May 1, 2023

## RADIO OPERATIONS PLAN

Run Website - https://secondwindtrailrunning.com/pct50
Race Director - John Martinez

Communications Coordinator - Gary Holmes KM6LKP. 619-379-8809 km6lkp@gmail.com

Communications information website www.craigwilliams.com/pct50
Thank you for volunteering to provide radio communications support for the PCT 50 mile run. The run begins and ends in the Boulder Oaks campground located a few miles off the Buckman Springs exit from I-8. This is the next exit east of Sunrise Highway. The bulk of the runners will begin the run at 06:00 Hours. Some will avail themselves of the Early Start Option at 05:00. The last runner must be finished by 19:30 Hours. The course travels along a portion of the historic Pacific Crest Trail that goes from the Mexican Border to Canada. This is an out-and-back course with a turnaround approximately 2.3 miles beyond the Penny Pines Aid Station. The runners go through each Aid Station twice outbound, uphill, and then again inbound, downhill, as they return to the Boulder Oaks start point.

## Start and estimated end times:

Radio stations should be setup and checked in with Net Control by:

Bolder Oaks 05:00 to 20:00

Fred Canyon 06:00 to 19:30

Dale's Kitchen 07:30 to 15:30

Todd's Cabin 08:00 to 15:30

Penny Pines 09:00 to $14: 30$

## OBJECTIVES:

We are serving as communications support and not required to provide medical aid or official time tracking of runners. Our primary responsibility will be to ensure the safety of the runners, volunteers and ourselves. We will track runners by logging them as they leave each aid station. Our records will not be used as official times, but as a backup for the Aid Station logs

We will provide the following services for this event:

1) Communications for injured runners, help locating lost runners, and reporting of dropped runners.

## Please contact Net Control to report injured or suspected lost runners.

2) Tracking of runners through each Aid Station in order to ensure all are accounted for.
a. Report to Net Control when the first and last runners pass through your station.
b. Contact the next station downstream from your station (on the VHF simplex channel) to report when your last runner has left your station.
c. Report to Net control runners who drop from the run at your site. If a runner drops, be sure the Aid Station Captain is also aware of this as the runner has instructions to turn in their bib if they dropout.. Report to Net Control whether the runner needs transportation and if not (e.g. driven off by support crew) report who took the runner and where they are going (e.g. finish line/home/hospital).
d. Report to Net control runners who have departed your site (usually in groups of 5 unless there is an unusually long time between runners). Include runner bib number and departure time ( 24 hour military time 0000 to 2359). During busy times it helps to put the bib number and time on a scratch sheet and then transfer the information to the Reconciliation Worksheet. We are looking for accuracy not speed.
3) Provide race management and logistics communication between the Race Director, Start/Finish area and Aid Stations (e.g. supplies are needed).
4) Provide race status information to the Race Director. (e.g. "has runner \#x been through Aid Station y ?").
5) Practice skills and techniques that would be applicable to providing communications in a regional emergency situation.

## GUIDELINES/PROCEDURES:

In case of an emergency: Use common sense and the Medical personnel at your location. If you make a 9-1-1 call notify Net Control as soon as possible. If you do not have cell coverage Net Control has Government Liaison officers who have public service fire and law enforcement radios and can call for assistance immediately.

Program your radio(s) in advance with all the frequencies in the Frequency Plan below.
Please bring food, water, suitable clothing, hats, sunscreen, watch, clip board, paper, pencils, a small table, and a chair for your use. Think in terms of being self-sufficient. It will be quite cool early in the morning and probably hot in the afternoon, so layered clothing is advisable. Also print and bring copies of this document and the logging and reconciliation worksheets (2 copies of each).

Bring extra batteries or generator (with approved spark arrestor) for your radio(s), external antennas and manuals or Quick Reference Guides for your radios.

If you have FRS radios, bring them. They can be very useful to help communicate with other (non-Ham) volunteers at the Aid Station over moderate distances.

Radio Operators may report directly to their assigned location (see 2015 PCT50 Ham Roster). Please arrive early enough to get your station set up and on the air at least 30 minutes prior to the projected arrival of the first runner. Run radio checks to verify your radio's programming, check that you can hit the repeater, find the lowest power setting you can use reliably with your radio and antenna, and learn which other sites you can reach on simplex. Report to Net Control when your station is operational.

Find and introduce yourself to the Aid Station Captain. Let him/her know that, among other things, you are there to help meet his/her communications needs. Also get to know the Aid Station volunteer(s) who will be recording runners and times. Working with them can provide an additional check of the runners and times you've logged. It is useful to periodically reconcile your logs in case one or the other of you might have missed a runner. Work as a team with the Aid Station personnel; we are all there to ensure the safety of and assist the runners.

The Runner Reconciliation Worksheet is used to log each runner (by bib \#) and the time they depart the Aid Station. Use one copy for the outbound ( uphill ) leg and another copy for the inbound (downhill) leg. Check off the bib \# when the runner and time has been reported to Net Control. You can use the Checkpoint Logging Sheets to group runners by five for easier call in to Net control.

The first time through the Fred Canyon Aid Station (outbound leg) the runners may be so closely grouped that it is difficult to get individual times. If necessary, record an approximate time e.g. every 5 minutes and concentrate on recording runner bib \#s.

