Missouri District “B” ARES
Emergency Operations Plan

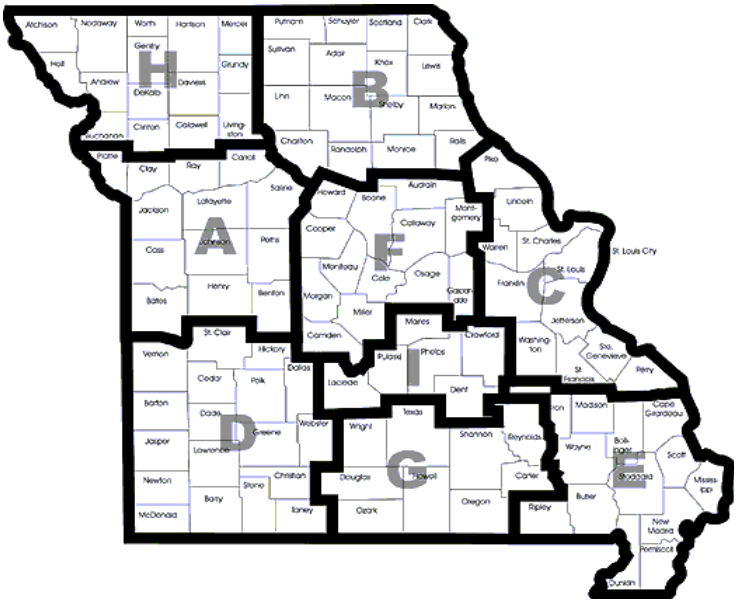
Includes the Missouri Counties of Putnam, Schuyler, Scotland, Clark, Sullivan, Adair, Knox, Lewis, Linn, Macon, Shelby, Marion, Chariton, Randolph, Monroe and Ralls

JUNE 17, 2020

1. Background

The Amateur Radio Service is authorized under Part 97 of the Federal Communications Commission's rules as a "voluntary non-commercial communications service, particularly with respect to providing emergency communications." The American Radio Relay League (ARRL) facilitates emergency communications through its Field Organization in general and the Amateur Radio Emergency Service (ARES) in particular.

The ARES is the emergency branch of the ARRL Field Organization. It operates under the direction of the Section Manager, an elected position within the Field Organization. There are 71 sections in the United States and its possessions. The State of Missouri is comprised of one section. Within the Missouri Section, there are 9 districts and 115 local jurisdictions includes all 114 Missouri counties and the city of St. Louis. Each of the local jurisdictions should have an Emergency Coordinator (EC) assigned. These designated ECs report to their respective District Emergency Coordinators (DEC) in each of the 9 districts who in turn report to the Section Emergency Coordinator (SEC). An updated listing of Missouri Section ARES leadership is kept at http://ares-mo.org/district-info/ and all members are encouraged to keep contact information for their respective areas on hand,



The ARES operates to serve both governmental and non-governmental agencies through "Memoranda of Understanding" (MOU) or "Statement of Understanding" (SOU). For purposes of this document, the terms are interchangeable. These MOUs are non-binding letters explaining the participating parties' roles and responsibilities and are initiated at both the national and section levels.

Written MOU's need not be in place on a section or local level if they exist on a national level. District and local level MOU's must originate with the appropriate EC or DEC and must be approved and signed by the DEC, SEC and Section Manager prior to their execution. MOU's transfer in-kind as new ECs and DECs are appointed unless specifically cancelled by the incoming EC or DEC. Agencies signatory to MOU's are referred to as "Served Agencies."

It is the intention of this plan to provide guidelines for training and usage of Amateur Radio volunteer communicators. The Missouri Section ARES organizations recognize the role of the Radio Amateur Civil Emergency Service (RACES) to government agencies as auxiliary communications links during times of emergency. It is also the intention of this plan to provide for adequate training and preparation of ARES operators to assist with the needs of the state and local government communications as required. It is the recommendation of this plan that all ARES operators register with their local civil defense agencies. This fulfills the mandatory registration requirements of Part 97 for RACES operators. It will also provide a larger contingent of qualified operators that may be utilized during emergencies regardless of affiliation with ARES or RACES. ARES operators should be prepared to assist any agency whether government or private sector as dictated by the needs of any given situation.

The DEC shall establish the training standards for new ARES volunteers and ensures that all new ARES operators complete a basic curriculum for emergency communications training, The DEC shall ensure that all jurisdictions within the district have adequate training available and regular exercises so that the district as a whole maintains a high degree of readiness.

