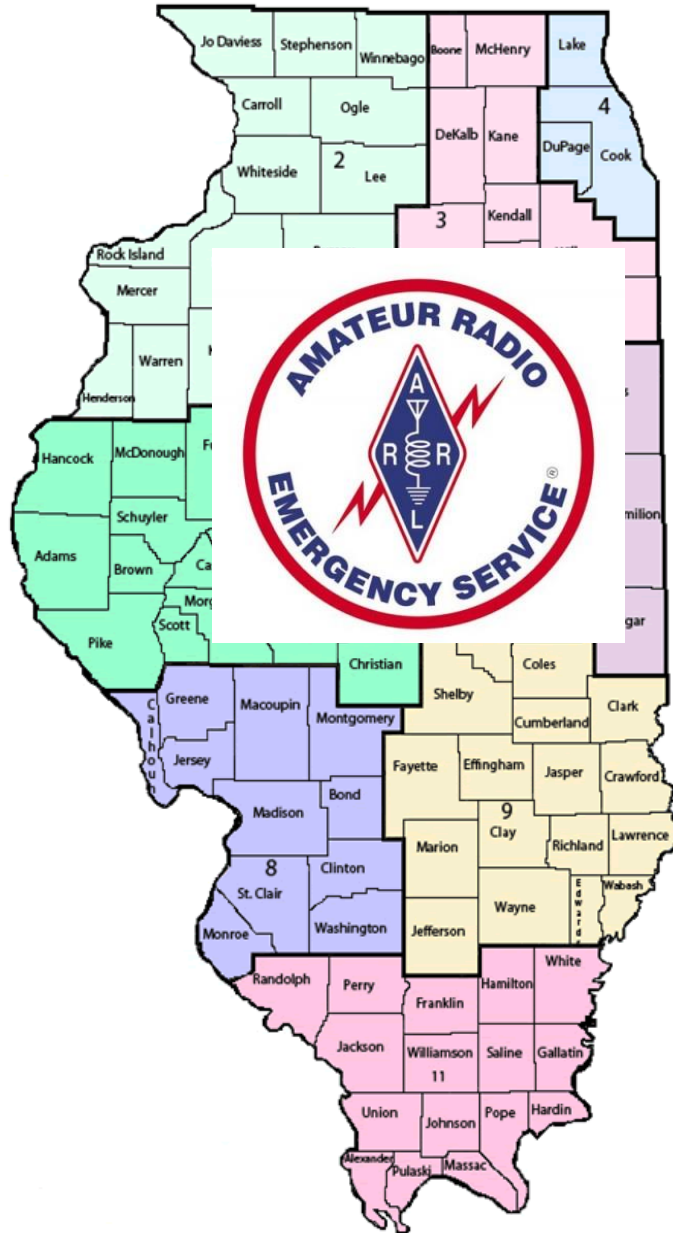# Illinois ARES/AUXCOMM Incident Operating Practices

ILLINOIS STATE ARES
Emergency Operations All Hazards
ARES Incident Operating Practices

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

Authority: This document is a plan of how the Illinois Amateur Radio Emergency Service ARES will operate during a large-scale incident. Outside of the ARES organization, the contents of this document are purely suggestive and informative. This material is open to all. Emergency Coordinators, amateur radio operators, incident commanders, event planners and others are welcome and encouraged to use this information to assist with communications planning and training.

During an incident the ARES Illinois Section Emergency Coordinator SEC or his/her designated representative should take a leadership role in assisting in coordinating statewide ARES emergency amateur radio communications.

Amateur radio zones, regions, clubs and individuals are encouraged to develop plans of their own using this document for guidance.

Incident Command: In a large incident it would be expected that incident command using the FEMA ICS infrastructure will be implemented. The SEC or other ARES authority should contact the appropriate ICS authority to make them aware of this plan and of ARES' ability to assist them with other communications needs as necessary. In a large incident effort 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 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 Incident Command **always** take precedence over this document.

