FLATHEAD VALLEY AMATEUR RADIO EMERGENCY SERVICE
Steps for 2-Meter Amateur Radio Operators
to Prepare for *in Advance of*
and Operate During an Emergency

This document describes the procedures the Flathead Valley Amateur Radio Emergency Service (ARES) operators will follow for 2-meter radio communications in the event of an emergency. It is important for all area amateur radio operators to know about these procedures, not only because these steps would be useful for any radio operator in an emergency, but also so operators avoid interfering with official emergency communications.

It is extremely important that amateur radio operators do not interfere with official communications during an emergency. It is helpful if all amateur radio operators know how to monitor communications during an emergency in case they can provide assistance with emergency communications or emergency response.

Before an emergency occurs, all amateur radio operators should prepare themselves by becoming familiar with the various radio frequencies they can access well and with who tends to operate on those frequencies. Amateur radio operators should practice operating on a variety of frequencies, both repeater and simplex (in case repeaters are not operational) in order to improve their communications skills. Acting as a net control is a great way to gain experience communicating with a variety of operators and circumstances. For example, some participants in a radio net cannot be heard by everyone else, including the net control, and relays may be necessary.

Table 1 - BEFORE an emergency... Get yourself prepared to operate in an emergency!

Step	Action
1	Compile a list of repeaters that you know you can communicate with. Practice regularly making contacts with each repeater on your list. Even mundane communications provide valuable confirmation of your ability to use the repeater. Practice!
2	Compile a list of simplex frequencies that you know you have been able to use for communication with other operators. Practice regularly making contacts with each simplex frequency on your list. Even mundane communications provide valuable confirmation of your ability to use the simplex frequency. Practice! The Flathead Valley ARES emergency simplex frequency is 147.52 MHz. The AMRRON simplex frequency is 146.42 MHz. The LDS Church also maintains a list of by-community simplex frequencies.
3	Prepare an emergency frequency list, listing repeater and/or simplex **frequencies in the order in which you expect them to most likely be of use in an emergency**. Refer to Appendix A for an <u>example</u> emergency frequency list. This is just one example to illustrate the information you will likely need and a possible format for your list. **You need to create your own list.** Your list will be specific to you, as the frequencies you can communicate on will be based on your location (station) and equipment. In fact, if you operate using multiple locations or equipment (e.g., a fixed base station, a mobile station in a vehicle, and a hand-held unit), you may need separate lists for each.

If you have an emergency at your station and need to use your amateur radio to request assistance, see Table 2.

If you suspect that an emergency situation may exist in the community, but you do not personally have an emergency at your station, see Table 3.

Table 2 - Procedure if you DO have an emergency at your station

Step	Situation	Action
1	You have an emergency at your station.	Tune to the first frequency on your list. Go to step 2.
2	You've tuned your radio to a repeater or simplex frequency from your list, and you're ready to request assistance.	Listen to hear if there is any traffic on the frequency. If there is traffic on the frequency, go to step 3. If there is no traffic on the frequency, go to step 4.
3	You have an emergency, require assistance, but there is traffic on the frequency that you want to use.	Do not interrupt ongoing emergency communications. Wait for an interval when no operators are transmitting, then announce that you have an emergency, followed by your call sign. If you successfully interrupt the conversation, go to step 4. If you can't interrupt the conversation on the frequency, go to step 6.
4	There is no traffic heard or you have interrupted a conversation.	Transmit your call sign, announce that you have an emergency and wait to see if you receive a callback from another operator. If you do not contact anyone on your first attempt, continue to call for help several times. If you receive a callback, go to step 5. If you fail make contact with anyone who can help, go to step 6.
5	You have an emergency and you have made a contact.	Give your call sign, describe your emergency, give your location, and describe the assistance needed at your station. Ask your contact to confirm the information. Determine if your contact is in a position to adequately assist with your emergency. If so, you are DONE. Otherwise, go back to step 4 to see if there are any other operators on your frequency who might be able to assist.
6	You have an emergency but have been unable to get any assistance on the frequency you are using.	Go to the next frequency on your list and return to step 2. If you've reached the end of your frequency list, go to step 7.
7	You have an emergency but you've not been able to establish contacts or get any adequate assistance from anyone on your frequency list. There may be too much traffic on the repeaters/simplex frequencies or, even if you have made contact(s), you've not been able to get assistance. Or, if no contacts were made, the repeaters may be inoperable and you have failed to make any simplex contacts.	Go back to the top of your frequency list and try the whole process all over again. If, after several attempts, you feel you are incapable of getting any help using your practiced frequencies, go to step 8.
8	You have an emergency but you have been unable to establish contacts or get any adequate assistance from anyone on your frequency list, even after multiple attempts.	Scan the amateur repeater and simplex bands for other potential contacts. Try transmitting on repeater output frequencies. Periodically return to step 2, in case other operators have tuned in or come on the air.