2. Purpose

The purpose of this plan is to outline the ARES organization in Missouri District "B" and present the basic information required for effective operation during an emergency. It will also contain addendums, which constitute the bulk of the "living document," as submitted by the various personnel. The plan is intended to be updated periodically, on an as-needed basis.

The plan is not intended to be the "last word" in emergency operations, but to be a resource in planning and operations. Recommendations for training are presented as a guideline to establish minimum standards for qualifying Amateur operators as ARES operators. ARES operator training will include items established by the Missouri State Emergency Management Agency for RACES operators. All training should be tailored to meet the needs of the agencies and communities served. Any additions, deletions, corrections affecting the section level should be brought to the attention of the DEC and District Training Coordinator. All submissions will be given due consideration for inclusion in updates as they are released.

3. Organization

The field services leadership of Missouri ARES District "B" is outlined as follows:

District Emergency Coordinator: Dale Bagley, KØKY

Assistant District Emergency Coordinator: Donald Vary, KDØHHN

See complete District Organization and Contacts in Appendix A

4. Plan Activation

If an ARES member determines that a true emergency situation exists, every effort should be made to notify the appropriate county EC so that information concerning an incident may be relayed through the ARES structure and formal net operations established. If the appropriate county EC is unavailable, the chain of command should be followed. This does not preclude operators from contacting an emergency dispatch center or requesting assistance for smaller incidents, such as initial fire, medical or traffic accident calls. Then monitor the assigned Amateur Radio frequencies utilized in the affected area. This would include appropriate repeater output frequencies and predetermined high frequency net frequencies. If electrical service to a repeater is interrupted, stations should monitor the repeater output frequency or other predetermined simplex frequency, as directed by the local leadership. All appointed Official Emergency Station (OES) operators shall monitor HF and VHF net frequencies if a declaration of emergency is imminent.

It is important that operators not interrupt existing emergency communications, but instead listen and only transmit if specific assistance is requested from that station or if a clear relay can be given in times of difficult copy. Operators should conform to established net protocols at all times. Deviating from established net procedures slows and confuses operators.

Calls for assistance from Served Agencies should be routed to the appropriate EC. This will result in the most efficient and appropriate response. Only under prior arrangements should individual ARES members "self dispatch" on their own. All ARES members shall have contact information for their leadership.

Alerting:

When an emergency arises the first knowledge of it is usually at the county level. The immediate response to an emergency is to call up local ARES members and begin establishing communications. This may be accomplished by whatever system each EC has in place in their county. As soon as this is accomplished, the EC should inform his/her DEC and/or the SEC of the situation. The DEC and SEC should be contacted by phone, if possible. In the event of a major disaster affecting all counties, the DECs and SEC should monitor 3.963 or 7.263 MHz for updates and information if the local communications are inoperable. For everyone's

assistance, the District B ARES roster(issued separately by the DEC) contains phone numbers, pagers, if applicable, and email addresses to facilitate communicating with them when the need arises. These additions are intended to enhance the ability of ARES to provide communications assistance.

In the event of any widespread communications emergency, every EC, DEC and the SEC should have an HF station monitoring 3.963 MHz or 7.263 MHz (If the EC, DEC or SEC does not have the license privileges or capacity to operate on these HF frequencies, they should make arrangements to appoint an OES, which has the capability within their county/district/section.)

Wide Area Nets:

Operations have proven the need for wide-area administrative nets. Once emergency operations have begun and it is apparent that the State Emergency Operations Center (EOC) will be involved, or that there will be more than one (1) county involved, an HF station should be included in the operation of the County Control Station (CCS). The CCS can provide a link to the State EOC and allow inter-county communications and coordination of manpower and assistance from other areas. This also allows the DEC and SEC to communicate directly with the area(s) involved. It should also be noted that the Missouri Emergency Packet Network (MEPN) packet network is available to provide a digital link to State Emergency Management in Jefferson City.

