

This Summary will provide you with the essential information you need for the Western States Endurance Run and Trail Ride. A copy of it will be in your operations kit, which you should pick up at the Event Control site on your way up to your assignment. (We've made special arrangements for 89 Crossing, High Camp, Lyon Ridge, Red Star and Robinson Flat because of their early start

SYSTEM FREQUENCIES

Table 1 – Repeater Frequencies w/ Channel #

CH / SYSTEM	MOBILE RX	MOBILE TX	CTCSS (PL)
1)SQUAW	443.975	448.975(+)	114.8
2)MT. ROSE	147.150	147.750(+)	123.0
3)Robinson Flat	443.900	448.900(+)	136.5
4)BALD VHF	146.625	146.025(-)	123.0
5)BALD UHF	443.550	448.550(+)	127.3
6)CrossBand "X"	443.950	443.950(s)	162.2
7)CrossBand "Y"	443.125	443.125(s)	162.2
8)Foresthill 1	146.355	146.955(+)	94.8
9)AUB-VHF1	145.430	144.830(-)	162.2
10)AUB-UHF	440.575	445.575(+)	162.2
11)Future	Future	Future	Future
12)Portable Repeater	146.355	146.955(+)	114.8
13)NAT'L SIMPLEX	146.520	146.520(s)	NONE
14)Pilot Hill	147.195	147.795(+)	123.0
15)Foresthill 2	146.745	146.145(-)	156.7
16)Foresthill 3	443.225	448.225(+)	110.9
17)AUB-VHF2	145.270	144.670(-)	156.7

Mt. Rose is used only if Squaw Peak is not working/goes down.

RF UHF (CH 3) is now a crossband in to Bald VHF as of 2012. No change to any radio programming required.

Table 2 – Simplex Frequencies

CHANNEL	LOCATION	PRIMARY	SECONDARY
20	EVENT CALLING	146.505	N/A
21	NCS USE ONLY	147.495	N/A
22	MB and UP Course	146.415	N/A
23	MB and UP Course	146.445	N/A
24	FH and DOWN Course	146.465	N/A
25	FH and DOWN Course	147.480	N/A

INITIAL CHANNEL ASSIGNMENTS

The following table provides your initial channel assignment, based on our previous experience and known system coverage. Please adhere to these assignments for unless directed otherwise by NCS.

Table 3 - Initial Channel Assignments

CHECKPOINT	PRIMARY	SECONDARY
Robie Park (RP)	SQUAW (CH 1)	MT ROSE (CH2)
89 Crossing (89)	SQUAW (CH 1)	MT ROSE (CH2)
High Camp / Squaw Valley (SV)	SQUAW (CH 1)	MT ROSE (CH2)
Escarpment (ES)	SQUAW (CH 1)	MT ROSE (CH2)
Watson's Monument (WM)	SQUAW (CH 1)	MT ROSE (CH2)
Lyon Ridge (LR)	SQUAW (CH 1)	BALD VHF (CH 4)
Red Star (RS)	BALD VHF (CH 4)	AUB-VHF 1 (CH 9)
Duncan Canyon (DC)	BALD VHF (CH 4)	AUB-VHF 1 (CH 9)
Robinson Flat (RF)	BALD VHF (CH 4)	AUB-VHF 1 (CH 9)
Miller's Defeat (MD)	BALD VHF (CH 4)	AUB-VHF 1 (CH 9)
Dusty Corners (DU)	BALD VHF (CH 4)	AUB-VHF 1 (CH 9)
Last Chance (LC)	BALD VHF (CH 4)	AUB-VHF 1 (CH 9)
Swing Bridge (SB)	CrossBand "X" (CH6)	SIMPLEX to DT (CH22)
Devil's Thumb (DT)	AUB-VHF 1 (CH 9)	BALD VHF (CH 4)
Deadwood (DW)	AUB-VHF 1 (CH 9)	BALD VHF (CH 4)
El Dorado Canyon (ED)	CrossBand "Y" (CH 7)	SIMPLEX to MB (CH 23)
Michigan Bluff (MB)	AUB-VHF 1 (CH 9)	BALD VHF (CH 4)
Chicken Hawk (CH)	FORESTHILL 2 (CH15)	AUB-VHF 1 (CH 9)
Foresthill (FH)	FORESTHILL 2 (CH15)	AUB-VHF 1 (CH 9)