Other Organizations: There are other entities that have communication assets for use in a large-scale incident e.g. IEMA HF, CERT, FEMA(CISA) SHARES, Red Cross, Salvation Army, MARS, etc. See Annex B. Our goal is to closely coordinate with these agencies in an environment of open and active cooperation; using their strengths to assist us and our ability to fill gaps to assist them. The ideal would be to coordinate through the Incident Command. However, in some cases it may be appropriate for the ARES SEC or appointed representative to reach out directly to these organizations to coordinate.

If an individual ARES member is approached by one of these organizations, they should assist them in making contact with 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 plan is designed to be dynamic and should be reviewed annually in January.

Area of responsibility: This document covers Illinois statewide ARES communications. **It is not meant to replace any local plans that may be in affect.**

Zones: To allow better span of control, the state is divided into three zones. It is not the intent to isolate any one or a group of counties from another but to facilitate better control within the Incident Command structure. Using this document as a guide, these zones may develop their own plans for intra-zone and region communications tailored to their 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 role of Zone Manager. Once communications systems are stabilized, control may be shifted to others, or a zone wide unified command may be established.

Zones are:
(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 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, that conditions may worsen.

2) Confirm that your power source is stable. Does the voltage remain between 113 and 127 and at 60 cycles per second? 120 volts AC is preferred. If poor conditions exist, or if there is **ANTICIPATION** that conditions will deteriorate, evaluate and establish back-up power (generator, battery / solar, wind, or hydro).

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 on previous training standards, and prepare to transmit them when requested. Utilize ICS-213 if possible, or Radiogram.

5) Best Practice
- The best practice is to use 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 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, VHF/HF: Leave all sessions open for Peer-to-Peer coverage.
- Each 15-minute period may be extended if traffic handling is necessary.

7) **REVIEW** your station for taller, higher gain antenna systems, as time allows.

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

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

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

12) **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 in Illinois and how to use those assets in an incident. An incident may require the need for both local and statewide amateur communications. In all cases effective and reliable communications is the goal. When necessary, the guidance in this document can be altered to achieve these goals.

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 until relieved.

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

Local communications
First actions in an incident should be to establish local communications

If a zone or region has an incident communications plan, follow the guidance of that plan. For those areas with no plan, follow the guidance below.

Repeaters: First attempt to communicate should be on one of the zones designated repeater, *see attached ICS 217a*. If the repeaters are functional, monitor that system. You may be directed to monitor other frequencies or pass traffic etc. If net control has not been established, establish net control using the guidelines above. If the repeaters are not functioning, 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 state 217a. This frequency may require a relay system to reach all stations. Net control should consider establishing alternate net control stations geographically located to cover the entire zone. If no communications have been established on the zone frequency use the national calling frequency, 146.520MHz initially to establish 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 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 State ICS 217a to establish communications.

NOTE: Use of HF may limit access by those not possessing the appropriate license or HF equipment.

When feasible operators should monitor both the area VHF and HF frequencies for possible traffic.

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

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 itnra-zone data communications. (State ICS 217a) The default means of data communications is WINLINK ARDOP peer-to-peer. NCS should use these frequencies as appropriate.

State HF: In the case where after attempting the above no in zone communications has been established, a call should be made on statewide ARES frequencies 3905kHz or 7227kHz LSB. State your location, 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 – State Communications: In a large 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. In many cases it may be best to have a single station designated as the zone/state relay station. If feasible, this station should not be the NCS of the primary zone net but should be a station that can monitor the appropriate state frequencies as well as the appropriate zone net.

Contacting Local Authorities: Once reliable communications have been established, it is appropriate that local EOC's, Command Centers and municipalities be notified that these communications systems are available for use. It may even be appropriate to locate an amateur radio operator at these locations. Contact with local authorities **MUST** be coordinated by the Zone Manager, DEC, EC or other appropriate ARES representative. **Do not self-deploy!**

State Communications:

Contact with state authorities is the responsibility of the SEC or SM or their designated representative.

