

FURNACE CREEK 508

WHERE THE WEST IS WON



adventure·CORPS™
"We're Out There"

adventure•CORPS™

“We're Out There”

Welcome to the 28th edition of the spiritual odyssey known as Furnace Creek 508, the premier ultramarathon bicycle race in the world. Our 508 mile course serves as a dramatic forum for bicycle racing, personal achievement, and self-discovery. Some call it a "trans-personal experience," while others call it "the hell of the west." We think it's heaven on earth.

The 508 was created in 1983 by John Marino, the godfather of ultramarathon bicycle racing who founded the Race Across America (RAAM) and the Ultra Marathon Cycling Association (UMCA). The race route was originally a 102 mile loop in the Hemet, CA area that was ridden seven times sequentially. In 1985, it was moved to the roads between Tucson and Flagstaff in Arizona. It was also held twice a year for a number of years, which is why we are now celebrating our 28th edition after nineteen years.

Since 1989, the 508 been held on the now world-famous Death Valley course that lives on to this day. Since 1991, it has proudly been produced by adventureCORPS, producers of the world's finest endurance sports events held on the open road and "out there."

With racers coming from all over the U.S., Canada, Europe, and Asia, the 508 is truly a world-class race.

We look forward to sharing the weekend with you. Thanks for joining us.

Sincerely,



Chris Kostman

PS Special thanks to Matt Frederick of www.mattfrederickdesign.com for laying out this beautiful race magazine!

549 Vistamont Ct. Berkeley, CA 94708-1243 USA

www.adventurecorps.com

Pho: (510) 528-3263 - Fax: (419) 818-5393

adventure•CORPS™

"We're Out There"

Table of Contents

The WideWorld of Totems	Page 2
General Race Information	Page 3
Hints on Supporting a Cyclist	Page 7
Equipment List for Furnace Creek 508	Page 10
Detailed Course Description	Page 12
Major Climbs	Page 17
Course 3D Images and Profile	Page 18
The Insider's Guide to Furnace Creek 508	Page 20
Official Rules	Page 24
Furnace Creek 508 Route Details	Page 31

Furnace Creek 508 Race Magazine is published annually by adventureCORPS.

All correspondence should be sent to:
 549 Vistamont Ct. Berkeley, CA 94708-1243 USA
 Pho 510-528-3263 / Fax 419-818-5393
 Email: chris@adventurecorps.com

www.the508.com
www.adventurecorps.com

"Furnace Creek 508," "The 508," and "Where the West is Won" are trademarks owned by adventureCORPS. Use of any of these trademarks is forbidden without the express written consent of adventureCORPS. So there.

Front: Michael Olstad of Team Armadillo, 2001. Back: Dan Horse Dibb and Greg Polecat Page of Time Station Seven, 2001.

Layout and page design by Matt Frederick Design.



<http://www.mattfrederickdesign.com>, cel. 209.996.4561 or msg 209.341.0493

The Wide World of Totems

Aardvark Abalone Akita Albatross Algae American Eagle Amoeba Ant Anteater Antelope Armadillo Asses Avocet Badger Banana Slug Bandicoot Barnacle Barracuda Basenji Bat Bear Bees Beetle Bighorn Bison Black Widows Blowfish Blue Fox Bluejay Bobcat Brahma Bull-et Brittle Star Brown Bear Bubba Shrimp Buffalo Bull Bulldog Bumble Bee Bunny Bush Baby Bushbuck Cactus Wren California Condor Camel Caribou Cat Caterpillar Centipede Cerion Chameleon Cheetah Chihuahua Chinook Chukwalla Cockatoo Cockroach Cougar Cow Crawfish Crocodile Crow Cutthroat Trout Dachsund Dalmation Deerhound Devil Ray



Dinosaur Dodo Dog Dolphin Dragon Dragonfly Drills Duck Dugong Eagles Eaglet Echidna Eel Elephant Elk Falcon Fearless Fly Ferret Flamingo Flounder Flying Fish Flying Squirrel Foxhound Frog Froggy Gastropod Gazelle Gecko Geese Gila Monster Giraffe Gnu Goose GosHawk Grasshopper Greyhound Griffin Grouper Guinea Pig Guppy Hammerhead Hamster Harrier Harris Hawk Hawaiian Owl Hawk Hedgehog Heron Hippo Hog Honey Bee Hoopoe Hornet Horse Hummingbird Husky Hyena Hyenasaurus Inchworm Jackal Jackalope Jackrabbit Jaguar Jellyfish Kaka Kangaroo Kangaroo Rat Katydid King Crab Kingfisher Kingsnake Kinkajou Kiwi Klondike Koala Kodiak Bear Kudu Lab Rat Langur Lemmings Lemur Leopard Lion Lizard Llama Lobster Locust Longhorn Lynx Macaw Mackska Mad Dog Maggot Malamute Mallard Manatee Mandrill Manimal Mastadon Meerkat Megamouth Shark Mink Mongoose Monkey Moose Moth Mountain Pigmy-Possum Mountain Turtle Mountangoat Mouse Mule Muskrat Nanosaurus Narwhal Newt Night Eagle Nightingale Nuthatch

