

CACHE COUNTY AMATEUR RADIO COMMUNICATIONS PLAN

February 19, 2017

1. INTRODUCTION

1. The Cache County Amateur Radio Emergency Service® (ARES®) is composed of FCC licensed amateur radio operators who have voluntarily registered their capabilities and equipment for public communications service.
2. Under Federal regulations, the contents of messages handled by amateur radio are not divulged to unauthorized persons and such public service communications are furnished without compensation of any kind.
3. The Cache County ARES® functions in this EMERGENCY PLAN under the direction of the Cache County Emergency Coordinator (EC), who is appointed by the Utah Section Emergency Coordinator of the American Radio Relay League (ARRL) with the support of Amateur Radio operators that are part of ARES® and or RACES.
4. The EC may appoint Assistant Emergency Coordinators (AEC) sufficient to function efficiently.

2. PURPOSE

1. The purpose of this plan is to provide a written guide containing the minimum information that would be needed in an emergency. Each emergency is different and flexibility is a necessity to provide an adequate response.
2. The primary responsibility of the Cache County ARES® is to furnish emergency communications in the event of a natural or a man-made disaster when regular communications fail or become inadequate.
3. All drills, training and instruction shall be carried out to ensure readiness to respond quickly in providing effective amateur emergency communications.
4. The following jurisdictions/agencies shall be served, as requested, in an emergency:
 1. Incorporated Jurisdictions in Cache County.
 2. The Unincorporated Area or Populations under the authority of the Cache County Executive and the Cache County Office of Emergency Management.
 3. The American Red Cross
 4. Police and Fire Departments
 5. Hospitals and Nursing Homes
 6. The District Emergency Coordinator, when surrounding counties request assistance.
 7. The State of Utah Division of Emergency Management
 8. The Federal Emergency Management Agency
 9. Cache County Sheriff's Office

3. PLAN ACTIVATION

1. Any member of the Cache County ARES® who becomes aware that a communications emergency may exist, should contact the EC/AEC and monitor the Cache County Emergency Net repeater for activity. (Emergency repeater frequencies and tones are documented in Appendix 1)
2. A series of three tones (hi-lo-hi) heard on the 146.720- repeater indicates that a net or an emergency situation is in progress. Should you hear these tones, please stay on frequency and check in with net control. If you hear no traffic within a couple of minutes, call for the net control operator on this frequency or the 147.200+ repeater. (See Appendix 1)
3. If local telephone service is available, the EC and/or Assistant ECs shall be notified by telephone or by any other means available.
4. In any emergency in which amateur radio is requested to serve, amateur radio operators may be alerted by any City/County Emergency Management Coordinator, Red Cross, or State official notifying the EC. In the event the EC is unavailable, an Assistant EC shall be notified. The Assistant will attempt to notify the EC periodically.
5. When this plan is activated, EVERY Amateur Radio operator is encouraged to monitor the information network frequency and offer assistance AS ASKED by the NCS. The most important skill is the ability to LISTEN, LISTEN, LISTEN. As tactical nets are established on frequencies assigned by the emergency frequency coordinator, the NCS can direct volunteers to these frequencies. The purpose of the information net (InfoNet) is to collect and disseminate VERIFIED information to those listening. This could include weather data, road conditions, shelter locations, summaries of media reports, status of commercial power, staging areas, locations of supplies, requests for volunteers with specific expertise, etc. This is NOT a

tactical or staging net. The NCS will not conduct roll calls but will keep lists of stations who have checked in. Stations will check out with NCS. Generally stations will “check in” with “callsign and location”. Stations may check in with VERIFIED (not hearsay) information. The NCS may ask for lists of undamaged roads into a particular area to assist agencies moving and staging emergency vehicles. Emergency traffic of any kind is, obviously, encouraged.

6. When a group (such as CERT, Red Cross, shelter, church, staging area manager, search/rescue, etc.) has a specific assignment and geographic area, the emergency frequency coordinator will determine a simplex or repeater frequency for use. The group MUST have enough operators to justify a frequency assignment AND must have an NCS. The InfoNet will keep track of such assignments (location, purpose, frequency and NCS). The InfoNet can regularly update listeners as to what activities are occurring and what frequencies various tactical nets are using. When the tactical assignment is complete, the frequency is released for assignment by the emergency frequency coordinator.