The runner's time can be copied to the Reconciliation Worksheet (alongside the runner's bib \#) at your convenience. This worksheet (one copy for the outbound leg, another for the inbound leg) can be used to help verify that all runners have been accounted for through your Aid Station. Runners who drop at upstream Aid Stations should be marked on this worksheet so you know not to expect them back.

190 plus runners have signed up but only approximately 170 runners are expected. A list of runners by bib \# and last name will be distributed to all operators. The actual number of runners that start will be disseminated by Net control after the start.

In addition to the worksheets for recording runner times, you should maintain a $\log$ ( Radio Station Log ) of other messages and important events, especially anything regarding runner safety or welfare.

Aid Stations should remain operational until the last runner has reached the next downstream Station. This is a safety precaution in case a runner should be injured and turn back rather than continuing down the course. Once all runners have been accounted for at the downstream Station, you may secure (with approval from Net Control).

Please check-in and check-out each individual operator (upon arrival and departure from the Aid Station at the end of the day) with Net Control so that we can account for all Radio Operators. Also let Net Control know if your station is going to temporarily be off the air and when you return.

Please use tactical calls (Aid Station names) to identify your station (for example: "Net Control this is Dale's Kitchen"). Remember to sign-off with your personal call sign at the end of all contacts.

We will be operating as a Directed Net. Net Control will coordinate all radio traffic on the VHF repeater. Operators at Aid Stations will normally be communicating with Net Control, but if they need to talk directly to another Station or the Race Director, should request permission from Net Control first. (this is not necessary if you can reach the other station on the VHF simplex frequency).

Report to Net Control the arrival or departure of EMTs and or Sheriff Search and Rescue units at your Aid Station (they should check-in with you). This will assist the Race Director if there should be a need to dispatch an EMT crew.

We are using the RACES repeater with their permission and generosity. We will yield to any emergency traffic that comes across the repeater.

After Action Report - after the event is over, please send an email to Craig Williams craig@craigwilliams.com with your comments on what went well and what could be done to improve communications. Include a brief description of your equipment (type of radio, power level, type of antenna) and any information about the site that would be helpful for future operators.

## FREQUENCY PLAN:

| Channel | Frequency (offset) PL | Usage |
| :--- | :--- | :--- |
| MEARC Repeater | $146.610(-)$ TX/RX PL 100.0 | Primary communications between Net Control <br> (Bolder Oaks) and Aid Stations, This is a <br> directed net managed by Net Control. |
| RACES Repeater | $147.195(+)$ PL 114.8 | Secondary communications between Net <br> Control (Bolder Oaks) and Aid Stations, This is <br> a directed net managed by Net Control. We will <br> yield the repeater to RACES in the event of a <br> real-world emergency. |
| VHF Simplex | 146.520 | Direct communications between Aid Stations, <br> mobile units that can't reach the repeater or as <br> otherwise needed. |
| UHF Simplex | 446.500 | Alternate simplex <br> FRS Ch 3 462.6125 |
| Lyons SANDRA | 146.265 (+) PL 107.2 | Can be used to communicate with non-Ham <br> volunteers. e.g. spotters helping to ID runners <br> coming into an Aid Station, someone going out <br> on the trail to assist a runner. <br> Backup repeater if primary becomes <br> unavailable. |



| Station | Lat/Long | Directions | National Forest Pass Required? |
| :---: | :---: | :---: | :---: |
| Net <br> Control / <br> Boulder <br> Oaks <br> Camp <br> Ground | N32 43.961 <br> W116 29.010 | Take I-8 to the Buckman Springs Road off ramp (EXIT 51). Turn West off exit ramp. ( I8 is north/south at this point!) Make quick left at stop sign onto Old Highway 80 and go south (parallel to l-8) about 1-2 miles to campground. Park in the Boulder Oaks Campground. | No |
| Fred Canyon | N32 46.296 W116 26.340 | Drive to Cibbets Flat Campground, located off of the Kitchen Creek off ramp (EXIT 54) from I-8. Go north on Kitchen Creek Road about 4.5 mile to the campground entrance on the right. <br> As you enter Cibbets Campground, keep going straight (instead of following the road to the left). The paved road soon turns to dirt as you proceed through an open gate. You'll climb about $3 / 4$ mile until you see a large tree with a large circular clearing right in front of it. That's the Fred Canyon aid station location. <br> There is no shade here, so consider bringing your own EZ Up tent. | No |
| Dale's Kitchen | N32 50.496 W116 25.116 | Reached by going north up the Sunrise Hwy (I8, EXIT 47) to near the green 22.5 mile marker. Turn right on to Thing Valley Rd. (just before the Mount Laguna Fire Station) and go down 1.4 miles (no left turns) to the aid station. <br> Recommended that you meet at the Red-Tail Rooster Volunteers Center located directly across the Sunrise Hwy from the fire station and drive in together. <br> Some shade, but EZ Up tent may be desirable. | Yes* |
| Todd's Cabin | N32 52.851 <br> W116 25.396 | Located up the Sunrise Hwy at the green 24.5 mile marker. Turn north and go uphill on the dirt road (right side) for 200 yards. | No |
| Penny Pines | N32 54.345 W116 27.445 | Located at the green 27.5 mile marker on Sunrise Hwy. | Yes* |

* Parking at indicated aid stations locations requires a National Forest Adventure Pass. Day Use passes are available for $\$ 5$ at Forest Service offices, REI and A-16 stores and at the Laguna Mountain Lodge \& Store. Some people may have Lifetime or Annual Passes.

