

Memorandum of Understanding between Rocky Mountain Ham Radio and Arapahoe County ARES District 22

Purpose

The purpose of this document is to state the terms of a mutual agreement, a Memorandum of Understanding (MOU), between the Rocky Mountain Ham Radio (RMHAM) and Arapahoe County ARES District 22 (DISTRICT 22.) This document will serve as a framework within which DISTRICT 22 members will have access to RMHAM owned and operated repeaters and equipment in support of DISTRICT 22's Emergency Communications functions.

Background

ARES

As established under Federal Communications Commission's Rules and Regulations (47 C.F.R. Part 97), a primary responsibility of the Amateur Radio Service is the rendering of public service communications for the general public, particularly in times of emergency when normal communications are not available. Using the Amateur Radio Service frequencies, Amateur Radio operators have been serving the general public, both directly and through governmental and relief agencies, for more than 50 years. To this end, the American Radio Relay League (ARRL), the national association for radio amateurs, organized the Amateur Radio Emergency Service (ARES).

RACES

The Radio Amateur Civil Emergency Service (RACES) is an emergency service function defined under Part 97 of the FCC rules. RACES is a special service of the Amateur Radio Service that provides radio communications to local, county, or state civil preparedness agencies during periods of local, regional, or national civil emergencies. All of the authorized frequencies and emissions allocated to the Amateur Radio Service are also available to RACES on a shared basis. In the event that the President of the United States invokes his War Emergency Powers, RACES operators, using specially authorized amateur radio frequencies, may be the only Amateur Radio Operators permitted on the air.

Skywarn

Skywarn is a volunteer program sponsored by the National Weather Service (NWS). Each NWS office appoints a Skywarn Liaison from within its personnel. This Liaison is responsible for organizing the Skywarn program in their office's forecast area. Volunteers are trained by NWS meteorologists to spot severe weather and are given a list of criteria in which the NWS would like "spotters" to call with reports. The purpose of this program is to give forecasters information on "ground truth" so they can make a better interpretation of weather radar and remote sensor data. Also, severe weather watches and warnings may be issued based on Spotter observations. The Amateur Radio Service is utilized by many Skywarn Spotters to relay reports to a central Net Control

Station (NCS) who then makes a single phone call to the NWS forecast office with all of the collected spotter reports.

Organization of District 22

DISTRICT 22 is a combination of the ARES and Skywarn programs in Arapahoe County of Colorado. Leadership officials are more or less common among the two groups, effectively combining the three programs into one. DISTRICT 22 members hold membership in ARES (and RACES when activated as such by the Emergency Manager for the Arapahoe County Sheriff's department), and most are also trained Skywarn spotters. This enables DISTRICT 22 to respond to any communications emergency with the same group of amateur radio operators, insuring Continuity of Operations (CONOPS) as the situation changes.

Organization of RMHAM

RMHAM, founded in 1994, exists as an association of persons commonly interested in the Amateur Radio Service and the betterment of the hobby by proliferating the highest quality communications systems and support. RMHAM is an ARRL Affiliated club

It is the stated purpose of RMHAM, to further the exchange of information and co-operation between amateur radio operators as a whole, to promote radio knowledge, fraternalism and individual operating proficiency, and to conduct club programs and activities for the advancement of the general interest and welfare of Amateur Radio in the community, and for the advancement of the "RMHAM" facilities for the benefit of all.

RMHAM will provide its equipment for emergency communications organizations on an as needed, first come, first serve basis. RMHAM operates the following repeaters and hardware in the Denver Metro Area:

449.225 +5 141.3Hz PL	Thorodin Mountain	Extremely Wide Area Coverage
447.650 +5 141.3Hz PL	Squaw Mountain	Extremely Wide Area Coverage (IRLP) Linked with Boulder for seamless front range coverage
447.750 +5 141.3Hz PL	Lee Hill Boulder	Metro Coverage (IRLP)
447.850 +5 100Hz PL	Mount Baldy, Breckenridge, CO	
449.625 +5 141.3Hz PL	Lookout Mountain, Golden, CO	Denver Metro IRLP
447.225 +5 141.3Hz PL	Critchell Mountain, Denver Metro/South Canyons	Coverage
144.39 Digipeater	Thorodin Mountain	(Denver Metro Coverage)
IRLP Reflector 9870		