Primary Communications: 3905kHz or 7227kHz +/- LSB are the primary statewide ARES emergency coordination frequencies. In a large incident, this frequency 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 NCS station maintains a clear tactical picture of the overall incident. Therefore, soon as possible, NCS should be shifted to a station that is physically located at the SEOC or large area command center. If this is not possible, a station with direct, reliable communications with the command center should be used.

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 State ICS 217a.

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

Other Voice Frequencies:

146.52000MHz is the 2M nationwide calling frequency
446.0000MHz is the nationwide 70cm frequency
When all other methods fail the above call frequencies may be used in an attempt to establish communications or to hail outside help.

DATA:

WinLink: WinLink ARDOP is the primary method of data communications for Illinois ARES.

Illinois WinLink 2M Packet: 145.61000Mhz is the Illinois WinLink frequency. Internet Gateways on this frequency have been set up throughout the state. If 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 145.6100MHz channel can be busy and over utilized. The state 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. It can be used to pass digital traffic intra-state.

Worldwide WinLink/Ardop HF
WinLink/Ardop HF are systems that allow for the sending and receiving email over long distance via high frequency radio. There are gateways set up around the world for entry into the web. It may be used 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 nets: There are CW frequencies in the 80M and 40M bands listed on the ICS 217a. CW nets may be established on these frequencies when appropriate.

Message handling:
Stations may be tasked with transmitting various types of messages. The ICS form 213 is the primary template for formal message traffic within the Incident Command System and should be the default message form for agencies that have no specific format (Appendix C). Additionally, operators need to be skilled in National Traffic System Radiogram message handling (See ARRL links in Annex C). When handling health and welfare traffic the ARRL radiogram (Appendix C) is usually the most effective and efficient way of passing this traffic. 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. They may have their own communications forms. The served agency is the ultimate authority on what message format to use. In some cases, the radio operator may need to assist them in drafting a message so that it can be correctly delivered.

All messages transmitted, relayed or received should be logged using the ICS 309 message log in Appendix C. This will allow effective message tracing should follow up action be required.

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

Accuracy: ALWAYS send the message exactly as it was received. Do not interpret.

Reliability: When the originator gives a message to amateur radio, they expect it to be delivered. When accepting a message the operator should verify that they have sufficient information to ensure the message can be delivered to the appropriate recipient.

Speed: Speed is always last, accuracy and reliability take precedence, but inordinate delay in the delivery of a message can have serious repercussions. If delivery of a message is significantly delayed the radio operator should notify the originator.

RECORDS AND FORMS

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

Incident planners and those who feel they may become involved in disaster communications should keep a hard copy of the major ICS communications document. 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 (attached in appendixes) and area map tiles from Google Earth. Obviously, a printer, extra cartridges, and a laptop could also prove useful. All need to have an auxiliary power source.

Area Status Report

Status Report format is two lines indicating:

1) Ham Call Sign, Local Date/Time of observation (YYMMDDHHMM), County, Location inc. 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, Ham after service status

Example:

wa9xxx,2312301730,williamson,carterville/division/grand,
PY,WY,SN,HP,CP,TN,F

Illinois State-wide ARES Incident Organization Chart (ICS207)

- ARES SEC
- State EOC/Large area command
- Other Organizations See Annex B
- Net Control Station (ARES primary net)
- North Zone Manager
  - Region 2
  - Region 3
  - Region 4
  - Local EOCs, Orgs etc.
- Central Zone Manager
  - Region 6
  - Region 7
  - Local EOCs, Orgs etc.
- South Zone Manager
  - Region 8
  - Region 9
  - Region 11
  - Local EOCs, Orgs etc.

