Butte Radio Club
DRAFT Signals Operating Instructions
Rev 4/8/26

1. Introduction

This guide is to document for club members and other Hams our standard and emergency communications operations. It is a work in progress.

2. Routine Nets

a Butte Radio Club operates two repeaters. The primary repeater is located on Red Mountain south of town operating at 146.940 with a - offset and tone of 100. The repeater is equipped with batteries in the event of a power loss, giving it several days worth of power. Its location on Red Mountain provides communications with the Gallatin Valley (Bozeman/Belgrade), Dillion in the south, Townsend (occasionally Helena) to the north and Deer Lodge to the northwest.

b The secondary repeater operates at 146.680 with a - offset and tone of 100. This repeater is currently set up in Butte and does not have the coverage the primary repeater has and is mostly restricted to the Butte Valley at the current time

c The Club has a weekly net every Monday at 7 PM local on the primary repeater. Should the repeater be down for some reason, the net may operate simplex on 146.940 or use the secondary repeater.

d Club members are encouraged to monitor the primary repeater during the course of their day as feasible.

3. Emergency Communications

Emergency communications is a hallmark of Ham radio. Butte Radio Club is developing the following responses in the event of emergencies. The response levels listed in the following sections reflects a continuum of responses depending on the seriousness of the emergency event. This is a work in progress that will change based on support requirements and available membership to participate.

The Club will designate a qualified member to be the Emergency Communications Coordinator (EC) for the group. The EC needs to meet State ARES requirements of at

least an intermediate level of status of ARES (see 2)b) below) and ARRL member. State EC will be notified of the selection.

Club emergency communications coordinator (EC) responsibilities

- Responsible to coordinate with the State EC leadership.

- Responsible for coordinating in advance with each of the potential supported organizations to identify potential communications needs. Part of this coordination is the evaluation of potential types of emergencies that may affect the communities and formulate a basic "Quick-Start" plan for supported element.. This plan should include each points of contact with the agency, expected operating frequencies, how each will be utilized, what liaisons will be required, communities modes and equipment and how stations will be prioritized and assigned. The Quick-Start document can serve as a standard policy for consistent procedures when an activation occurs.

- Maintain training records of club ARES members.

- Organize teams in response to emergencies, in coordination with Club President and leadership.

b Levels of Emergency Operations

1) Emergency Net Monitoring. This is a heightened level of monitoring for emergency comms that can be declared by the Club leadership. Common activation scenarios include warnings of severe storms that could cause potentially life threatening conditions, Forest Fires, etc.

Members will be notified by email and text messages, provided power, internet and cellular comms are still operational. In the case of weather related scenarios, there will normally be some advanced warning. Other events, such as an earthquake, perhaps no warning at all.

Should an unexpected event occur that drops power, internet and cellular comms, members are encouraged to check in on the 146.940 repeater after seeing to their family's and own safety.

Under this level of emergency comms, club members will be asked to monitor the primary repeater over specific times for any calls for help / life threatening situations. These represent situations where the other individual has lost telephone / cellular means to report the situation . Individual will act as a net control station and announce call and inform the net that it is being monitored every half hour or so.

Other members also encouraged to monitor as well, but the designated monitor runs the net. The It is anticipated that members will be able to monitor the net from their

homes, with no requirement to deploy to a field location. Member operating as net control will periodically announce that the repeater is being monitored for emergency traffic.

Member will take the information down and relay it to the appropriate local government agency for response,

Non life threatening problems comms may also be encountered, again due to loss of telephone or cell phone comms, which can be relayed if possible to appropriate agencies.

Remember, the 146.940 repeater covers a substantial area of SW Montana. Others from outside of Butte may use it as long as emergency comms have priority, including emergency comms from outside Butte.

Finally, an effort to maintain the latest information will be posted on the Club's Facebook page- as long as the internet is accessible.

2) County Emergency Communications Support

a) The Club may be called upon to provide communications support for Butte Silver Bow County and other key facilities. These would be situations of greater hazard affecting the county, necessitating a more formal and structured response.

Initial facilities anticipated needing communications support, in priority order -

- County Emergency Operations Center
- St James Community Hospital
- Emergency Shelters (Red Cross)
- Montana Tech
- TBD

It is assumed that at current membership levels, the County EOC will be the primary agency to be supported.

b) Team member qualifications

Team members from within the club will need to volunteer for this heightened levels of support. They are anticipated to wear two hats - RACES and ARES.

- Radio Amateur Civil Emergency Service (RACES) is an older group that operates during local civil defense events. Only RACES can operate on designated nets. Any licensed member is eligible to participate.

- Amateur Radio Emergency Service (ARES) is a broader operating group that will operate on nets and frequencies not RACES designated. It is also more structured than RACES. ARRL in 2025 revamped the program with key changes in levels of membership. There are three levels of membership:

- Basic
- Intermediate
- Advanced

Each level incorporates more on-line and in person training. Any licensed Ham can enroll at the Basic level. The higher two levels require ARRL membership. The club is not required to be ARRL listed in order for there to be teams.

FEMA ICS and other training is expected to be done by ARES members. This training is listed in Appendix A. Members are also encouraged to have deployable assets for HF as well as 2m, but this is not a mandated requirement.

ARRL recommends that emergency team members hold both RACES and ARES member will give the greatest flexibility to emergency comms responses.

c) Other Related Skill sets

Besides being a competent voice operator, operations at the county and above my require other skills and knows

- WinLink

- Morse Code.

3) Other Emergency Comms Support.

The State ARES EC can issue requests for volunteer ARES teams to deploy to assist in other disasters around the state. Deployment is voluntary.

4. State Emergency Nets.

A list of frequencies that State authorities may operate on is being compiled. The state will use these nets to provide the latest information on a state basis. There will also be operational nets for the local EOC to report to the appropriate State agencies.

5 Other Radio Communications Methods.

There are other radio communications out there for you information that may be getting used for emergencies. The Club at this stage will not be monitoring them but their presence should be noted, particularly by those who use them.

a. CB radios. Channel 9 is still the recognized emergency channel that may be monitored by police or rescue personnel.

b. FRS/GMRS. These include the small, low power Family Radio Service and General Radio service radios found in stores thru the more powerful GMRS systems. The GMRS has become popular due to low price, 50 watts of power, repeater capable and no test license. There is a move at state level to designate the joint FRS/GMRS channel 3 as an emergency channel, similar to CB channel 9, to be monitored by police and rescue personnel as necessary.

c. A new system called Meshtastic networks is on the rise. It is an open source, off-grid, decentralized mesh network built to run on affordable, low-power devices. No cell towers. No internet. Just pure peer-to-peer connectivity.

There may be club members that use this developing system, and is a developing operation.

APPENDICIES

A - ARES FEMA ICS courses and other training requirements.

B - ARES Training Records (Tentative appendix)

C -