EC Guidelines:

When an emergency exists within the District, or when the DEC or Assistant District Emergency Coordinator (ADEC) begins wide area operations, the following operations guide will be followed by all EC's:

1. Each EC will stay in their county and be ready and available to provide assistance, as requested, by the DEC or ADEC, if the DEC is not available.
2. **NO** EC will leave their county without the express consent of their DEC or the ADEC.
3. ECs will be responsible for the following:
   a. When there is an emergency in their county, each EC is responsible for:
      i. Determining the extent of the problem and evaluating their manpower needs.
      ii. Establish operations based on guidelines in the District Operating System.
      iii. Notify your DEC and/or ADEC of the emergency.
      iv. Establish operating schedules and request assistance from your DEC if required.
      v. Keep your DEC and the ADEC up to date on the situation in your county.
      vi. Keep logs and lists of involved Amateur operators.
      vii. When operation are over, be sure all Amateur operators are notified and return home.
   b. When notified of an emergency in another county or ARES district:
      i. Be ready to assemble assistance from your county, if requested.
      ii. Notify your AEC's of the possible need to provide assistance to another area.
      iii. Maintain communications with your DEC and/or ADEC.
      iv. Notify your DEC and/or the ADEC of any changes in your location or any additional means of communicating with you.

v. Notify the DEC and/or ADEC of any changes that would affect contacting you

1) Additional or different pager numbers
2) Cell Phone numbers
3) Fax numbers
4) Frequencies being used in your county

c. When operations in your area are concluded be sure the following are accomplished prior to securing:

i. Make sure all ARES personnel are accounted for
ii. Pass along our appreciation to all participants
iii. Be sure all Amateur operators are notified that operations have concluded
iv. Collect reports and logs from your AEC' and control stations.
v. Make recommendations for certificates
vi. File a report with your DEC and ADEC.

Personnel Notification:

The following criteria should be observed for all call-ups of ARES Personnel. Please be sure to notify ALL the proper people immediately. In the event that a person is not available, notify either the alternate or immediate supervisor of that person. This is vital to insure the proper operation of Amateur Radio during an emergency.

Occurrence: Notify:

Public Service Events & Local Drills: Notify local ARES Personnel.
Emergency in your County: Notify local ARES Personnel, DEC/ADEC.
Emergency Spreading to Adjacent County: Notify your DEC/ADEC, adjacent County EC.
When you need assistance: Notify your DEC and/or ADEC.
When requesting assistance you will need to know the following information:

1. Number of Amateur operators requested.
2. How long will assistance be needed (you can estimate this)
3. What kind of equipment will be needed
4. What kind of conditions in which they will be operating.

Logging:

ALL STATIONS WILL MAINTAIN COMPLETE LOGS:

All fixed stations operating during an emergency must maintain a complete log of their operations. This log will contain the TIME (local) of each message, the CALLSIGN of the contacted station and the MESSAGE CONTENT of the message. A copy of all FORMAL TRAFFIC will be kept and become part of the log. Each log sheet will contain the OPERATING CALLSIGN, the location of the station, the call of the operator and should be signed by the control operator.

Mobiles should log the STATION CALLED, TIME, and brief CONTENT of each message. Each log should contain the operator's call sign and date and operator's signature.

ALL LOGS will b kept as part of the ARES records. If an operator requires copies for his/her own log, copies should be made and the originals remain with the ARES EC.

5. Training and Procedures:

An annual test of the District B ARES will be conducted in conjunction with the National Simulated Emergency Test (SET). This test will be conducted at various levels throughout the district. It is also recommended that local exercises be held as determined to be appropriate and coordinated with district or local agency participation whenever possible. It is recommended that one exercise annually in addition to the SET be held to exercise interoperability and cross-jurisdictional response protocols.

The ARRL has provided courses for Emergency Communications training and certification. The first course, EC-001, Introduction to Emergency Communications, is highly recommended as the basic training standard for new ARES members in Missouri. New ARES members are encouraged to complete the EC-001 course within one year of registration with their local ARES group. Information on EC-001 certification can be found at http://www.arrl.org/cce/. Missouri Section leadership officials are strongly encouraged to complete the EC-016 course (currently under revision). In addition, the following courses are recommended for all ARES members:

FEMA Course # Description

IS-100 Introduction to Incident Command System
IS-200a ICS for Single Resources and Initial Action Incidents
IS-700 National Incident Management System – An introduction
IS-800 National Response Framework, An Introduction
IS-802 Emergency Support Functions (ESF) #2 – Communications

Additional tests, drills, nets and training will be carried out as directed by the individual EC's. These sessions allow tailoring of training requirements to the specific needs of the areas and Served Agencies. Consideration should be given to the needs of adjacent areas for maintaining a high state of readiness for mutual aid support. It is recommended that neighboring districts be invited to participate in any exercises held on a district basis.