Table 3 - Procedure if you do NOT have an emergency at your station

Step	Situation	Action
1	You do not have an emergency at your station.	If you suspect that the community may be experiencing some sort emergency (see Example 1), go to step 2.
		If you have no reason to expect that there is any sort of emergency, go to step 9.
2	You suspect there may be an emergency in the community, but you do not personally have an emergency at your station, and you do not need to transmit a request for assistance.	Tune your radio to a frequency from your list. Listen to see if there is any traffic related to the emergency that you suspect may be occurring. If you hear emergency communications in progress DO NOT INTERRUPT! Go to step 3.
		If you hear normal, non-emergency communications, go to step 4.
		If you hear no traffic at all, go to step 5.
3	You hear emergency communications on the frequency you have tuned into.	DO NOT INTERRUPT THESE COMMUNICATIONS!
		Monitor the conversation. Make notes about which operators are involved in the conversation and try to understand the nature of the emergency.
		Only consider interrupting the communications if you are certain that you have information that may be helpful in responding to the emergency.
		If you begin communicating with another operator about the emergency, be certain to leave generous breaks between transmissions so that other operators can interrupt the conversation if necessary.
4	You hear normal amateur conversations but still suspect that an emergency situation exists.	Wait for a break in the communication then try to interrupt the conversation.
		If successful, go to step 6.
		If not, go to step 7.
5	You hear no traffic on the frequency to which you are tuned, but still suspect that an emergency situation exists.	Once you are certain there is no traffic on the frequency, call out and try to establish contact with another operator.
		If you establish contact, go to step 6.
		If you are unable to establish contact, go to step 7.
6	You suspect an emergency, you do not need assistance, and you have contacted another operator.	Explain why you are concerned that there may be an emergency and ask the other operators if they are aware of any emergency situation.
		If the emergency is already known, go to step 8.
		If the other operators know nothing, share your information, tune to the next frequency from your list, and go back to step 2.
7	You suspect an emergency, you do not need assistance, but you have failed to contact anyone on the frequency you are using.	Move on to the next frequency from your list and go back to step 2.
		If you have exhausted all frequencies on your list but failed to make any contacts, return to the top of your frequency list and go back to step 2.
8	You have contacted other operators and determined that there is an emergency.	Share any information you have about the emergency. Determine if you are in a position to assist with the emergency. Actions from here will be dependent upon the nature of the emergency. See Example 2 for examples of how you might assist (relay messages, etc.).
9	You have no reason to think there is any sort of emergency.	If you wish to use any frequency (repeater or simplex) proceed as normal. As always, listen first in case someone is using the frequency; remember, they could be handling an emergency of which you are unaware.

<div align="center">**Examples**</div>

Example 1 – Examples of situations that might cause you to suspect there is an emergency in the community

1. You experience a loss of power, telephone or cellular service, or you notice that TV and/or radio broadcast transmissions are not occurring. These are common problems and are most likely ordinary events. However, these might also be indicative of a more widespread emergency, especially if multiple services have failed.
2. You see smoke or flames suggesting a large wildfire.
3. You feel an earthquake.
4. You see a very bright flash.
5. You hear an unusually large explosion.
6. You see or hear an unusually large amount of activity involving law enforcement, fire departments or other emergency services.

Example 2 – Examples of how you might be able to offer assistance in the event of an emergency

1. You may be able to act as a relay between two operators who need to exchange emergency traffic.
2. You may be able to contact local emergency service providers, when others are not able to, and alert them of a need for their help. For example, you may have telephone service, but others in the community have indicated via the amateur radio network that they do not. Or, if all phones are out, you may be physically close enough to drive or walk to the police or fire station to alert them in person of the emergency.
3. You may have amateur radio capabilities (long range HF equipment – antenna, high powered RF amplifier, favorable station siting, WINLINK or PSK31 capability, etc.) that are superior to others and are able to use those to enhance the response of amateur radio emergency communications operators.
4. You may be in a position to personally offer the delivery of skills or resources that would be helpful to someone who is in urgent need of assistance.

Appendix A – EXAMPLE Emergency Communications Frequency List

This is just an example emergency frequency list. You must create your own list(s) of frequencies that work well for your location and equipment.

EMCOMM Frequency List
Jim French, KD0PUI
Whitefish

Order	Frequency	Type	Offset	Tone	Description	Last Tested	Notes
1	146.76	repeater	-	100 Hz	FVARC, Blacktail	Mar 1, 2017	
2	146.86	repeater	-	100 Hz	LDS, Blacktail	Feb, 2017	
3	147.38	repeater	+	100 Hz	FVARC, Whitefish	Feb, 2017	
4	147.52	simplex	NONE	n/a	FV-ARES simplex	Feb, 2017	
5	146.42	simplex	NONE	n/a	AMRRON simplex	Mar 2, 2017	
6	147.26	repeater	+	100 Hz	Werner Peak	Feb, 2017	
7	147.04	repeater	+	none	HARC, Missoula	Mar 1, 2017	
8	145.35	repeater	-	100 Hz	Polson	2017	
9	146.52	simplex	NONE	n/a	National Simplex	2016	
Not practiced routinely							
10	146.20	simplex	NONE	n/a	LDS simplex, Kalispell	never	
11	147.40	simplex	NONE	n/a	LDS simplex, C'Falls	never	
12	147.14	repeater	+	103.5 Hz	Pat's Knob	2016	
13	147.34	repeater	+	100 Hz	Pinkham Mountain	2016	
14	145.27	repeater	-	100 Hz	Big Mountain	2016	
15	147.45	simplex	NONE	n/a	LDS simplex, Whitefish	never	
16	145.47	unknown	-	??	Statewide Emergency	never	
17	146.16	reverse	+	n/a	FVARC Blacktail *Reverse*	2017	
18	146.26	reverse	+	n/a	Reverse of LDS Blacktail	never	

Last updated: March 5, 2017

Notes:

1. When attempting to access a repeater with no active traffic, something may be heard (ID code, silent transmission) that suggests the repeater is operational, even if no contact is made. This should be noted... it's a good thing.
2. Frequencies 1-9 are ones I use routinely. If I make no contacts on any of them, either something is very wrong or, more likely, nothing is wrong and there's just nobody monitoring.
3. 147.38 is often the only repeater that can receive my transmissions since I am sometimes away from my base station, have only my HT available, and my HT doesn't hit Blacktail very well from Whitefish. 147.38 is easy for me to hit with my HT from Whitefish.

Emergency Amateur Radio Frequency List

Radio Operator: _____

Station/Device: _____

Order	Frequency	Type	Offset	Tone	Description	Last Tested	Notes
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
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