Radio Amateur Civil Emergency Service Communications Plan

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Record of Changes

Change Number	Date of Change	Description of Change	Completed By

I. Purpose

The primary purpose of this plan is to establish and support a state radio amateur civil emergency service (RACES) program to provide official communications supplemental to established state communications systems. Second, this plan is to be utilized as a guide by county governments in the development of local RACES programs.

To provide emergency management with amateur radio communications through networks using state, county, and/or privately owned equipment, authorized under the Federal Communications Commission (FCC) and operated by licensed amateur radio operators in RACES. County plans should conform to the current State RACES plan and a copy should be provided to Kansas Division of Emergency Management (KDEM) to provide as an attachment to this plan.

II. Background

RACES is an organization of amateur radio operators who volunteer to provide radio communications for state and local governments in times of emergency. Created in 1952 to primarily serve in civil defense emergencies, RACES provides essential communications and warning links to supplement state and local government resources during emergencies.

RACES is a special part of the amateur operation sponsored by the Federal Emergency Management Agency (FEMA). RACES provides emergency communications for emergency management. RACES is conducted by amateurs using their primary station licenses or by existing RACES stations. In the event that the president invokes the war emergency powers, amateurs officially enrolled in the county emergency management group would become limited to certain frequencies, while all other amateur operations would be silenced.

III. Authority

This plan is applicable to all RACES operations within Kansas and is issued under the authority of, and in accordance with, the documents listed below and supersedes all previous editions:

- a. Federal Communications Commission Rules and Regulations, Part 97
- b. Federal Emergency Management Agency Guidance for Radio Amateur Civil Emergency Service (CPG 1-15)
- c. Kansas Emergency Management Act (KSA Chapter 48, Section 9)
- d. Kansas Response Plan

During an emergency, RACES is operated under the direct control of emergency management, as authorized by the FCC, KDEM, and county emergency management agencies.

IV. RACES Eligibility

Any United States citizen who possesses a valid amateur radio license – technician class or higher – is eligible to become a member of RACES. All RACES operators are required to

operate within the restrictions of their license class, per FCC rules and regulations, Part 97.

V. Procedures for Establishing a RACES Program

The following procedures are to be followed for establishing a RACES program:

- a. To establish a RACES program, the director/coordinator of a state or county emergency management office should first appoint, in writing, a reliable amateur to serve as the RACES Officer. This individual serves as a liaison between the RACES program and the director's/coordinator's office and assists in the development of the RACES organization, recruits members, and keeps the Director, EOC, informed of all RACES activities, progress, and needs.
- b. The RACES Officer is a general class amateur, or higher, and should be thoroughly knowledgeable of FCC rules and regulations and familiar with the functions of the Amateur Radio Relay League (ARRL) and the Amateur Radio Emergency Services of the ARRL. Individuals with strong organizational abilities, good verbal and written communications skills, and experience in emergency management, emergency operations center operations, or incident management may be ideal candidates.

VI. RACES Membership

Membership in RACES is based at the county level. Individual members will register with the RACES Officer in their county. The county RACES Officer will provide a list of prospective RACES members to the county emergency management director/coordinator, who will approve or deny the individual's membership in RACES. A current list of RACES members will be maintained by the county RACES Officer and county emergency management office.

RACES members should be registered in one county only. If a member is registered in more than one county, and there is a need for RACES volunteers in multiple counties, it could be impossible for individual county emergency managers to know the number of volunteers available.

VII. Background Checks

KDEM or county emergency management directors/coordinators may conduct background checks of RACES officers and team members assigned for operation in RACES programs. All operator personnel will be provided with identification cards assigned by the authority having jurisdiction. Facilities available for conducting background checks include:

- Local Police Departments for local records checks only;
- County Sheriff's Offices for local records checks only; and
- Kansas Bureau of Investigation (KBI) for complete criminal history record information.