4. MOBILIZATION

1. The EC will notify ARES® members by Radio, Cell phone, pagers and Email Systems as from information entered into the ARES member database.
2. If telephone service is available, the Telephone Tree will be activated. If telephone service is not available, notification will be by radio and/or runner, as necessary.
3. The EC, or operator designated by him, will transmit on each VHF 2-Meter repeater, in turn, advising all stations of the ARES® activation and request that all operators switch to the ARES® frequency for further instruction.
4. Upon the awareness or notification that a communications emergency exist, members of the Cache County ARES® will check-in on the Cache County Emergency Net and maintain radio silence. (Emergency repeater frequencies and tones are documented in Appendix 1)
5. Mobile and Portable units will be activated.
6. The EC will assume NET CONTROL or delegate another operator to act as Net Control Station (NCS) on the Cache County Emergency Net repeater or other frequency to be determined by the EC. (See Appendix: 1.) Control will be established at whichever Emergency Operation Center (EOC) is activated by the Emergency Management Coordinator of the jurisdiction involved with the emergency. Only VHF equipment will be used at the EOC unless otherwise directed by the EC. HF stations will be established as needed at a location away from the disaster site at the residence of an ARES® operator. HF stations will maintain a link with the EOC via the Cache County Emergency Net repeater and use appropriate HF frequencies (see Appendix 1).
Operators with pre-assigned operating positions/locations shall contact the EC/AEC to determine if they should proceed to their operating locations immediately or standby on the primary net frequency for further instructions.

Tyler Griffiths N7UWX
Cache County ARES® Emergency Coordinator

Cache County Command and Monitoring Frequencies			
TACTICAL CALL	PRIMARY	BACKUP #1	BACKUP #2
Command #1	147.200+ (T103.5) DTMF 221 to unlink Mt Logan	146.640 simplex	146.640- (No Tone)
Command #2	146.720- (T103.5)	146.720 simplex	
EOC Intercom	147.520 simplex		
Tac #1	146.460 simplex		
Tac #2	146.560 simplex		
Tac #3	146.520 simplex		
State Wide Net (RACES)	449.650 (T100.0)	147.450 simplex	147.180- (T100.0)
VHF Portable Repeater	147.860 -3.150 MHz offset (T77.0))		
UHF Portable Repeater	449.250- (T103.5)		
Packet/Winlink	145.030 simplex	144.950 simplex	145.010 simplex
APRS/Winlink	144.390 simplex		
DMR Digital (NU7TS)	447.000- (CC1)		
D-Star B (AC7O)	447.975-		
D-Star C (AC7O)	145.150-		
D-Star B (NU7TS)	449.575-		

Other Resources			
TACTICAL CALL	PRIMARY	BACKUP #1	BACKUP #2
ERC	146.420 simplex		
Smithfield	145.550 simplex		
Smithfield	147.460 simplex	146.580 simplex	
Logan PAR	146.580 simplex		
Logan PAR	146.520 simplex		
Hyde Park	146.500 simplex		
*Sedgwick (Idaho)	146.800- (T88.5)	146.800 simplex	
Promontory	147.260+ (T103.5)	147.260 simplex	
Red Spur	145.310- (T103.5)	145.310 simplex	
Mt Logan (440)	449.625- (T103.5)	449.625 simplex	
Pisgah (440)	449.800- (T103.5)	449.800 simplex	
*North Logan – N7RRZ	147.240+ (T79.7)	147.240 simplex	
*North Logan – N7RRZ	449.325- (T156.7)	449.325 simplex	
Ogden Store House	145.590 simplex		

*Some repeaters need permission/MOU (memorandum of understanding)