CAL 2 (PS)	FORESTHILL 2 (CH15)	BALD VHF (CH 4)
Rucky Chucky –near (RC-N)	AUB-VHF 1 (CH 9)	BALD VHF (CH 4)
Rucky Chucky-far (RC-F)	Via Nearside	AUB-VHF (CH 9)
Francisco's (FR)	AUB-VHF 1 (CH 9)	BALD VHF (CH 4)
River Crossing (PB)	AUB-VHF 1 (CH 9)	BALD VHF (CH 4)
Green Gate (GG)	AUB-VHF 1 (CH 9)	AUB-VHF 2 (CH 17)
ALT (AL)	AUB-VHF 1 (CH 9)	AUB-VHF 2 (CH 17)
Brown's Bar (BB)	AUB-VHF 1 (CH 9)	AUB-VHF 2 (CH 17)
Hwy 49_Upper Quarry (HC)	AUB-VHF 1 (CH 9)	AUB-VHF 2 (CH 17)
Lower Quarry (LQ)	AUB-VHF 1 (CH 9)	AUB-VHF 2 (CH 17)
No Hands Bridge (NH)	AUB-VHF 1 (CH 9)	AUB-VHF 2 (CH 17)
Finish (FI)	AUB-VHF 1 (CH 9)	AUB-VHF 2 (CH 17)
Barn (BA)	AUB-VHF 1 (CH 9)	Simplex (CH 21)

* See Appendix #3 for the digital modes used at each checkpoint.

DROP REPORTING

All stations will report all runners/riders who drop via their voice channels. Information should include the location, number, time of the drop, and a reason ("unknown" is an acceptable reason ... we just want to know that you don't know). Drops should be reported as soon as you receive them from the station staff. Please also keep a written list of drops on the timer's form in your operations kit and turn them in at Event Control when you have closed.

"REAL TIME" FOR VOICE REPORTS

Except for Lyon Ridge (and possibly High Camp & 89 Crossing) the station staff will be recording the arrival times for all runners/riders. To reduce the voice bandwidth and time required to report arrivals, we will use the following procedure.

1. The timer sheet holds 20 entries.
2. If the timer fills a sheet in less than 15 mins, collect it and report all twenty.
3. If 15 mins elapses after the first runner on the sheet and the sheet is not full, have the timer start

a new sheet with the next arriving runner, and transmit the partial sheet.

4. This allows NCS to get the runner/rider numbers to WEB CAST in time. Our GOAL is within 30 mins of a runner/rider getting to a checkpoint it is reported to the WEB CAST for the WORLD to see. These are world-class events.
5. Please make sure the time sheets are clear to read and with three-part sheet you need to press hard. If used.
6. TEVIS CUP will have all IN and OUT times at RF, LC, DW, CH, FH, FR and LQ. Complete list of IN times at all other checkpoints. EXCEPTION: At 89, HC and LR. The first 20 riders and total number of riders out of checkpoint will be acceptable and/or expected

TRANSMISSION OF ARRIVAL REPORTS

When you have one or more forms to transmit, call NCS and advise them how many runners/riders you want to report. If it is small, NCS may just take them on the channel you are assigned. If there are enough to tie up the channel, NCS will direct you to a secondary channel.

Call NCS on the secondary channel you were assigned and follow instructions. You will likely be directed back to your primary channel when your traffic is clear.

After transmission, annotate the timer's form with the date/time of transmission and the channel you used (see Table 1) and place them in the return envelope provided in your operations kit.

EMERGENCY PROCEDURES

We define an emergency as any situation which places a runner/rider, horses, sweeps, volunteer or staff member in jeopardy on the trail, at checkpoints that cannot be completely handled at the checkpoint without outside aid.

1. **Emergency traffic takes precedence over ALL other traffic.**
2. **Indicate your emergency to NCS on your first call (i.e.: "CONTROL, LAST CHANCE - EMERGENCY TRAFFIC") or ("BREAK, BREAK") IF YOU NEED TO STOP AN EXISTING CONVERSATION.**
3. **In general, stations with emergencies will not be moved to other channels, however, you may be asked to move if it is necessary to contact the mounted sweep teams at an incident site.**
4. **The Event Officials make all decisions in the emergency. Your job is to communicate their**

requests, information, decisions, and instructions to and from Event Control ... only. Please do not get trapped into being the decision makers.