Complete criminal history record information (CHRI) is the summary of arrests and prosecutions for criminal charges. Each state has a single central repository that is

responsible for maintaining that state's CHRI. KBI operates the Kansas central repository for CHRI. The general public may obtain the following types of adult conviction criminal history information:

- Court convictions for violations of Kansas law that are felonies or class A
 or class B misdemeanors. Class C misdemeanor assaults are also part of the
 database.
- Court convictions for violations of municipal ordinances or county resolutions that are equivalent to class A or class B misdemeanors or class C misdemeanor assaults under state statute.
- Confinements in Kansas Department of Corrections facilities.
- Records of arrests within the past twelve (12) months are also released when the records of disposition have not yet been received.
- Active diversions that have not yet been successfully completed.

A name-based record CHRI may be completed through KBI online at http://www.kansas.gov/kbi/criminalhistory/ for a nominal fee. The following information is needed to complete the CHRI: the subject's first name, last name, and date of birth. If you also know the subject's social security number (SSN), middle name, alias names, height, weight, race, place of birth, residence and occupation, these additional items of information may be helpful in locating the record or determining that the subject has no record.

VIII. Amateur Radio Operator Credentialing and Resource Typing

During a large scale event, the need for additional communications resources can quickly overwhelm the locally available operators. The logical resolution is to request support from the non-impacted areas nearby. The result is an emergency management staff working with operators who they don't know and thus aren't confident in their skill set. The reason for this is no method for demonstrating skills and relating them to their value during a response. This problem is not unique to radio communications, but true of almost all disciplines. The resolution proposed as part of the National Incident Management System (NIMS) is resource typing. The concept of resource typing is to classify both personnel and assets so that when a resource is requested the requesting agency gets what they need. To date, FEMA has not applied their typing scheme to amateur radio.

To resolve this issue and give those emergency managers some idea of what our skills sets are, the State RACES Working Group has developed a set of personnel typing requirements for amateur radio operators that follow the NIMS resource typing format. The main objective is to make it easy for the receiving emergency management agency to have some sense of what a particular operator's skills are and to provide confidence that a particular operator would be comfortable and able to complete a task or challenge that might be assigned to them. This should be considered a *minimum* set of requirements for each classification. If a group should so choose they could add additional skills and abilities as they see fit. Each operator must have their type qualification signed off by their sponsoring organization's leader and the designated emergency management official from

the sponsoring emergency management agency. Amateur radio operator credentialing and resource typing guidelines are outlined in *Attachment B*.

There will be a two (2) year grace period from the date of this plan for already operational RACES officers or RACES team members. RACES officers and/or RACES team members who do not complete the training set forth by the State RACES working group within two (2) years will not be credentialed as a part of the statewide comprehensive resource management and credentialing system (CRMCS).

IX. Insurance

The State of Kansas does not provide insurance of any type (worker's compensation or otherwise) for RACES program volunteers. The county where the RACES member is registered may elect to provide insurance for RACES volunteers. This is solely at the discretion of each individual county's board of county commissioners.

X. Situation and Assumptions

A. Situation

The state recognizes the potential of natural, man-made, and technological occurrences affecting the lives and property of the citizens of Kansas. In any case, local and state and government capability to respond to alleviate suffering and hardship is based in large part on the availability of adequate communications.

B. Assumptions

Emergency or disaster situations, whether natural, man-made, or technological, have the potential and tendency to overload, or in some cases destroy normal established communications systems. As a backup to these systems, supplemental emergency communications is a necessity.

XI. Concept of Operations

RACES is a part of the amateur radio service and utilizes this services radio frequencies in support of official support of official emergency communications. The FCC is the regulatory authority for the non-governmental radio spectrum that portion of the radio spectrum allocated to civilian use, of which the amateur radio service is a part. The FCC regulates the use of frequencies within the amateur radio service through Part 97 of the FCC rules and regulations, which covers both the technological and operational aspects of this service. Part 97 specifically addresses RACES operations within Subpart F. All RACES operations within the State will be conducted in accordance with Sub-part F. In situations not covered by this Subpart, other Subparts of Part 97 will apply. State and county RACES programs shall operate under their respective jurisdictional RACES Plan and standard operating procedure, as applicable. The State RACES plan shall be written as a non-conflicting supplement to the FCC rules and regulations, part 97. County RACES plan shall be written as non-conflicting supplements to both the FCC rules and regulations and this plan.

State RACES radio regions shall correspond with the state homeland security regions (see attachments). RACES radio networks may be established by both state and county government emergency management agencies to support voice and data communications.

XII. Organization and Assignment of Responsibilities

A. General

As defined in section XI of this plan and prescribed by FCC in its rules and regulations, RACES is an amateur radio service in support of emergency management agencies. Therefore, state and county government RACES functional structures will parallel the existing emergency management organizational structures.

B. Emergency Management Organization

The emergency management director/coordinator of each county within the state is responsible for the emergency management program within their respective jurisdiction.

At the state level, KDEM is created by the Kansas Emergency Management Act to conduct the emergency management functions of planning and coordination of state resources prior to, during, and after a disaster.

C. RACES Organization and Assignment of Responsibilities

1. State RACES program

- a. The Deputy Director of KDEM appoints the State RACES Officer, approves the State RACES Plan, standard operating procedures, and certifies all State RACES affiliates.
- b. The Response and Recovery Branch is responsible for administering the State RACES program and oversight of the State RACES Officer.
- c. The State RACES Officer is responsible to the Response and Recovery Branch Director, or their designated representative, for promoting RACES to county governments; providing subject matter expertise for development and sustainment of county RACES programs; providing status updates pertaining to county RACES programs; coordinating monthly RACES radio nets; providing advice and assistance on matters concerning amateur radio communications; and maintaining the state emergency operations center (SEOC) amateur radio room.
- d. The State RACES program will work in coordination with other county RACES programs and amateur radio groups at the local, state, and federal levels of government as needed to augment amateur radio communications.

2. County RACES programs

a. The county emergency management director/coordinator is responsible for appointing the County RACES Officer, approving the county RACES

- Plan, standard operating procedures, and certifying all county RACES team members.
- b. The County RACES Officer is responsible to the county emergency management director/coordinator, or their designated representative, for developing and maintaining the county RACES plan and standard operating procedures using the State RACES Plan and FCC rules and regulations as a guideline; promoting RACES within the county; conducting the county RACES program in accordance with established policy and procedures; providing advice and assistance on amateur radio communications; and providing status updates pertaining to county and state RACES programs.

XIII. Direction and Control

A. State RACES Program

Authority for direction and control of the overall State RACES program has been delegated to the State RACES Officer. Upon activation of the state network, the net control station (NCS) will be the SEOC. Station call sign WXØKR, or a station delegated to assume the NSC function.

B. County RACES Programs

Authority for direction and control of the county RACES program may be delegated to the county RACES Officer. Upon activation of the county network, the NCS is normally the county emergency operations center, or a station delegated to assume the NCS function. When interfacing with the state RACES network, county RACES stations or any other certified emergency communication stations will comply with the State RACES Plan.

XIV. RACES Activation

All RACES activation must be through the appropriate county or state emergency management office. The statewide RACES net will be activated upon direction of the State RACES Officer or other proper authority at KDEM. Only the county emergency coordinator/director, or their designated representative, has the authority to activate RACES on a county level. State RACES operations may be augmented through mutual aid from county RACES programs and/or the Adjutant General's Department Amateur Radio Club. No RACES volunteer will self-deploy and travel to a disaster area without prior approval of the county emergency management director/coordinator or through the RACES Officer.

XV. Continuity of Operations

Lines of succession are necessary in all organizations to maintain an orderly and efficient operation in the absence of those individuals in authority. This is no less important in voluntary organizations. Many volunteers have primary occupations and contribute to the organization whenever their primary jobs allow. No volunteer can, nor should be

expected to preempt their primary responsibility on every occasion the individual is called upon to support the volunteer organization. Therefore, since absences are to be expected, occasionally all RACES programs within the state are encouraged to have adequate alternates to the primary positions identified in their membership roles. In the absence of the primary officer, the RACES officer designated by the primary officer as the next alternate officer in line will assume authority.