Regional Nets			
TACTICAL CALL	PRIMARY	BACKUP	TIME
BRIDGERLAND ARC	146.720- (T103.5)	146.720 simplex	Tue 21:00
LOGAN STORE HOUSE ERC	146.420 simplex		1 st & 3 rd Sun 20:30
So Idaho Emergency Net	146.800- (T88.5)		Sun 20:00
RACES VHF Net	449.650 (T100.0)	147.180- (T100.0)	3 rd Thur, Even Month 20:00
RACES HF Net	3.920 MHz LSB		3 rd Sat, Odd Month 08:00
Beehive Utah Net (NTS)	7.272 MHz LSB		Daily 12:30
Golden Spike (Box Elder)	145.430- (T123.0)	145.290- (T123.0)	Wed 20:00
Box Elder County Emergency training net	145.430- (T123.0)	145.290- (T123.0)	Sun 19:30
Weber County ARES	448.600- (T123.0)	146.900- (T123.0)	Tue 20:00
DCARC (Davis County)	147.420 simplex	449.925- (T100.0)	Thur 19:00
UARC (Salt Lake)	146.620- (No Tone)		Sun 20:00
BEARS (Bear Lake)	147.120- (T123.0)		Sat 18:30

Cache County Radio Resource

Resource Name: Cache County Repeater (IRLP node 3381)

Frequency: 147.200 MHz **Offset:** + 600 KHz **PL Tone:** 103.5

Location: Logan

Coverage: Cache County, Valley floor

Primary Use: Command Net #1,

Secondary Use: Command Net#2

Notes:

- Swappable with Mt. Logan for command net depending on situation.
- IRLP (node 3381) EchoLink (node 495125)
- Link to Mt Logan (DTMF 220 to link, 221 to un-link)
- East bench coverage for Mt Logan if linked

Resource Name: Mt Logan Repeater

Frequency: 146.720 MHz **Offset:** - 600 KHz **PL Tone:** 103.5

Location: Mt. Logan

Coverage: Cache County, Cache Valley, Logan Canyon, 100 mile radius.

Primary Use: Command net #2

Secondary Use: Command net#1

Notes:

- Swappable with Cache County Repeater for command net depending on situation.
- Links: Permanent links - 147.260+, 145.310-, 449.625- (221-Link 220-Unlink to 147.200)
Temporary links – 146.800-, 147.860-, 147.200+
- Autopatch: *xxx-xxxx (no letup); When call complete, end autopatch with #
- For 911 call: 911
- Emergency power

Resource Name: EOC Intercom

Frequency: 147.520 MHz **Offset:** simplex **PL Tone:** none

Location:

Coverage:

Primary Use: Cache EOC to City EOC's

Secondary Use: Talk-In to EOC

Notes:

Resource Name: Tac #1, #2, #3

Frequency: 146.460, 146.560, 146.520 MHz **Offset:** simplex **PL Tone:** No Tone

Location:

Coverage:

Primary Use: Assigned as necessary

Secondary Use:

Notes:

Resource Name: Valley Floor Repeater

Frequency: 146.640 MHz **Offset:** - 600 KHz **PL Tone:** No Tone

Location: Cache County Sheriff's Complex

Coverage: Cache Valley, Valley floor

Primary Use: Back-up #2

Secondary Use: Command #1

Notes:

- DO NOT USE if Cache County EOC ActivatedQ
- Emergency power

Resource Name: VHF Portable Repeater

Frequency: 147.860 MHz **Offset:** - 3.150 MHz **PL Tone:** 77.0

Location: As Assigned

Coverage: Location dependent, up to 25 mile coverage

Primary Use: as needed

Secondary Use:

Notes:

- Linkable to Mt. Logan, Sedgwick, UHF Portable, 449.800-, 446.000 s, 449.875-

Resource Name: UHF Portable Repeater

Frequency: 449.250 MHz **Offset:** - 5 MHz **PL Tone:** 103.5

Location: As Assigned

Coverage: Location dependent, up to 25 mile coverage

Primary Use: as needed

Secondary Use:

Notes:

- Linkable to Mt. Logan, Sedgwick, VHF Portable, 449.800-, 446.000 s, 449.875-

Resource Name: Sedgwick Repeater

Frequency: 146.800 MHz **Offset:** - 600 KHz **PL Tone:** 88.5

Location: Sedgwick Peak (West of Grace, Id)

Coverage: SE Idaho, SW Wyoming, Cache Valley

Primary Use:

Secondary Use:

Notes:

- Linkable to Mt Logan
- Permanent link 449.375- on same site

Resource Name: BARC Promontory

Frequency: 147.260 MHz **Offset:** + 600 KHz **PL Tone:** 103.5

Location: South end of Promontory Mtn. range

Coverage: Box Elder County, South to Utah County, and West Desert

Primary Use: Linked Repeater

Secondary Use:

Notes:

- Emergency power
- Autopatch same as Mt Logan
- Backup for RACES Net

Resource Name: Red Spur

Frequency: 145.310 MHz **Offset:** - 600 KHz **PL Tone:** 103.5

Location: Near Red Spur Mountain (West of Randolph, UT)

Coverage: Rich County, Bear Lake County, SW Wyoming, Black Smith Fork canyon

Primary Use: Linked Repeater

Secondary Use:

Notes:

- Solar Power
- Autopatch same as Mt Logan

Resource Name: Mt Logan 440

Frequency: 449.625 MHz **Offset:** - 5 MHz **PL Tone:** 103.5

Location: Mt. Logan

Coverage: Cache County, Cache Valley, Logan Canyon, 100 mile radius.

Primary Use: Linked Repeater

Secondary Use:

Notes:

- Links: Permanent links – 147.260+, 145.310-, 449.625-
Temporary links – 146.800-, 147.200+
- Autopatch: *xxx-xxxx (no letup); When call complete, end autopatch with #
- For 911 call: 911
- Emergency power

Resource Name: Pisgah

Frequency: 449.800 MHz **Offset:** - 600 KHz **PL Tone:** 103.5

Location: Mt. Pisgah (top of Sardine Canyon)

Coverage: Cache County, Black Smith Fork canyon

Primary Use: Snow Bird Link (Intermountain Intertie)

Secondary Use: Utah State RACES Net

Notes:

- ~~Emergency power~~

Resource Name: N7RRZ

Frequency: 147.240 MHz **Offset:** + 600 KHz **PL Tone:** 79.7

Location: North Logan

Coverage: Cache County, Cache Valley,

Primary Use:

Secondary Use:

Notes:

- Links: Permanent link 449.325- (T156.7) on same site
- Autopatch: *xxx-xxxx (no letup); When call complete, end autopatch with #
- For 911 call: 911

Resource Name: D-Star B (AC7O)

Frequency: 447.975 MHz **Offset:** - 5 MHz **PL Tone:** none

Location: Valley Floor

Coverage: Cache County

Primary Use: D-Star Voice

Secondary Use: Data

Notes:

- D-Star
- REF 029C

Resource Name: D-Star C (AC7O)

Frequency: 145.150 MHz **Offset:** - 600 KHz **PL Tone:** none

Location: Valley Floor

Coverage: Cache County

Primary Use: D-Star Voice

Secondary Use: Data

Notes:

- D-Star
- REF 029C

Resource Name: D-Star B (NU7TS)

Frequency: 449.575 MHz **Offset:** - 5 MHz **PL Tone:** none

Location: Wellsville

Coverage: Cache County

Primary Use: D-Star Voice

Secondary Use: Data

Notes:

- D-Star
- REF 029C

Resource Name: DMR (Moto TURBO) (NU7TS)

Frequency: 447.000 MHz **Offset:** - 5 MHz **Color Code:** CC1

Location: Wellsville

Coverage: Cache County

Primary Use: Digital DMR Voice

Secondary Use: Link to Riverside DMR 447.125 & BrandMeister US

Notes:

Resource Name: Beehive Net - HF 40 meters

Frequency: 7.272 MHz **Offset:** **PL Tone:** none

Location: HF

Coverage: Western US

Primary Use: Beehive Net NTS (daily at 1230 hours)

Secondary Use: State Wide Communication

Notes:

Resource Name: State Wide RACES Net - HF 80 meters

Frequency: 3.920 MHz LSB **Offset:** **PL Tone:** none

Location: HF

Coverage: Western US

Primary Use: Utah State RACES HF Net (3rd Sat, Odd Month 08:00)

Secondary Use: State Wide Communications

Notes: