

# Missouri Section ARES® Emergency Operations Plan



**Dale Bagley, KØKY  
Section Manager**

**Don Moore, KMØR  
Section Emergency Coordinator**

**Revised  
August 2004**

1. **Background**

The Amateur Radio Service is authorized under Part 97 of the Federal Communications Commission's rules as a "voluntary non-commercial communication 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 including all 114 Missouri counties and the City of St. Louis. Each of the local jurisdictions should have an EC assigned. These designated EC's report to their respective DEC in each of the 9 districts who in turn report to the SEC. An updated listing of Missouri Section ARES® leadership is kept at [www.ares-mo.org/districts.asp](http://www.ares-mo.org/districts.asp) 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" (MOUs). These MOUs are non-binding letters explaining the participating parties' roles and responsibilities and are initiated at both the national and section levels. Written MOUs need not be in place on a section or local level if they exist on a national level. Section-level MOUs must originate with the Section Emergency Coordinator and must be approved and signed by the Section Manager prior to their execution. MOUs transfer in-kind as new Section Managers are elected unless specifically cancelled by the incoming Section Manager. Agencies signatory to MOUs 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 Section Emergency Coordinator (SEC) 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 SEC shall ensure that all districts within the section have adequate training available and regular exercises so that the section as a whole maintains a high degree of readiness.

2. **Purpose**

The purpose of this plan is to outline the ARES® organization in the Missouri Section and present the basic information required for effective operation during an emergency. It will also contain appendices, which constitute the bulk of the "living document," as submitted by the various District Emergency Coordinators (DECs) and Emergency Coordinators (ECs). This plan is intended to be updated periodically, on an as-needed basis.

This 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 amateurs 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 or corrections affecting the section level should be brought to the attention of the Section Emergency Coordinator and Section training Coordinator. All submissions will be given due consideration for

inclusion in updates as they are released.

### 3. **Organization**

The field services leadership of the Missouri Section is outlined as follows:  
(An updated and more detailed list can always be found at <http://www.ares-mo.org>)

<b><u>Section Manager:</u></b>	Dale Bagley, KØKY	<a href="mailto:k0ky@arrl.org">k0ky@arrl.org</a>
<b><u>Section Emergency Coordinator:</u></b>	Don Moore, KMØR	<a href="mailto:km0r@arrl.net">km0r@arrl.net</a>
<b><u>Section Traffic Manager:</u></b>	Dale Huffington, AEØS	<a href="mailto:ae0s@arrl.net">ae0s@arrl.net</a>
<b><u>Section PIO:</u></b>	Dennis McCarthy, AAØA	<a href="mailto:mccartdj@slu.edu">mccartdj@slu.edu</a>
<b><u>Section Training Coordinator:</u></b>	Gene Bess, WØGAB	<a href="mailto:w0gab@arrl.net">w0gab@arrl.net</a>

### 4. **Plan Activation**

If a member station 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 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 OES stations shall monitor HF and VHF net frequencies if a declaration of emergency is imminent.

It is important that stations 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. Stations should conform to established net protocol at all times. Deviating from established net procedure slows and confuses operations.

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.

### 5. **Training and Procedures**

An annual test of the Missouri Section ARES® will be conducted in conjunction with the National Simulated Emergency Test (SET). This test will be conducted at various levels throughout the section. It is also recommended that district or local exercises be held as determined to be appropriate and coordinated with district or local agency participation whenever possible.

The ARRL has provided courses for Emergency Communications training and certification. The courses are presented in three levels. The Level-I course is highly recommended as the basic training standard for new ARES® members in Missouri. New ARES® members are encouraged to complete Level-I training within one year of registration with their local ARES® group. Information on Level I certification can be found at <http://www.arrl.org/cce/>. Missouri Section leadership officials are strongly encouraged to complete Level-2 and Level-3 courses as well.

Additional tests, drills, nets, and training will be carried out as directed by the individual ECs and DECes. 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 sections be invited to participate in any exercises held on a district or section-wide basis.

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 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.

## 6. **Emergency Nets and Frequency Usage**

The following frequencies are utilized within the Missouri Section 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 meets weekly following the Missouri Traffic Net on Sunday evenings at 6:30pm local time.

<b><u>Frequency</u></b>	<b><u>Net Name</u></b>
3963.0 kHz.	Missouri Emergency Services Net (MESN)
7263.0 kHz.	Missouri Emergency Services Net (MESN) (daytime alternate)

### **VHF Packet**

Many members are active on packet. Although this system is not currently the best means of communicating across the Missouri Section, it may be a viable method of getting low priority traffic to its destination.

There are several packet nodes set up through the state and a system is presently being assembled that will facilitate the linking of much of the state of Missouri. A packet network directory can be found on the Missouri ARES® web site ([www.ares-mo.org/packet.asp](http://www.ares-mo.org/packet.asp)). The system being assembled across Missouri is designated the Missouri Emergency Packet Network or MEPN. It is based on a 6 meter backbone with 2 meter node access for normal users. Details, including monthly updates, can be found at [www.ares-mo.org/mepn.asp](http://www.ares-mo.org/mepn.asp).

### **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 the Missouri Section is available on a website maintained by the Missouri Repeater Council ([www.missourirepeater.org](http://www.missourirepeater.org)).

Some portions of the section are served by linked systems, which allow more widespread coverage. This may allow getting into or out of a metropolitan area to rural communities. These systems are susceptible to commercial power interruption and may not function during times of widespread or localized power outage. When power outages occur and repeaters being utilized for emergency communications stop working, it is recommended that the output frequency of the repeater be use in

'simplex' mode along with relay stations to handle all traffic. Once the repeater system is on the air again, the transition back to repeater operation is simple. This method should be practiced whenever possible in order to understand the geographical challenges presented and for training operators in relay operations.

### **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 exposure 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 ARES® Interoperability Document contained in the reference section of the Missouri ARES® Website ([www.ares-mo.org/reference.asp](http://www.ares-mo.org/reference.asp)). Some of the most commonly utilized frequencies are listed as follows:

Mnemonic	Freq	TX CTCSS	Primary area of usage
HVCall	146.550	CSQ	Statewide - PRIMARY CALL
HUCall	446.000	CSQ	Statewide – UHF CALL
HMCall	52.550	CSQ	Statewide – 6 M CALL

It is also suggested to try on local repeaters and national simplex calling frequencies if contact is not made on the frequencies outlined above.

See the Missouri Section ARES® Digital Plan Addendum for more information on digital operation in the Missouri Section. This plan and any addendums are available from the Missouri ARES® website on the ARES® links page. ([www.ares-mo.org/ares\\_links.asp](http://www.ares-mo.org/ares_links.asp))