XVI. Training and Exercises

A. Training

The state will establish monthly nets to enhance the communication techniques and abilities of each operator.

B. Exercises

The state will utilize RACES Officers, including county RACES programs, when exercising emergency operations plans whereby normal communications would be degraded or non-existent. County emergency management directors/coordinators should likewise plan to utilize their local RACES team members when conducting exercises. This will determine the abilities and limitations of the RACES networks and enable members to develop and practice skills necessary during an actual emergency.

XVII. RACES Plan Development, Maintenance, and Implementation

- A. The KDEM response and recovery branch director and the state RACES officer are responsible for the development, maintenance, annual review, and distribution of the State RACES Plan.
- B. County emergency management directors/coordinators and the county RACES officers for their respective jurisdictions are responsible for the development, maintenance, annual review, and distribution of county RACES plans.
- C. Changes to this plan may be recommended in writing to the KDEM response and recovery branch director or state RACES officer.
- D. This plan supersedes all previous editions of the State of Kansas Radio Amateur Civil Emergency Services Communications Plan and is effective upon signing by the KDEM deputy director.
- E. This plan may be reproduced without prior authorization.

XVIII. Attachments

The following attachments are considered to be part of this plan:

- Attachment A: FCC Rules and Regulations Governing RACES
- Attachment B: Amateur Radio Credentialing and Resource Typing Definitions
- Attachment C: Map of the regional RACES Areas for the State
- Attachment D: State RACES Program Contacts

- Attachment E: Frequency assignments for state, regional, and county RACES Organizations
- Attachment F: List of state, regional, and county nets (including frequency, time, net control station, location, and FCC call sign)
- Attachment G: Phonetic Alphabet
- Attachment H: Sample County Network Operations Plan for RACES

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Angee Morgan, Deputy Director Kansas Division of Emergency Management	Date	

Attachment A

FCC Rules and Regulations Governing RACES

97.407 Radio Amateur Civil Emergency Service

- A. No station may transmit in RACES unless it is an FCC-licensed primary, club, or military recreation station and it is certified by a civil defense organization as registered with that organization, or it is an FCC-licensed RACES station. No person may be the control operator of a RACES station, or may be the control operator of an amateur station transmitting in RACES unless that person holds a FCC-issued amateur operator license and is certified by a civil defense organization as enrolled in that organization.
- B. The frequency bands and segments and emissions authorized to the control operator are available to stations transmitting communications in RACES on a shared basis with the amateur service. In the event of an emergency which necessitates invoking the President's War Emergency Powers under the provisions of section 706 of the Communications Act of 1934, as amended, 47 U.S.C. 606, RACES stations and amateur stations participating in RACES may only transmit on the frequency segments authorized pursuant to part 214 of this chapter.
- C. A RACES station may only communicate with:
 - 1. Another RACES station;
 - 2. An amateur station registered with a civil defense organization;
 - 3. A United States Government station authorized by the responsible agency to communicate with RACES stations;
 - 4. A station in a service regulated by the FCC whenever such communication is authorized by the FCC.
- D. An amateur station registered with a civil defense organization may only communicate with:
 - 1. A RACES station licensed to the civil defense organization with which the amateur station is registered;
 - 2. The following stations upon authorization of the responsible civil defense official for the organization with which the amateur station is registered:
 - i. A RACES station licensed to another civil defense organization;
 - ii. An amateur station registered with the same or another civil defense organization:
 - iii. A United States Government station authorized by the responsible agency to communicate with RACES stations; and
 - iv. A station in a service regulated by the FCC whenever such communication is authorized by the FCC.
- E. All communications transmitted in RACES must be specifically authorized by the civil defense organization for the area served. Only civil defense communications of the following types may be transmitted:

- 1. Messages concerning impending or actual conditions jeopardizing the public safety, or affecting the national defense or security during periods of local, regional, or national civil emergencies;
- 2. Messages directly concerning the immediate safety of life of individuals, the immediate protection of property, maintenance of law and order, alleviation of human suffering and need, and the combating of armed attack or sabotage;
- 3. Messages directly concerning the accumulation and dissemination of public information or instructions to the civilian population essential to the activities of the civil defense organization or other authorized governmental or relief agencies; and
- 4. Communications for RACES training drills and tests necessary to ensure the establishment and maintenance of orderly and efficient operation of the RACES as ordered by the responsible civil defense organization served. Such drills and tests may not exceed 1 hour per week. With the approval of the chief officer for emergency planning in the applicable State, Commonwealth, District or territory, however, such tests and drills may be conducted for a period not to exceed 72 hours no more than twice in any calendar year.

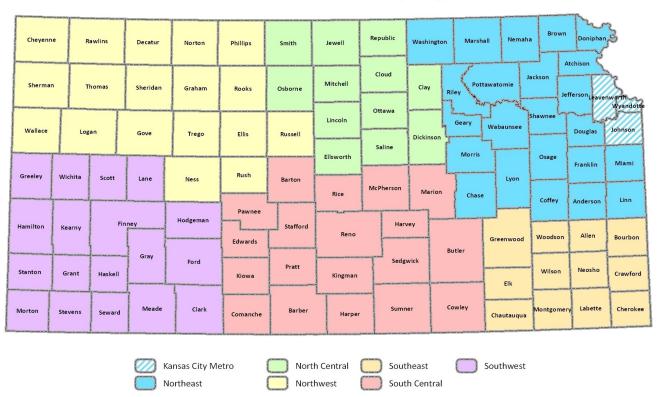
All other rules governing operation in the Amateur Radio Service must also be followed.

Attachment B Amateur Radio Credentialing and Resource Typing Definitions

Resource: Amateur Radio Operators				
Category: ESF-2 Communications			Kind: Individual Credentials	
Type I RACES_1	Type II RACES_2	Type III * RACES_3	Type IV ** RACES_4	
 All of Radio Operator II plus the following: Hold a leadership in an Emcomm group Have a demonstrated ability to lead and direct radio operators, demonstrated by either coordinating public service events, or creation and execution of live radio training or exercises with groups of 10-15 or more Public Service and Emergency Communications Management for Radio Amateurs – ARRL Course #EC-016, or all of the following:	 All of Radio Operator III plus the following: Proficiency in one mode other than voice (i.e. digital, code, RTTY, ATV, etc.) Introduction to Emergency Communication – ARRL Course #EC-001, or all of the following: IS-1: Emergency Manager, An Orientation to the Position IS-120: An Introduction to Exercises IS-139: Exercise Design IS-235: Emergency Planning IS-288: The Role of Voluntary Agencies in Emergency Management Operating proficiency as a net control Government issued photo identification 	 All of Radio Operator IV plus the following: General Class License (or higher) IS-200: ICS for Single Resources and Initial Action Incidents IS-800: National Response Framework, An Introduction Act as a Net Control for an amateur radio net at least once Emcomm Group issued identification (ARES, RACES, etc.) Government issued photo identification * Minimum qualifications for County and State RACES Officers 	 Technician Class License (or higher) IS-100: Introduction to the Incident Command System IS-700: National Incident Management System (NIMS), An Introduction Government issued photo identification ** Minimum qualifications for County RACES team members 	

Attachment C Map of Regional RACES Regions

Kansas Homeland Security Regions



Source: US Census Bureau: Kansas Division of Emergency Management

Kansas Adjutant General's Department Geographical Information System

Attachment D State RACES Program Contacts

Name	Affiliation	Call Sign	Contact Information
Susan Sims	State RACES Officer	KD00DN	wx0kr@yahoo.com
JD Spradling	State RACES Communications Unit Leader	KC0NYS	wx0kr@yahoo.com
Jonathan York	KDEM	KE0AUK	Office: (785) 274-1406
	Response & Recovery		jonathan.r.york5.nfg@mail.mil
	Branch Director		
Devan Tucking-Strickler	KDEM		Office: (785) 274-1596
	Human Services Officer		devan.n.tucking.nfg@mail.mil
Marlo Tangney	KDEM		Office: (785) 274-1409
	Communications Officer		marlo.g.tangney.nfg@mail.mil