- 5. Should NCS instruct you to contact an emergency response agency on one of our channels (e.g. Cal STAR), use your tactical call (name of your site). Answer their questions directly, be brief, and let them lead the situation. They know what they want and when they want it.**
- 6. If you are concerned about the conduct of an emergency situation, please keep written notes as best you can and include them in your return envelope.**

COLLECTION AND RETURN OF PAPERWORK

The Event Officials have asked that the radio crews return all of the site paperwork to Event Control after your checkpoint closes. This includes all timer's forms, drop forms and runner/rider Numbers, Cards or Chips.

A manila envelope has been provided for this purpose.

The checkpoint staff has been very good about complying with this request. When you first arrive, coordinate with the station captain and/or timers on how you will accomplish this, and how the in time and out-time reporting will work.

Should you encounter a problem or a lack of cooperation, please do not argue. Inform NCS of the issue and you'll get instructions. There is an Event Official at the control station at all times, and that official will handle the problem.

When you leave, come by the Event Control building in the ARD Overlook Park and turn in your envelope.

RUNNER/RIDER STATUS REQUESTS

At sites where crews and/or spectators are allowed, you will likely be asked (repeatedly!), "Can you tell me where #xxx is?" The short answer is, "No." We do not have sufficient radio bandwidth and NCS time to research and answer all of these requests.

The Event directs crews to the event web site for information on each runner & rider, and crews are urged to station someone at an Internet computer somewhere in the world who they can telephone and get the answer. The web site is www.ws100.com or www.teviscup.org and that's where you should direct them. The Leader Board at Foresthill and Finish areas are also good location.

NCS can locate by the WEB CAST runner/rider's location in special circumstances.

You may get a request from NCS as to whether a runner or rider (or possibly his/her crew) is at your site. This is usually motivated by a problem that NCS is trying to clear. We ask that you make a good faith effort to answer the question, but at large sites, it can be impossible. In such case, report what happened ("Not here" and "We weren't able to determine" are two very different answers and are important to NCS)

DROPPED RUNNER/RIDER PROTOCOL

We tell you this so you will be able to relay it to crews and runners when they begin asking you about it

Runners who drop at stations where crews are permitted will generally leave with their crews, if they are present. If the runner desires event transportation, the protocol is:

1. Runners/Riders/Horses that drop above Foresthill will be transported to Foresthill if it hasn't closed. Those who drop below Foresthill will be transported to the finish.
2. Horses may go directly Barn Area or Loomis Basin if needed.
3. A new program might require additional radio traffic. HORSE TRANSPORT CARD will be given to all pulled horses. As a horse is transported by trailer to a new location. Before a driver leaves a checkpoint he will load horses in his trailer and then see the radio person at the checkpoint and report trailer number, time, horse number and destination of horse. Radio person will relay to NCS. At new destination the driver will check-in with new radio person of his arrival. We will continue this every time a horse is transported from point to point. We need to track all pulled horses. This may include runners and riders later.
4. The WSER makes no guarantee of immediate transportation and runners and crew will probably know that. Runners may have to wait at a site until the transportation arrives, keeping in mind that some sites have very difficult access. In some cases, the runner(s) may need to ride out with the station staff when the station closes.
5. We ask that Radio Crews do not transport runners/riders/horses. If the situation appears to require that you do that, please contact NCS first.

GENERAL VOICE PROCEDURES

Do not call other stations on your Repeater Channels without getting permission from NCS.

The Simplex Channels are for CKPT to CKPT direct contacts.

Use tactical call signs (i.e. station locations) for all transmissions, except when you clear. To clear the channel, say "<tactical callsign> CLEAR, <your ham radio callsign>.

After every one or two groups of numbers transmitted to NCS. NCS will confirm that SOS Sweep Teams don't need to contact NCS. SOS Sweep Teams will need to be ready, after a group of numbers, to get their communications into NCS.

Sweep Teams need to generally stop their horses in a HOT SPOT, with antennas vertical. Then make their contact to NCS. This will get your best communication to NCS.