Ocelot Octopus Old Fox Orangutan OrCa Oriole Ostrich Otter Panda Panther Parrot Peacock Pegasus Pelican Penguin Piglet Piranha Pitsnake Polecat Pony Porcupine Porpoise Pteradactyl Puma Quadzilla Quagga Quail Rabbit Raccoon Raptor Rat Pack Rattlesnake Raven Red Legged Frog Red Robin Red Rockettes Red Rooster Reindeer Rhino Ringtail Roadrunner Robin Rock Rooster Sabertooth Sasquatch Sawfish Scorpion Scoters Sea Horse Sea Lion Seagull Seal Shark Sheep Sidewinder Sitting Duck Skeeter Skunk Slug Snail Darter Snake Snapping Turtles Snowkitty Sparrow Sparrow Hawk Spider Springbuck Squid Squirrel Steelhead Stingray Stork Swan Tadpole Tanzilla Tarantula Tasmanian Devil Thunder Hawk Thunderbird Tibia Tigger Timber Wolf Toad Tortoise Toucan Tree Frog Tree Slug T-Rex Trout Tumble Bug Turtle Unicorn Vicuna Vulture Wallaby Walrus Warthog Wasp Waterbuck Weasel Whale Whippet Wildcat Wildebeest Wolf Wolverine Wolves Woodchuck Woodpecker Wolly Mammoth Woolly Monkey Worm Zebra



GENERAL INFORMATION

DATE: October 12-14, 2002.

DISTANCE: 508 miles, more or less.

ROUTE: The Official Route for the Furnace Creek 508 is included in the Race Magazine and on the website. The 508 mile course covers 35,000 feet of cumulative elevation gain while passing through Valencia, Mojave, Randsburg, Trona, Panamint Valley, Death Valley, Stove Pipe Wells, Furnace Creek, Badwater, Shoshone, Baker, Amboy, and Twenty Nine Palms.

STARTING LOCATION: Hilton Garden Inn 27710 The Old Road, Valencia, CA 91355, 661-254-8800. Driving instructions from the San Fernando Valley: Proceed north on Interstate 5 for about 20 miles, exit at Magic Mountain Parkway in the city of Valencia, and the Inn is on the west side of the interstate, next door to Marie Callendars. All entrants who plan on obtaining a room the night before the race are encouraged to stay at the Hilton Garden Inn. It has comfortable facilities and a restaurant, making pre-race logistics as convenient as possible. You must call immediately to get a room reservation. The hotel now has only 65 rooms available at the special 508 rate, so be sure to mention Furnace Creek 508. (If this hotel is full, try calling the Best Western Valencia Inn at 661-255-0555, Comfort Suites at 661-254-7700, or Hampton Inn at 661-253-2400.)



PRE-RACE MEETING: We have outgrown the banquet facilities of the Valencia Country Club and there is nowhere else in the entire area that is remotely affordable in terms of a meal, so beginning in 2002 we will no longer have a meal with the pre-race meeting. The meeting, still a fun and exciting event for everyone, will be held 6:00-7:30PM, Friday, October 11, at the banquet room of the Valencia Country Club. All riders and at least one support crew member **MUST** attend this meeting. Bring the Race Magazine. The Country Club is less than one mile away from the Hilton Garden, just east of I-5 and south on Tourney Road on the left.

STARTING TIME: For Solo and Tandem entrants, it's 7:00AM. Two Rider Teams will start at 10:00AM. Four Rider Teams and Two or Four Tandem Teams will start at 1:00PM. We anticipate using the Hilton Garden Inn's front main parking lot. All riders must be present at the start no later than thirty minutes prior to their start time for pre-race instructions and photos. The first several miles of the race will be under "yellow flag" conditions, after which the race will officially begin, though the clock will have started at the actual start line.

ENDING LOCATION: At the finish line host hotel, as detailed below. Chris Kostman can be reached there after the lead rider arrives - (760) 367-9141 ext. 508. Plan on hanging out at the finish line to greet other finishing riders, which will help everyone get to know one another better and make the weekend more fun.

ENDING TIME: Determining the exact arrival time in a non-drafting 500 mile bike race is virtually impossible. Unknown wind conditions will alter the finishing time by as much as a few hours. Barring any unforeseen serious circumstances, the event is officially over 48 hours from the start, or at 7:00AM, Monday, October 14. Here are some projected finish times for solo and tandem entrants:

18 mph	28.25 hrs	11:15 am
17 mph	29.91 hrs	12:55 pm

16 mph	31.78 hrs	2:47 pm
15 mph	33.90 hrs	4:54 pm
14 mph	36.32 hrs	7:19 pm
13 mph	39.11 hrs	10:07 pm
12 mph	42.38 hrs	1:22 am
11 mph	46.23 hrs	5:14 am

FINISH LINE HOTEL: Best Western Gardens Motel, 71487 Twenty Nine Palms Highway, Twenty Nine Palms, CA 92277, 760-367-9141. A very nice hotel located literally at the finish line of the race on the main drag (Hwy 62). The managers have also extended a special rate of \$60 for a double, \$65 for a triple, and \$70 for a quad to race entrants and staff. Make your reservations ASAP. Identify yourself with the 508. (If this hotel is full, try calling the Harmony Motel at 760-367-3351. There is also a nearby Motel 6.)