Attachment E Frequency Assignments for State and County RACES Organizations

Band	Mode	Frequency	Repeater
80 meters	CW	3.525 MHz	No
80 meters	LSB	3.982 MHz	No
80 meters	LSB	3.950 MHz	No
80 meters	DATA	3.950 MHz	No
60 meters	LSB	5.357 MHz	No
40 meters	CW	7.060 MHz	No
40 meters	LSB	7.282 MHz	No
40 meters	LSB	7.200 MHz	No
20 meters	USB	14.255 MHz	No
15 meters	USB	21.275 MHz	No
10 meters	USB	28.480 MHz	No
6 meters	USB	50.525 MHz	No
2 meters	FM	146.520 MHz	No
2 meters	FM	145.250 MHz	Yes



Attachment F List of State, Regional, and County Nets (Including frequency, time, Net Control Station, location, and FCC Call Sign)

To be developed

Date/Time	Frequency

Insert State RACES nets information

Attachment G Phonetic Alphabet

A	Alpha
В	Bravo
С	Charlie
D	Delta
E	Echo
F	Foxtrot
G	Golf
Н	Hotel
I	India
J	Juliet
K	Kilo
L	Lima
M	Mike
N	November
0	Oscar
P	Papa
Q	Quebec
R	Romeo
S	Sierra
Ť	Tango
U	Uniform
V	Victor
W	Whiskey
X	X-Ray
Y	Yankee
Z	Zulu

Attachment H Sample County Network Operational Plan for RACES

COUNTY NETWORK OPERATIONAL PLAN FOR RACES

I. Purpose of County Network

The purpose of this network is to provide command and control communications to back up other existing communication facilities and to establish new communication links as required carrying out the emergency management mission. The primary mission of RACES is to provide communications where required and as assigned by the State or county emergency management director to assist in accomplishing the following:

- (1) Movement of public to shelters;
- (2) Communications from shelters to the county emergency operations center;
- (3) Communication between shelters within the county;
- (4) Communications from the county emergency operation center to the regional or state network and other counties;
- (5) Communications from the county emergency operation center to other cities or key points located within the county, law enforcement, fire, hospitals, national weather service, etc.; and
- (6) Fixed and mobile communications to support other county emergency management services as assigned by the county emergency manager, or their designee, such as storm spotters, transportation, search and rescue, etc.

II. Station Assignments

Fixed and mobile RACES assignments to carry out the above described mission will be made by the county RACES officer as approved by the county emergency manager, or their designee. Insofar as practical, existing privately owned fixed and mobile RACES stations will be utilized, particularly in the mobile service, during an emergency. Consideration will be given to relocation of private-owned fixed equipment to shelters, if the need develops. County owned fixed RACES stations may be procured by county emergency management and permanently installed in the county emergency operations center or other locations as needed.

III. Other Emergency Assignments

Special RACES communication assignments other than listed above may be made for inner or inter-county uses depending upon the situation under emergency operations. Such assignments will be made as requested by the county emergency manager, or their designee. These may include other forms of communications such as use of other radios services, telephone, fax, etc.

IV. Practice Drills and Training

County RACES programs are encouraged to conduct regular drills or exercises to maintain operational readiness.

V. Attachments

The following listed attachments are considered to be part of this plan:

- Attachment A: Diagram of county, showing cities and emergency operation centers
- Attachment B: Authorized frequencies assigned to the county and local RACES network and their linking to secondary stations and net controls
- Attachment C: List with county RACES officer, alternates, and RACES members

Signed:			
County Emergency Manage	ement Director	Date	
County RACES Officer		Date	