A special thanks to our coordinators for their extra help throughout the year.

- Kim Scheidel, KE6RKX CrossBand Coordinator
- Pete Spencer, KE6TWR High Country Coordinator
- Glenn Maclean, WA7SPY Repeater Trustee & Coordinator
- Fred Jensen, K6DGW NCCRA Coordinator
- Mary Anne Balthrope, KE6EST SOS Coordinator
- Bob Balthrope, KD6WTY SOS Coordinator
- Ken Sakamoto, KC6JSV NCS Coordinator
- John Kernkamp, WB4YJT Radio Engineer
- Chris Terry, K9WWV WiFi Coordinator
- Rich Littlefield, K6KLB Winlink 2000 Coordinator

A special thanks to:

- Eric Homa, N6NMZ Repeater Trustee & Engineer
- Chris Huber, N6ICW Repeater Trustee & Engineer

Please review (www.wstrail.org) and (www.comm.wstrail.org/voice.htm) before the event. We really do appreciate your volunteer efforts. Enjoy the event and the Sierra scenery.

This is a TEAM effort. You're all part of this team:

"WESTERN STATES COMMUNICATIONS"

73,

Ralph, W6RWL

WS Communication Leader

SOS SWEEP TEAM RADIO ASSIGNMENTS

WSER

TEAM	(CH) PRIMARY	SECONDARY
1) RF to DT	BALD VHF CH 4 CrossBand "X" CH 6	ROBINSON FLAT CH 3
2) DT to MB	BALD VHF CH 4 CrossBand "Y" CH 7	FORESTHILL 2 CH 15
3) MB to FH	BALD VHF CH 4	FORESTHILL 2 CH 15
4) CAL2 to RC	BALD VHF CH 4	FORESTHILL 2 CH 15
5) FH to RC	BALD VHF CH 4	FORESTHILL 2 CH 15
6) GG to HWY 49	AUB-VHF 2 CH 17	AUB-VHF 1 CH 9
7) HWY 49 to FINISH	AUB-VHF 2 CH 17	AUB-VHF 1 CH 9
8) HWY 49 to FINISH	AUB-VHF 2 CH 17	AUB-VHF 1 CH 9

TEVIS CUP

TEAM	PRIMARY	SECONDARY
1) RP to HC	SQUAW CH 1	MT ROSE CH 2
2) RP to HC	SQUAW CH 1	MT ROSE CH 2
3) HC to RF	SQUAW CH 1	MT ROSE CH 2
4) HC to RF	SQUAW CH 1	MT ROSE CH 2
5) RF to DW	BALD VHF CH 4	CrossBand "X" CH 6
6) DW to FH	BALD VHF CH 4 CrossBand "Y" CH 7	FORESTHILL 2 CH 15
7) FH to FR	BALD VHF CH 4	FORESTHILL 2 CH 15
8) FR to LQ	AUB-VHF 2 CH 17	AUB-VHF 1 CH 9
9) LQ to FINISH	AUB-VHF 2 CH 17	AUB-VHF 1 CH 9

3)

Digital Checkpoints:

Use digital mode as primary mode to transmit Runner/Rider data to NCS, as available.

Checkpoint	Primary Mode	Secondary Mode
Lyon Ridge	WL2K	Radio
Red Star	WL2K	Radio
Robinson Flat	WL2K	Radio
Miller's Defeat	WL2K	Radio
Last Chance	WL2K	Radio
Devil's Thumb	WL2K	Radio
Deadwood	WL2K	Radio
Michigan Bluff	Laptop Internet	Radio
Chicken Hawk	WL2K	Radio
Foresthill	Laptop Internet	Radio
Rucky Chucky / Francisco's	Laptop Internet / WL2K	Radio
ALT	Laptop Internet	Radio
Hwy 49_Upper Quarry	Laptop Internet	Radio
Lower Quarry	Laptop Internet / WL2K	Radio

Appendix:

1)

We are using additional radios for Tevis Officials this year.

Tactical Calls are:

TEVIS CONTROL (NCS)

TEVIS #1 thru #10

2)

Freq. below only to be used for Emergency's only. NCS will direct you to use this Freq. or any other as direct by agency.

"CALCORD Freq."

156.075 Simplex

PL 156.7 Encode & Decode