11
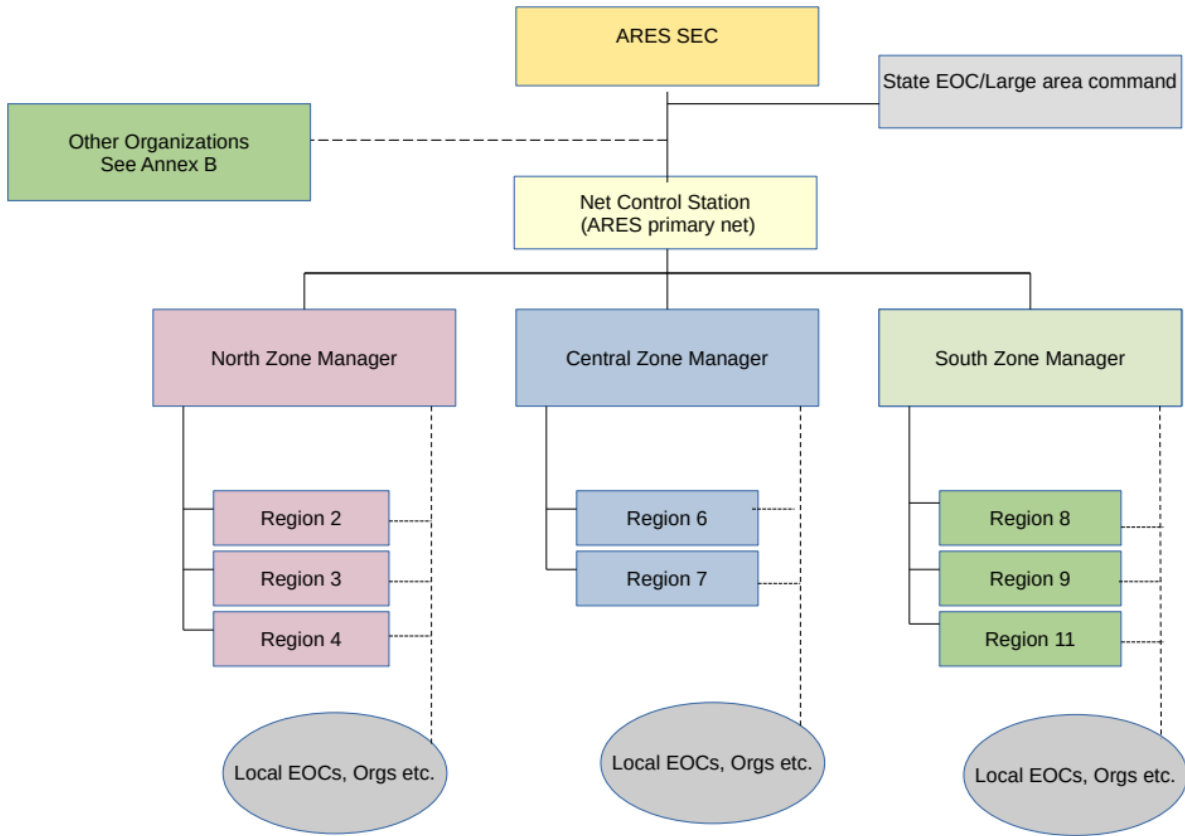
ANNEX A
ICS 217a

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET				Frequency Band HF/VHF/UHF (PAGE 1)			Description IL ARES STATEWIDE FREQS		
Pg No	Channel Configuration	Channel Name/Trunked Radio System Talkgroup	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
		VOICE STATE WIDE	By assignment	3905/7227kHz	-	3905/7227kHz	-	LSB	VOICE
		DATA STATE WIDE	By assignment	3570kHz DIAL*	-	3570KhZ DIAL	-	USB	ARDOP P2P *CTR 3571.5kHz
		VOICE North	By assignment	3935/7217kHz	-	3935/7217kHz	-	LSB	VOICE
		VOICE Central	By assigment	3915/7237kHz	-	3915/7237kHz	-	LSB	VOICE
		VOICE South	By assigment	3925/7247kHz	-	3925/7247kHz	-	LSB	VOICE
		HF DATA North	By assignment	3585kHz DIAL*	-	3585kHz DIAL*	-	USB	ARDOP P2P *CTR 3586.5kHz
		HF DATA Central	By assignment	3565kHz DIAL*	-	3565kHz DIAL*	-	USB	ARDOP P2P *CTR 3566.5kHz
		HF DATA South	By assignment	3560kHz DIAL*	-	3560kHz DIAL*	-	USB	ARDOP P2P *CTR 3561.5kHz
		2M VOICE NORTH	By assigment	146.450MHz	-	146.450MHz	-	FM	SIMPLEX VOICE
		2M VOICE CENT	By assignment	146.550MHz	-	146.550MHz	-	FM	SIMPLEX VOICE
		2M VOICE SOUTH	By assignment	146.580MHz	-	146.580MHz	-	FM	SIMPLEXVOICE
		DATA_4	By assigment	3555kHz DIAL*	-	3555kHz DIAL*	-	USB	ARDOP P2P *CTR 3556.5kHz
		DATA_5	By assigment	3550kHz DIAL*	-	3550kHz DIAL*	-	USB	ARDOP P2P *CTR 3551.5kHz
		DATA_6	WINLINK gateway	3591kHz DIAL*	-	3591kHz DIAL*	-	USB	ARDOP/PACTOR *CTR 3592.5
