Jefferson County
Amateur Radio Emergency Service/
Radio Amateur Civil Emergency Service
Emergency Operations Plan

I. IMPLEMENTATION

A. Activating the Plan

1. In an emergency in which Amateur Radio might serve the community, hams may be alerted in accordance with the Jefferson County Emergency Operations Plan by the Jefferson County Emergency Management Director/Communications Officer notifying the Emergency Coordinator or the designated Assistant Emergency Coordinator.

2. Any member of JefCARES who for any reason suspects a communications emergency exists should monitor the assigned net for activity. If no net is in progress and local telephone service is available, the EC and/or AECs should be notified by telephone. The Jefferson County Sheriff Dispatcher may call the TCARC repeater via the reverse autopatch.

3. The ARES Emergency Coordinator will design, organize and staff the communications networks to fill the emergency communications needs and initiate the mobilization procedure.

B. ARES Mobilization Procedure

1. Hams will immediately establish communications with the EC and/or AEC on the **TCARC Repeater 145.49 MHz** (144.89 input ~ CTCSS 123.0) FM repeater to determine if a mobilization request has been received whenever -

   a. Direct observations indicate that an emergency condition might exist.

   b. An Alert or Warning is issued on NOAA Weather Radio or the Wisconsin Emergency Broadcast System.

   c. Local broadcast station WFAW or another commercial broadcast station, broadcasts an alert from Jefferson County Emergency Management notifying the community of an emergency situation.

   d. When called by an EC, AEC, or fellow ham in accordance with a telephone alerting "tree," call web, or other alerting system.

e. When a general call for activation or other assistance is issued on the TCARC 145.49 MHz FM repeater. Call-up sequence 300* for severe weather and 650* for net status.

2. Upon the awareness or notification that a **communications emergency** exists, members of JefCARES will call into the Jefferson County Emergency Net on the TCARC repeater (144.89 / 145.49 MHz FM CTCSS 123.0) with the output, 145.49 MHz FM simplex, as an alternate frequency.

a. **Mobile units** are activated and dispatched to the Jefferson County Emergency Operations Center (EOC) at UW Extension (Collins Road, Jefferson) or to the sheriff's office, the courthouse, or other staging areas if requested by the County Emergency Manager.

b. The EC will assume net control or delegate another station as net control station (NCS). Control may be from the Jefferson County EOC or such other location as specified by the EC/AEC in charge of the activation.

3. **Simplex** –If the 145.49 repeater fails, our first simplex choice will be 145.49.
The assigned state ARES simplex frequencies for Jefferson County areas follows:
147.42 MHz. PL 162.2 Hz. and 446.150 MHz. PL 162.2 Hz.

4. **Alternate repeaters** which may be utilized for liaison or back-up are:

a. 146.22/.82 MHz (146.22 input ~ CTCSS 127.3) Delafield wide area repeater; may be monitored by the South East Region Emergency Management office, the State EOC; or linked to 146.67 when Milwaukee/Waukesha ARES is activated.
b. 145.45 MHz (144.85 input ~ CTCSS 123.0) Janesville Repeater; may be used for Central backbone net for Sullivan Weather.
c. 146.715 MHz (146.115 input ~ CTCSS 123.0) Clinton Repeater.
d. 147.15 MHz (147.75 input ~ CTCSS 123.0) Madison wide area repeater. may be linked to Wisconsin Emergency Management.
e. 145.13 MHz (144.53 input ~ CTCSS 127.3) Milwaukee wide area repeater; may be used as a backbone net for Sullivan Weather Skywarn; also designated state RACES frequency.
f. 146.865 MHz (146.265 input ~ CTCSS 123.0) Elkhorn repeater southeast.
g. 147.36 (147.96 input ~ CTCSS 123.0) Cambridge – part of the state-wide WECOMM system

5. Packet Radio nets may be established to handle the more sensitive messages between active locations equipped with either permanent (such as the EOC) or ham-provided portable packet stations. The ARES packet frequency will be 145.61 MHz or as announced.