6. Directed Net Operations:

Directed nets are the backbone of the ARES traffic handling operation. Directed nets operate with a Net Control Station (NCS) which maintains order on the net. Stations not directly involved with the operation of a directed net should stand by until the net is clear. At no time will a station transmit on a directed net except when called upon by the NCS, when checking in during a non-roll call period or when a station has bona fide emergency or priority traffic.

Most net operations relating to emergencies are "tactical" in nature. They are generally directed nets and messages sent can be qualified as any exchange that does not utilize an established message format or form. The National Traffic System (NTS) message format should be utilized whenever practical. Its use has a long history of reliable and accurate message exchange. ARES members should become proficient in the ARRL NTS message format and its usage. Also, good operating technique and keeping a log of your operation is of primary importance. Remember, it is the Served Agency's needs that will determine what will be used in any given situation.

7. Emergency Nets and Frequency Usage:

The following frequencies are utilized within District B for organized emergency nets. Contact may be attempted on these frequencies in the event that you are cut off from commercial telecommunications. Listen before transmitting!! If an emergency net is in progress, do not interrupt!! Monitor the frequency and follow the directions of the net control station.

HF

The Missouri Emergency Services Net (MESN) meets as needed following the Missouri Traffic Net.

Frequency Net Name

3963.0 KHz (MTN & MESN)

7263.0 KHz (MTN $ MESN) alternate

VHF/UHF Repeater Systems

VHF or UHF repeaters serve most communities within the section. This may be a viable means of contacting a desired person or someone who can in turn contact that person for you. ARES members are strongly encouraged to obtain a listing of the available repeaters in their area BEFORE an emergency occurs. An up to date list of coordinated repeaters in District B is available on a website maintained by the Missouri Repeater Council (www.missourirepeater.org)

District B Repeaters

KØMOB	Moberly	147.090	-	127.3
WØKEM	Hannibal	146.625	-	103.5
WØMTL	Hannibal	146.880	-	103.5
NØPR	Macon	146.805	-	156.7
NØSYL	Madison	146.985	-	110.9
WØCBL	Kirksville	145.130	-	
WØCIT	Brookfield	147.345	+	
KDØIZE	Glenwood	145.110	-	103.5
KEØBX	Lancaster	145.330	-	100.0
ACØOK	Milan	147.180	+	
KBØYKI	Ewing	444.875	+	100.0
KDØETV	Marceline	443.150	+	110.9

VHF /UHF Simplex Frequencies:

The Missouri Section Utilizes a set of predetermined simplex frequencies for "event or scene of action" operations. Use of the simplex mode minimizes exposures to power interruption, but also shortens effective communications range in most cases. A complete listing of frequencies and procedures for utilization can be found in the Missouri Section VHF/UHF Interoperability Plan. Some of the most commonly utilized frequencies district-wide are listed as follows:

Mnemonic Frequency TX CTCSS Primary area of usage
HVCall 146.550 CSQ Statewide – PRIMARY CALLS
HUCall 446.000 CSQ Statewide – UHF CALL
HVCall 146.550 CSQ Statewide – VHF CALL
HMCall 52.500 CSQ Statewide – 6 M CALL

It is commonly known that ARES serves many agencies. These allocations minimize interference across jurisdictional boundaries in the event that an emergency may exist close to or across jurisdictions.

Appendix A: District "B" ARES Directory

District "B" DEC
Dale Bagley, KØKY
(H) 660-385-3629
(C) 660-351-0282

District "B" ADEC
Donald Vary, KDØHHN
(H) 573-221-8205
(C) 573-719-9002

Adair Co
Patrick McGillan, KA9PDK
(C) 660-988-4102

Chariton Co
Vacant

Clark Co
Rodney Walton, KEØYSY

Knox Co.
Vacant

Lewis Co.
Vacant

Linn Co.
Vacant

Macon Co.
Timothy Slover, KØTSS

Marion Co.
Donald Vary, KDØHHN
(H) 573-221-8205
(C) 573-719-9002

Monroe Co.
Vacant

Putnam Co.
Vacant

Ralls Co.
Vacant

Randolph Co.
Monte Barcus, NØAUY
(C) 660-651-0081

Schuyler Co.
Victor Farrell, KBØQNH
(H) 660-457-3104
(C) 660-341-3104

Scotland Co.
David Newman, KBØNWT
(H) 660-465-7462
(C) 660-341-3337

Shelby Co.
Vernon Cash, N3TRE
(H) 573-321-6553
(C) 660-651-9492

Sullivan Co.
Sam Cook, ACØOK (EC)
(H) 660-265-3266
(C) 660-265-5704
Kristine Good, KEØELB (AEC)
(C) 641-275-0667