Recognition

RMHAM recognizes that DISTRICT 22 is an organization of approximately 70 Arapahoe County-resident amateur radio operators that, in turn, is recognized by the Arapahoe County Sheriff, the Cities of Aurora, Greenwood Villiage, Englewood and Littleton; by the Colorado Chapter of the American Red Cross and Salvation Army as the official ARES organization; and by the Denver office of the National Weather Service as the official Skywarn organization for Arapahoe County. District 22 will be designated as

the county RACES organization when activated as such by the Emergency Manager for the Arapahoe County Sheriff's department on its own behalf or that of any local government agency located in Arapahoe County.

DISTRICT 22 recognizes RMHAM as the exclusive owner and operator of the equipment listed above.

RMHAM shall provide all equipment maintenance, and ensures accessibility of the system by the Amateur Radio community.

Method of Cooperation

For the communications resources of RMHAM and DISTRICT 22 to be coordinated and used to the fullest advantage during disasters and emergencies, and to the extent permitted or required by law and regulation, RMHAM and DISTRICT 22 have agreed to the following:

1. The Points of Contact (POC) between RMHAM and DISTRICT 22 are listed in Appendix 1. All POC's should be updated by addendum, as necessary and verified on an annual basis by both DISTRICT 22 and RMHAM at the renewal of this agreement.
2. RMHAM agrees to allow DISTRICT 22 to assume operational control of the RMHAM repeater station during times requiring disaster communications as described above. Operational control is defined as using the repeater station to communicate by running an informal (without Net Control Station) or directed (with Net Control Station) net.
3. RMHAM agrees to provide a list of its trained Control Operators in Appendix 2 herein.
4. When contacted by a DISTRICT 22 POC, the RMHAM POC will make a reasonable attempt to have a control operator on frequency during an DISTRICT 22 activation.
5. An RMHAM Control Operator as requested by DISTRICT 22 will monitor the technical aspects of repeater operation, making any necessary adjustments or changes to the operation of the radio station as can be achieved remotely such as:
 - a. Turning the repeater off if it is in any danger of failure that would preclude further operation later, while notifying the DISTRICT 22 NCS with as much notice as possible so the net may be moved to another frequency.
 - b. Turning the repeater off if it is malfunctioning or in the presence of malicious interference which precludes proper operations with the same notification as in b. above.
 - c. Making any changes necessary to allow the repeater to operate in accordance with any/all FCC regulations and good radio practice.
6. DISTRICT 22 agrees to the following stipulations while using the RMHAM repeater


station:

- a. During DISTRICT 22 activation, all reasonable efforts will be made to make contact with an RMHAM POC in the order listed in Appendix 1 to notify him/her of the impending, imminent, or on-going use of the repeater. However, emergency use of the repeater to save life and/or property will always come first, regardless of the status of notification (in such an instance, notification will occur as soon as is reasonable). Notification attempts may be made over the air, via telephone, via email, or in person and should continue until all methods are exhausted or contact is made.
 - b. For an DISTRICT 22 training exercise, DISTRICT 22 agrees to contact an RMHAM POC in the order listed in Appendix 1 to request the use of the RMHAM repeater at least 5 days prior to the training exercise, and such permission will be granted assuming there are no other scheduled events for the repeater during the drill's expected duration. During a training exercise, DISTRICT 22 agrees to make all reasonable efforts to allow RMHAM members to utilize the repeater simultaneously with the exercise. During a drill, this will take the form of allowing RMHAM members to make calls on the repeater simultaneously with drill radio traffic. Both DISTRICT 22 and RMHAM members agree to keep transmissions short in concert with good on-air Amateur Radio practice so both groups may communicate efficiently.
7. RMHAM and DISTRICT 22 agree to maintain liaison so that there may be the closest possible cooperation in emergency communications planning and coordination, facility and equipment maintenance, and repeater equipment and site usage both during emergencies and on a normal, daily basis. *(An example of this would be for RMHAM to notify DISTRICT 22 that a new backup battery system has been placed in service at the repeater site. Another example would be that DISTRICT 22 could notify RMHAM of rolling power outages to make sure the repeater is sufficiently prepared.)*
8. The callsign used for the repeater system shall be at RMHAM's discretion at all times. RMHAM agrees to maintain their repeater system coordination with the Colorado Council of Amateur Radio Club's frequency coordination guidelines..
9. During activation, DISTRICT 22 will conduct the net using best practice standards and procedures, and will yield occasionally to directed calls among RMHAM members and guests, at the discretion of the DISTRICT 22 Net Control Station (NCS), which will not be unreasonably withheld.
10. Following each incident requiring an activation of the repeater system, DISTRICT 22 will provide RMHAM, by email (at an address provided in the contact list), with an after incident report which will include, but not be limited to, a brief description of the incident, times of activation and closure of the incident, callsigns and locations of those involved in the net (if available), and an DISTRICT 22 incident number, if any.
11. RMHAM will reasonably maintain the RMHAM repeater station. Additionally,