		DATA_7	WINLINK gateway	3595kHz DIAL*	-	3595kHz DIAL*	-	USB	VARA *CTR 3592.5kHz
		DATA_8	WINLINK gateway	7101kHz DIAL*	-	7101kHz DIAL*	-	USB	ARDOP/PACTOR *CTR 7103.5
		DATA_9	WINLINK gateway	7102kHz DIAL*	-	7102kHz DIAL*	-	USB	VARA *CTR 7103.5kHz
		IDEN	WINLINK gateway	145.610MHz	-	145.610MHz	-	FM	AX.25
		IDEN_2	IL DATA comms	145.050MHz	-	145.050MHz	-	FM	P2P PACKET
		IDEN_3	WINLINK gateway	144.990MHz	-	144.990MHz	-	FM	VARA

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.

ICS 217A Excel

3/2007

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET		Frequency Band HF/VHF/UHF (PAGE 2)		Description IL ARES STATEWIDE FREQS					

Pg No	Channel Configuration	Channel Name/Trunked Radio System Talkgroup	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
		IL2A	IL Comms	146.520MHz	-	146.520MHz	-	FM	National Calling freq
		IL2B	IL Comms	147.525MHz	-	147.525MHz	-	FM	
		IL2C	IL Comms	147.570MHz	-	147.570MHz	-	FM	
		IDEN_4	IL DATA	441.060MHz	-	441.060MHz	-	FM	VARA
		ILUHFA	IL Comms	446.000MHz	-	446.000MHz	-	FM	National Calling freq
		ILUHFB	IL Comms	446.400MHz	-	446.400MHz	-	FM	
		ILUHFC	IL Comms	446.700MHz	-	446.700MHz	-	FM	
		FRS_1	By assignment	462.5625MHz	-	462.5625MHz	-	FM	FRS CH1
		CW 1	By assignment	3538.0/7038kHz	-	3538.0/7038kHz	-	FM	CW
		CW 2	By assignment	3545.0/7035kHz	-	3545.0/7035kHz	-	FM	CW
		GMRS	By assignment	462.5625 MHz	-	462.5625 MHz	-	FM	GMRS CHAN 1

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.