Appendix B – Sample Go-Kit Contents

It is strongly recommended that every ARES member have a Go-kit ready for deployment at any time. It is also strongly recommended that every EC also have a deployable Go-kit. A suggested listing is:

1. Dual-band HT in padded belt case and/or mobile.
2. HF radio with internal/external sound card, tuner, HF antenna(s), power source(s)
3. Copy of current FCC Operating License.
4. Extra high-capacity (1000 ma) nicad, or backup AA battery case for HT.
5. DC adapter & cigarette plug cord for HT
6. Two sets of spare fuses (2A, 10A, 15A, 25A)
7. Roll up dual band HT antenna – N9TAX.com Slim Jim antenna
8. Earphone and/or speaker mike
9. Swiss Army knife
10. Multi-purpose tool
11. Mini-Mag-Lite, extra bulb and spare AAs
12. Pencil and pocket notepad
13. Emergency money - small bills and change.
14. SO-239 to BNC adapters (male/female)
15. SMA to BNC adapters (male/female)
16. 6 ft.to 10 ft. RG8-X jumper w/BNC male and female connectors
17. Small pocket compass
18. Folding chair/stool
19. Operating reference card for HT
20. ARES phone and frequency reference card
21. Small Tool Kit: Compact soldering iron, solder, needle nose pliers, screwdrivers, wire stripers, side cutters, Anderson Power Poles & Crimper.
22. 8 pack of AA alkaline batteries as running spares
23. Comfort, safety and basic first aid items: sunglasses, matches, tissues, toothbrush, sun block, sewing kit, insect repellent, tweezers, band-aids, adhesive tape, gauze pads, wound cleaning wipes, toilet paper, bottled water, spare eye glasses of current prescription etc.
24. Digital kit: Operator-supplied computer with digital programs installed, sound card modems, TNC, interconnecting cables, HF/VHF/UHF antennas, 13.8V power supply-batteries-solar.
25. For comprehensive lists of go-kit contents consider the following links:
26. http://races.org/gokit.htm#disaster
27. www.emergencyradiogokit.com/
28. www.harc.net/programs/amateur-radio-go-kit.pdf
29. Https://www.pinterest.com/wcgems/ham-radio-gobox-designs/

Appendix C: District “B” ICS-217

District B Model

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET

Frequency Band:

Description: ARES District B

	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
	Calling	HF Digital	NCS	3.590	USB	N/A	3.590	USB	N/A	D	Statewide HF Calling
	Calling	HF Digital Alt	NCS	7.083	USB	N/A	7.083	USB	N/A	D	Statewide HF Calling Alt
	Calling	HF Digital Alt	NCS	5.3465	USB	N/A	5.3465	USB	N/A	D	Statewide HF Calling Alt
	Working	HF Digital	Digital Net	NCS Direction		N/A	NCS Direction		N/A	D	Statewide HF Working
	Calling	HF Digital	NCS	3.5XX	USB	N/A	3.5XX	USB	N/A	D	District HF Calling
	Calling	HF Digital	Digital Net	3.5XX	USB	N/A	3.5XX	USB	N/A	D	District HF Working
	Calling	HVCall		146.550		CSQ	146.550		CSQ	A	Statewide VHF Calling
	Data	HVData		144.910		CSQ	144.910		CSQ	D	Statewide Data
	Packet	HVPacket		144.950		CSQ	144.950		CSQ	D	Statewide Packet
	Tactical	HVTac2	District B	146.650		PL 100.0	146.650		PL 100.0	A	District B VHF Tactical
	Calling	HUCall		446.000		CSQ	446.000		CSQ	A	Statewide UHF Calling
	Data	HUData		446.200		CSQ	446.200		CSQ	D	Statewide Data
	Calling	HUTac2	District B	445.925		PL 100.0	445.925		PL 100.0	A	District B UHF Tactical
	Msg Trfc	MESN Pri	HF :LSB Net	3.963		N/A	3.963		N/A	A	MESN
	Msg Trfc	MESN Sec	HF :LSB Net	7.263		N/A	7.263		N/A	A	MESN

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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