C. Operations

1. **A Net Control Station** (NCS) will establish a directed net on 145.49 MHz (144.89 MHz input - CTCSS 123.0) and receive check-ins from responding hams. Check in by giving your FCC-assigned call sign. NCS will probably instruct you to (1) stand by, (2) report to a staging area with appropriate equipment (identified by NCS) or (3) report to a public official or agency at a specified location such as the EOC, Fort Atkinson Hospital, or an activated shelter. If you have one, take along an HT with additional batteries and/or power packs and some type of gain antenna.

2. **You should call the NCS by giving your tactical call sign** (assigned location) when:
   a. Reporting on station.
   b. When you have emergency traffic, or
   c. When directed by the NCS.

3 . To avoid confusion**, tactical call signs**, denoting your function or location, will probably be used. You need only to *sign off* the exchange of transmissions with your FCC-assigned call sign to conform to FCC rules, e.g., "Fort Hospital, N9XYZ, Out."

   An exception would be if your communication with NCS or another station lasts longer than 10 minutes. Then, identify at least once every 10 minutes with your assigned call sign, completing that communication as above.

4. **Think** about what you need to say before keying the mike. Time can be critical. Talk like a telegram, rather than like a long letter. Follow the NCS's instructions explicitly and promptly. Use “break tags” as needed.

5 . **If you are directed to cover an official or agency**, report directly to the person in charge, identify yourself, briefly explain the capabilities of the ham net and answer any questions he/she may have.

6. **All written messages** must be standard ARRL form, see Appendix A (FSD-218) or ICS-213 format.

   a. All messages must be signed by the official who originates them, with his/her title, taking responsibility for their contents.

   b. Message precedences of EMERGENCY, Priority, Welfare, and Routine, as defined on ARRL Form FSD-218, shall be used on all formal messages. The precedence is assigned by the originator, i.e. the agency we serve. ICS-213 precedences are Urgent, Immediate, and Routine.

c. Stations do not transmit unless called by net control. The only exception to this is for a station having EMERGENCY traffic.

7. **If you become aware of an unrecognized need**, notify the NCS. Under no circumstances pass informal queries or information. Never transmit your own observations or opinions, unless asked by competent authority. Everybody has a scanner.

8. **Never quit your post without authorization** from the NCS or if relieved by a responsible official, because you may be needed elsewhere.

9. **NCS will plan for additional relief operators as needed**.

10. **If using a repeater and it fails**, go to the repeater output frequency in simplex mode, the designated alternate repeater, or, as assigned, 147.42 MHz simplex (162.2 Hz).

11. Under some situations it may be necessary to pass traffic outside of the local area. **Liaison stations** may be assigned to the following nets:

    a. **147.15 MHz** (input 147.75 ~ CTCSS 123.0))Wisconsin Emergency Management EOC Hamshack (also 3977.5 KHz SSB and 3555 CW),

    b. **147.36 MHz** (input 147.96 ~ CTCSS 123.0) WECOMM system

    c. **3967 KHz**. Wisconsin ARES/RACES Net

    c. **3.985 MHz** (0500 local time) Badger Weather Net

    d. **3.985 MHz** (1200 local time) Badger Emergency Net

    e. **3.985 MHz** (1700 local time) Wisconsin Side Band Net

    f. **3.555 MHz** (1900 & 2200 local time) Wisconsin Intrastate Net (CW)

12. **If RACES is activated**, only hams officially enrolled in a civil -preparedness organization may contact other RACES stations. All registered members of JefCARES are simultaneously registered as RACES operators. RACES nets may be activated on:

    a. 147.15 MHz (147.75 MHz input ~ 123.0) Madison MARA wide area repeater, possibly linked to the 145.13 Milwaukee MAARS wide area repeater
    b. 3.967 MHz Wisconsin ARES/RACES net
    c. 147.36 MHz. The WECOMM statewide system

13. **Wisconsin Emergency Management** may be reached through **WINLINK** at WDMAWEMHAMS@winlink.org, **PACTOR** on 7087 KHz. LSB, **Packet** – 145.610 (wc9aag@wc9aag.en53ja.wi.usa.noam), **APRS** 144.390 MHz.