- a. RMHAM cannot be held liable for failure of the repeater system, whether or not the failure is caused by emergencies described above.
- b. DISTRICT 22 agrees that RMHAM cannot be required to effect repairs to restore communications on short notice during an activation or event.
- c. DISTRICT 22 agrees that it will not expect any RMHAM member to be put in physical danger to effect repairs to the repeater station.
- d. RMHAM agrees to maintain the repeater station within the constraints of members availability to effect repairs; and within RMHAM's reasonable feasibility to affect such repairs.

12. RMHAM and DISTRICT 22 agree to make this agreement available to their membership so all Amateur Radio Operators in each organization understand the MOU between the two groups. This availability can take the form of publication on the Internet, or any other method deemed appropriate by each organization. The intent of this MOU is not to serve as a legally binding document. Rather, it should serve as a set of guidelines for good Amateur Radio practice and sufficiently serve the needs of both groups to determine how to conduct themselves prior to, during, and after a communications emergency or regional disaster where the RMHAM repeater station has been utilized.

This MOU shall take effect upon signature by the RMHAM repeater trustee, and/or appointed official, and the DISTRICT 22 Emergency Coordinator at the time of signature and shall remain in effect for one year from the date of signature. This agreement will self renew each year unless either organization has notified the other of their intention to not renew the agreement in writing. This agreement may be terminated by either organization with 30 days prior written notice to the other organization.

 5/4/09

Emit Hurdelbrink – W0UAW Date
DISTRICT 22 – Emergency Coordinator

 5/4/09

John Maxwell – N0WBW Date
RMHAM President

Appendix 1- Points of Contact
DISTRICT 22 POC's

Primary POC: Emit Hurdelbrink – W0UAW

Email: ec@arapahoeares.org

(303) 324-3416

Alternate POC: Dan Meyer – N0PUF (Operations Officer)

Email: n0puf@earthlink.com

(303) 877-8781

Alternate POC: Wayne Heinen – N0POH (Admin/Finance Officer)

Email: n0poh@wayneheinen.com

(303) 699-6335

RMHAM POC's

PRIMARY POC: John Maxwell – N0WBW

johnm@johnmaxwell.net

303-709-9388

ALTERNATE POC: David Markham – W0CBI

w0cbi@arrl.net

303-901-5376

ALTERNATE POC: Scott Taylor – W0KVA

scott@csalarm.com

720-934-8049

ALTERNATE POC: Scott Burkhardt – W0KU

radio@microlinkdenver.com

303-717-0841

ALTERNATE POC: David Markham – W0CBI

w0cbi@arrl.net

303-901-5376

RMHAM Repeater Control Operators

John, N0WBW

Scott, W0KU

Scott, W0KVA

Wayne, N0POH

Jeff, K0RM

David, W0CBI

Doug, K2AD
Nate, WY0X