ICS 217A Excel

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Sheet1

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET

	Frequency Band		Descriptions	
	VHF/UHF		STATE HAM REPEATERS	

Pg No	Channel Configuration	Channel Name/Trunked Radio System Talkgroup	Eligible Users	Rx Freq N or W	Rx Tone/NAC	TX Freq 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	WiresX ID83050
16	WHITESIDE	STERLING	NORTH	146.370	114.8	146.250	114.8	A	
4	ROCK IS	ROCK ISLAND	NORTH	146.775	100	146.175	100	A/D	C4FM
14	WHITESIDE	STERLING	NORTH	146.850	CSQ	146.250	114.8	A	
14	ROCK IS	ELDRIDGE IA.	NORTH	146.880	77.0	146.820	77.0	A	
16	BUREAU	PRINCESTON	NORTH	146.955	103.5	147.555	103.5	A	ECHOLINK
14	LEE	DIXON	NORTH	146.970	CSQ	146.370	82.5	A/D	ECHOLINK
4	KNOX*	GALEBURG	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	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	STEVESON	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	LAKE		NORTH	442.975	114.8	447.975	114.8	A	
6	LAKE	LAKE ZURICH	NORTH	443.850	114.8	448.850	114.8	A	
4	KNOX	GALESBURG	NORTH	444.450	103.5	449.450	103.5	A/D	C4FM

Page 1

CENTRAL ZONE 217a

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET

	Frequency Band		Descriptions	
	VHF/UHF		CENTRAL REPEATERS	

Pg No	Channel Configuration	Channel Name/Trunked Radio System Talkgroup	Eligible Users	Rx Freq N or W	Rx Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
11	TAZWELL	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	
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	CHRISTIAN	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	P25 NAC31D EL228190
9	OGLE*	CHANA	CENTRAL	147.165	146.2	147.765	146.2	A/D	P25 NAC 293
12	SHELBY*	WILLIAMSBURG	CENTRAL	147.390	203.5	147.990	203.5	A/D	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	
12	SANGAMON*	SPRINGFIELD	CENTRAL	443.70625	CC 5	448.70625	CC 5	D	DMR
12	SANGAMON	SPRINGFIELD	CENTRAL	443.78125		448.78125		D	D-STAR REF051ID
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(link is external)
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-l node# 465002

SOUTH ZONE 217a

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET

	Frequency Band		Descriptions	
	VHF/UHF		SOUTH REPEATERS	

Pg No	Channel Configuration	Channel Name/Trunked Radio System Talkgroup	Eligible Users	Rx Freq N or W	Rx Tone/NAC	TX Freq 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

ANNEX B
OTHER ORGANIZATIONS

RED CROSS

The American Red Cross of "Illinois" covers 88 counties across Illinois, Iowa and Missouri.

Most of RF work in the Region is Part 90 Public Safety. On the high frequency bands, The primary focus on SHARES. They also have a national license for OPERATION SECURE. They use these systems to coordinate with our Federal, State, and Military partners.

On the Amateur Service side, They are licensed in Illinois as N9ARC. They do not have a common net frequency like SATERN or IL ARES. Operators should expect that they would work with ARES on the 60 Meter Interoperability Channels, or they might check into the IL ARES nets on 40 or 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 lisgts and other useful information. Some of these guides can also be downloaded to smart phones and tablets from the device's app store.

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

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

AUXFOG AUXCOMM Interoperability Field Operations Guide eAUXFOG Mobile App | CISA

https://www.cisa.gov/safecom/field-operations-guides

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ANNEX C
MESSAGE FORMS

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 • Name • Signature • 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 • Name • Position/Title • Signature • 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 _____ 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 #	

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 _____ PHONE _____

NAME _____

STREET ADDRESS _____

TELEPHONE NUMBER

CITY, STATE, ZIP _____

FROM	DATE	TIME	TO	DATE	TIME
REC'D			SENT		

THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR, WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING, NO COMPENSATION CAN BE ACCEPTED BY A "HAM" OPERATOR. A RETURN MESSAGE MAY BE FILED WITH THE "HAM" DELIVERING THIS MESSAGE TO YOU. FURTHER INFORMATION ON AMATEUR RADIO MAY BE OBTAINED FROM ARRL HEADQUARTERS, 225 MAIN STREET, NEWINGTON, CT 0611

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.

ARRL radiogram useful links:

[Appendix B: NTS Methods and Practices Guidelines (arrl.org)](arrl.org)

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

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