BREAK TAGS

There are currently seven one-word Break Tags. They are: "answer," "question," "info," "priority," "medical," "emergency" and your call sign. Most of these tags have been used with great success in large public/emergency services nets. Here is how they work: Instead of saying "break" between transmissions during a directed net, the operator uses the word specified as a Break Tag without a call sign. They are to be used only when the operator's traffic will be appreciated by net control and results in more efficient communication. They are to be used wisely, as net control is directed to stop and turn over the net to the breaker. The message that follows a break should be as short as possible. Definitions and use:

"Answer": To be used when you have the definitive answer to a question currently being discussed on the air.

"Question": To be used when the answer of a question can't wait; for example, when the mayor is standing next to you and requesting you to get information using your radio.
"Info": To be used when information needs to be transmitted rapidly but is not related to what is being said on the air; for example, if an event that net control needs to know about is going to happen in the next few seconds or if waiting for the end of an exchange will negate the value of the information.
"Priority": To be used to report an important but non-life threatening situation such as a fender-bender that just happened.
"Medical": To be used to report a minor medical incident that affects the operator in some way; for example, having to leave his/her post for a few minutes to walk someone with a minor cut over to a med tent.
"Emergency": Only to be used to report an ongoing life or property threatening or damaging incident.
Your Call Sign: An indication that the operator has traffic that can wait and does not require the cessation of the ongoing exchange. This tag is an expectation to be put on hold and in queue for transmission.

II. SCOPE & PURPOSE

The purpose of this plan is to provide a written guide with the minimum information needed for the authorization and mobilization of volunteer amateur radio operators to provide communications in an emergency. Each emergency is different and flexibility to provide an adequate response is a necessity.

The primary responsibility of the Jefferson County Amateur Radio Emergency Service (JefCARES) is to provide Jefferson County and the surrounding area with an effective emergency communications support system which functions as a part of the Jefferson County Emergency Operations Plan. Jefferson County is in the Southeast Region of Wisconsin Emergency Management.

Special Event communications, sponsored by either JefCARES or local amateur radio clubs may be provided during non-emergency periods. These activities provide members with training, experience, and an opportunity to field test equipment and operating procedures while performing a public service and providing essential communications support to the requesting organization.

Jefferson County area amateur radio operators ("hams"), licensed by the Federal Communications Commission (FCC) to operate radio equipment in the amateur radio service, have voluntarily registered their capabilities, radio equipment, and operating skills to assist in public service and emergency communications through the Jefferson County Amateur Radio Emergency Service (JefCARES).

Under FCC regulations, amateur radio operators may not be compensated for providing communications and any communication in the conduct of a ham's and/or their employer's business is prohibited.

JefCARES functions under this Emergency Operations Plan under the direction of the Jefferson County Emergency Coordinator (EC), who is appointed by the American Radio Relay League Wisconsin Section Emergency Coordinator.

The EC may appoint Assistant Emergency Coordinators (AECs) as needed for the JefCARES to function efficiently.

The following agencies could be served during a communications emergency: The American Red Cross, local hospitals, Jefferson County Emergency Management, National Weather Service (NWS), The Salvation Army, City Police, County Sheriff, or any other Public Service or Emergency Response Agency requesting assistance.

III. Information for Officials

1. Amateur radio operators are trained communicators. When acting in that capacity, they are not interpreters, evaluators, or field commanders. Their purpose is to transmit messages given to them by responsible officials.

2. Messages must be written and signed by name and title of the responsible official.

3. By this plan, amateur radio operators are prohibited from transmitting personal observations or opinions, unless specifically requested by a responsible official. This avoids misinterpretation by citizens who may be listening on scanners.

IV. AUTHORITY

Communications Act of 1934, as amended; Title 47 US Code 97.1 et seq., Federal Communications Commission Rules and Regulations, Amateur Radio Service; Jefferson County Emergency Operations Plan, Annex B.

V. REFERENCE

Incident Command System

All fire personnel and many law enforcement agencies use the Incident Command System (ICS), a management tool designed to assist anyone who has responsibility for the successful outcome of an emergency incident. An emergency incident is any planned or unplanned occurrence or event, regardless of the cause, which requires action by emergency service personnel to prevent or minimize loss of life or damage to property or natural resources. Here are some ICS terms and definitions you may hear or need to pass messages.

