Title | Instructions |
|---|---|---|
| 1 | **Incident Name** (Optional) | Enter the name assigned to the incident. This block is optional. |
| 2 | **To** (Name and Position) | Enter the name and position the General Message is intended for. For all individuals, use at least the first initial and last name. For Unified Command, include agency names. |
| 3 | **From** (Name and Position) | Enter the name and position of the individual sending the General Message. For all individuals, use at least the first initial and last name. For Unified Command, include agency names. |
| 4 | **Subject** | Enter the subject of the message. |
| 5 | **Date** | Enter the date (month/day/year) of the message. |
| 6 | **Time** | Enter the time (using the 24-hour clock) of the message. |
| 7 | **Message** | Enter the content of the message. Try to be as concise as possible. |
| 8 | **Approved by**<br>• Name<br>• Signature<br>• Position/Title | Enter the name, signature, and ICS position/title of the person approving the message. |
| 9 | **Reply** | The intended recipient will enter a reply to the message and return it to the originator. |
| 10 | **Replied by**<br>• Name<br>• Position/Title<br>• Signature<br>• Date/Time | Enter the name, ICS position/title, and signature of the person replying to the message. Enter date (month/day/year) and time prepared (24-hour clock). |

# ICS 309 MESSAGE LOG

## Communications Log (ICS 309)

| 1. INCIDENT NAME | | | | | 2 OPERATIONAL PERIOD    From:Date _____   Time _____<br>To:   Date _____   Time _____ |
|---|---|---|---|---|---|
| 3. RADIO NETWORK NAME | | | | | 4. RADIO OPERATOR (Name, Call Sign) |
| 5. | | | COMMUNICATIONS LOG | | |

| Time (24:00) | FROM | | TO | | Message |
|---|---|---|---|---|---|
| | Call Sign/ID | Msg # | Call Sign/ID | Msg # | |
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| 6. PREPARED BY (Name, Position) | SIGNATURE | 7. DATE & TIME PREPARED |
|---|---|---|

ICS 309–CAN

# THE AMERICAN RADIO RELAY LEAGUE
## RADIOGRAM
### VIA AMATEUR RADIO

| NUMBER | PRECEDENCE | HX | STATION OF ORIGIN | CHECK | PLACE OF ORIGIN | TIME FILED | DATE |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

**TO:**

**THIS RADIO MESSAGE WAS RECEIVED AT:**
AMATEUR STATION:                    DATE:
NAME:
STREET ADDRESS:
CITY, STATE, ZIP:

**TELEPHONE NUMBER:**

_____    _____    _____    _____    _____

_____    _____    _____    _____    _____

_____    _____    _____    _____    _____

_____    _____    _____    _____    _____

_____    _____    _____

**SIG:**

| | FROM | DATE | TIME | | TO | DATE | TIME |
|---|---|---|---|---|---|---|---|
| REC'D | | | | SENT | | | |

A licensed Amateur Radio Operator, whose address is shown above, handled this message free of charge. As such messages are handled solely for the pleasure of operating, a "Ham" Operator can accept no compensation. A return message may be filed with the Ham delivering this message to you. Further information on Amateur Radio may be obtained

The American Radio Relay League, Inc. is the National Membership Society of licensed radio amateurs and the publisher of QST Magazine. One of its functions is promotion of public service communication among Amateur Operators. To that end, The League has organized the National Traffic System for daily nationwide message handling.

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**RADIOGRAM COMPONENTS:**

Number: Your message number
Precedence: "R" for ROUTINE unless it is an emergency! **R**outine, **H**ealth & Welfare, **P**riority or **E**mergency
Handling Instruction(s): (*Most commonly used)
 A = Collect landline delivery authorized by addressee within X miles (i.e., A25 - If no number, authorization is unlimited).
 B = Cancel message if not delivered within X hours of filing time; service originating station (i.e., B4).
*C = Report date and time of delivery (TOD) to originating station.
 D = Report to originating station the identity of station from which received, plus date and time. Report identity of station to which relayed, plus date and time, or if delivered report date, time and method of delivery.
 E = Delivering station get reply from addresses, originate message back.
 F = Hold delivery until....(date). (i.e. F5 holds until the "5th")
*G = Delivery by mail or landline toll call not required. If
Originating Station: Ham who formats & submits it to NTS.
Check: Word count for message body. If ARL text is used, precede count with ARL (i.e., ARL22).

Place of Origin: Where message originates.
Time Filed: In ZULU time (rarely used).
Date: Date message was written (Month & Day).
To: Put name and amateur call sign (if applicable); Street address; City; State (2-letter abbrev) & ZIP; Telephone including area code. ZIP is required for NTS messages sent digitally via Packet, etc.
Body: Text goes here, maximum 5 words per line and 25 words total. A telephone number with area code counts as 3 words (707 555 1212). ARL numbered texts are spelled out (i.e., ARL FORTY SIX). "73" is written as 73, counts as one word.
Signature: This is the signature of the person who wrote the message, may differ from the Originator. If a ham operator, include name and call sign. If not a ham, include name and phone number (including area code).
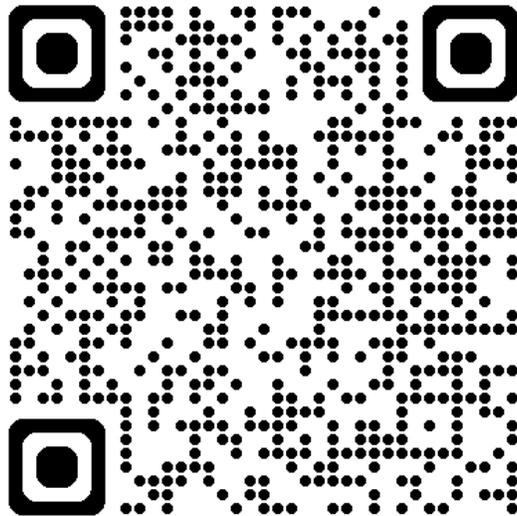REC'D: Operator call sign message was rec'd from,
SENT: Operator call sign sent to, time and date. If receiver is last stop and delivers the message, note to whom delivered, how, and time and date.

kg6ila: 09/2003

**ARRL Radiogram Useful Links**

National Traffic System Methods and Practices Guidelines (arrl.org)

· Routine Messages ARRL internal message abbreviations, FSD_3.pdf (arrl.org) Relief Emergency

· Routine Messages Radiogram Instructions, fsd218.pdf (arrl.org) Relief Emergency



ARRL RADIOGRAM WEB PAGE