Incident Commander (IC) - The person responsible for the management of the incident. In very small incidents, this person may accomplish all the ICS functions without assistance. However, the IC will usually delegate some responsibilities, although the IC still has overall responsibility. It is common to encounter incidents which cross jurisdictional boundaries. When this happens, it is common for a subset of ICS known as **Unified Command** to be put into place. This allows multiple jurisdictions to set unified objectives and strategies.

Incident Command Post (ICP) - (or **Command Post**) - The place where the IC and other members of the Command Staff do their work. The Command Staff assists the IC and reports directly to the IC. In a large incident, all five of the following sections of the Command Staff may be operating. The heads of 2 - 5 are known as **Chiefs**.

1. **Command** - The incident Commander
2. **Operations** - responsible for directing tactical actions to meet incident objectives. The Operations Section commonly uses **Branches, Divisions, Groups, Task Forces,** and **Strike Teams** to maintain unity, chain of command, and span of control.
3. **Planning** - responsible for collection, evaluation, and display of incident information. It also maintains status of resources, preparing the **Incident Action Plan** and incident-related documentation.
4. **Logistics** - responsible for providing adequate services and support to meet all incident or event needs. ***This is the section where communications groups, including hams, are managed.***
5. **Finance and Administration** - responsible for tracking incident-related costs, personnel and equipment records and administering procurement contracts associated with the event.

Base - location where primary logistics functions are coordinated and administered. This may or may not be the same place as the CP (Command Post).

Clear Text - Plain English - no ten-codes or other agency-specific codes are used for communications. Under ICS, messages are supposed to be passed in clear text.

Dispatch Center - a facility from which resources are assigned.

EM - Emergency Manager, Donna Haugom in Jefferson County.

EOC - Emergency Operations Center. (Sometimes **ECC** - Emergency Communications Center Describes a radio room, often in or near the **EOC**.)

HazMat - Hazardous Materials

Helibase - facility for parking, fueling, maintenance, and loading of helicopters.

Helispot - designated location where helicopters can safely take off and land.

Information Officer - member of the Command Staff responsible for interfacing with the public and the media.

Mutual Aid - agreement between agencies to assist each other with personnel and equipment.

Perimeter - a zone or line that encloses an area of limited access. Note the following three zones inside a perimeter for HazMat incidents.

1. **Cold Zone** : an area that should contain no hazards related to the incident. The Command Post (CP) is located here, well away from the dividing line between the cold and warm zones. ***Hams must never come closer to an incident than the cold zone.***

2. **Warm Zone**: Intermediate between the hot and cold zones; an entry point to the hot zone. Persons who enter the warm zone need specialized training and equipment. No hams here.

3. **Hot Zone**: Most dangerous area, closest to the actual incident. Entry may be life-threatening. Anyone who has entered here is considered contaminated and must be decontaminated before leaving. No hams here.

Staging Area - locations where resources are placed while awaiting tactical assignment.

VI. ORGANIZATIONS

A. The Amateur Radio Service

The amateur radio service is established by the Federal Communications Commission (FCC) under authority of the Communications Act of 1934 as amended and in accordance with treaties agreed under the International Telecommunications Union.

The purposes of the amateur radio service include "recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications."

Amateur radio operators must pass written examinations on their knowledge of radio rules and regulations, operating techniques, and other areas of telecommunications and technical skills in the operation of radio equipment before being granted an FCC-issued operator/station license and an unique identifying call sign in the amateur radio service.

Under international agreements, frequencies throughout the radio spectrum are allocated to the amateur radio service. By appropriate selection of frequency, amateur radio operators may establish communications on a local, regional or international basis. All nations allocate valuable space in the radio spectrum to the Amateur Radio Service because of its ability to immediately respond in time of need and quickly establish communications where none existed or to supplement existing emergency radio services overloaded with disaster communications.

B. American Radio Relay League

The American Radio Relay League, Inc. (ARRL) is a noncommercial association of radio amateurs, bonded for the promotion of interest in amateur radio communication and experimentation, for the relaying of messages by radio, for the advancement of the radio art and of the public welfare, for the representation of the radio amateur in legislative matters, and for the maintenance of fraternalism and a high standard of conduct.

C. Amateur Radio Emergency Service

ARES is sponsored by the American Radio Relay League to provide supplementary or emergency communications for public service purposes when disaster strikes. Every licensed ham, regardless of membership in the ARRL or any other local organization, is eligible for membership in the ARES. ARES is organized on four levels: National, Sectional (the State of Wisconsin), District (South Central Wisconsin), and local (Jefferson County area).

D. Radio Amateur Civil Emergency Service

RACES, as part of the amateur radio service, is composed of amateur radio operators registered with a civil defense organization (in Wisconsin this is the State of Wisconsin Division of Emergency Management), or a RACES station licensed to a civil defense organization. RACES provides radio communications civil defense purposes only, during periods of local, regional or national civil emergencies. RACES stations may only handle communications specifically authorized by the civil defense organization for the area served.

Under FCC rules, RACES shares in the use of those frequencies which have been allocated to the Amateur Radio Service, however RACES is provided specific radio frequencies on which operations would continue in the event Emergency War Powers were invoked and normal radio communications were silenced.

F. National Traffic System

The NTS is sponsored by the American Radio Relay League to provide a network of local, state, area, and transcontinental radio circuits for the transmission of non-commercial message traffic in support of the public interest. The NTS operates daily.

VII. Drills, Tests and Alerts

1 An annual test may be conducted in conjunction with the nationwide ARRL Simulated Emergency Test, or as part of a Special Event.
2. The JefCARES Net meets every Wednesday at 2000 local time (8:00 p.m.) on 145.49 (144.89 input) MHz FM, the Tri County Amateur Radio Club repeater.
3. At the discretion of the EC, the JefCARES may be activated unannounced via a telephone tree at least once per year.

VIII. ARES/RACES Officials

ARES - Amateur Radio Emergency Service, sponsored by the American Radio Relay League (a private organization)

JefCARES - Jefferson County ARES Unit

Emergency Coordinator (head of ARES/RACES group of hams): Mike Birch, KD9BDL

Assistant Emergency Coordinators(s): Dennis Rybicke, K9LGU - Fort Atkinson

Section Emergency Coordinator (head of ARES for the state): Kyle Schaefer, KC9SDK

District Emergency Coordinator (ARES official in charge of several counties): Tom Burger, KA9KJE

RACES - Radio Amateur Civil Emergency Service, administered by Wisconsin Emergency Management (a governmental body).

Chief RACES Radio Officer (head of RACES for the state): Kyle Schaefer, KC9SDK

Emergency Manager (county government official in charge of response to the incident): Donna Haugom.

Jefferson County RACES Officer: Mike Birch, KD9BDL

Jefferson County Emergency Communicators:

Lance Shanahan (920-563-9720) (920-563-6023)
Dwight Maasz (920-563-9165) (920-563-2083)

Repeater Codes W9MQB 13

RESET TO TIMER	0	FORT POLICE	D77/770	K9LGU	21/22
SLOW CW	2	JEFF CNTY SHRF	D10/880	KG9NLP	51
12 HR TIME	3	N9ATB	44/45	KA9ODI	74
CTCSS ON/OFF	7 / 6	KC9CCT	93	N9PGY	40
NET CALL UP	650	KC9DLE	47/48	KD9PM	49
WX NET CALL UP	300	N9DTT/N9DTV	D02	AA9PN	61
RESET AFTER NET	400	W9FIB	39	KF9RG	67
RESET AP TIMER	8	K9FJM	101/102	W9RWS	69
		KC9FYL	23	N9QXQ	97
ANSWER PATCH	**9**	N9GBB	17	KC9QMM	58
ACCESS AP	10	AA9IK	37	N9UUY	68
DUMP AP	11	KC9IKI	75/76	WA9SAB	81
TONE TEST	123	KC9AEH	18	KB9TWL	42
FORT HOSP ER	D11/660	AB9KL/KB9ZDH	19	WA9VYL	6502/03
				KC9VSA	103
TX ON/OFF	998/999	KC9LGR KC9LGS	84/941 83/941	KB9WCC	90

Rev 102313Z

NTS MESSAGE FORM

NR_____ HX_____ STATION_____ CK_____ PLACE OF ORIGIN_____TIME_____DATE_____

TO: _____

_____

_____

_____

PHONE:_____

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

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_____ _____ _____ _____ _____

SIGNATURE: _____