SPECIAL RENTAL CAR RATES FOR THE 508:

Participants in AdventureCORPS and Planet Ultra events, including The 508, can receive special discount rates on cars and vans from Enterprise Rent-a-Car that are rented in California. Call 800-325-8007, 800-593-0505, or any local branch and mention account # 32C1631.

SUNRISE/SUNSET/TWILIGHT: Using Valencia as a reference, Civil Twilight begins at 6:33AM and Sunrise is at 6:58AM, while Sunset is at 6:22PM and Civil Twilight ends at 6:47PM. Riders must have full lights and reflectors on, and be followed directly by their pace vehicle, between 6:00PM and 7:00AM.

RACE HEADQUARTERS: Race Headquarters is located at the 508 Office's cell phone. The number will be provided during the race meeting. If a rider drops out of competition, call Race Headquarters AT ONCE! State why and where you or your rider dropped out. You might also be able to reach Chris Kostman in care of the Best Western Gardens Motel, room 508, after racers begin to finish. For emergencies, call 911.

RACE NUMBERS: This year, we will continue with animal totems rather than numbers. Each racer will receive an animal name that must be posted on all four sides of each vehicle. Animals are the theme — antelope, bear, cheetah, duck, etc. Be sure to memorize your totem; this is how you and your crew will identify yourselves to time station and race officials. Returning racers will have the same totems as before. New riders may request a specific animal totem, however only Chris Kostman can officially assign animal totems, following a special ritual ablution and spiritual practice. Totems, whether nickname, mascot, alter ego, second identity, or spirit guide, are permanent and non-transferable!



A POST RACE BREAKFAST is planned for 8 AM, Monday, October 14. As usual, we'll take over the Carousel Café just east of the hotel at 72317 29 Palms Hwy. This will be an informal get-together, so don't expect anything too plush! It's your bill, of course.

OFFICIAL FINISHER'S DISTINCTION: To finish the Furnace Creek 508 is a noted accomplishment in itself. The time limit is 48 hours for solo entrants, 45 hours for two rider teams, and 42 hours for four rider teams (7:00AM on Monday).

DIVISIONS OFFERED: There are two separate divisions, men's and women's, sharing the same route at the same time, as well as

tandem, relay, HPV, and recumbent subdivisions (see 2E below for classes of recumbents and HPVs allowed), along with some age group designations such as 50+, 60+, and 70+. Here are the current categories. If you would like to enter in a new, different category, please contact the race director in advance to discuss that possibility.

Divisions Offered:

Solo (no drafting or riding together)

Men (age groups: under 50, 50+, 60+, 70+)

Women (age groups: under 50, 50+, 60+, 70+)

Men's Tandem (age groups: under 50, 50+, 60+, 70+)

Women's Tandem (age groups: under 50, 50+, 60+, 70+)

Mixed Tandem (age groups: under 50, 50+, 60+, 70+)

Note: All of the above technically have HPV/recumbent options; see 2E below for classes of recumbents and HPVs allowed.

Relay Teams (no riding together or drafting within or between teams)

Mens Two Rider

Womens Two Rider

Mixed Two Rider

Mens Four Rider (four men or three men/one woman)

Womens Four Rider

Mixed Four Rider (two men/two women or one man/three woman)

Mens Tandem Eight Rider (8 men or 5, 6, or 7 men and the corresponding number of women)

Womens Tandem Eight Rider (8 women)

Mixed Tandem Eight Rider (4 men/4 women or 5, 6, or 7 women with the corresponding number of men)

Note: All of the above subdivide into age groups: under 50, 50+, 60+, 70+. Also, they technically have HPV/recumbent

options; see www.the508.com for classes of recumbents and HPVs allowed.

Mixed 508 Rider Relay Team (each of 508 different riders will complete one mile each; once there is sufficient demand, this option will be offered in various age groups and gender divisions.)

COURSE RECORDS:

Solo

Men's Open, Rainer King Crab Klaus, '96, 28:09:34.

Men's 50+, Tom Winstrom, '91, 31:07:22.

Mens' 60+, Jim Pterodactyl Pitre, 61, Mesa, AZ, veteran, '01, 37:55:15.

Women's Open, Seana Hoopoe Hogan, '95, 28:46:34.

Women's 50+ Anne Snail Darter Schneider, '98, 42:31:45.

Men's Open Recumbent (Superstock category), Eric Hedgehog House, '94, 35:24:29.

Men's 50+ Recumbent (Superstock category), Don Gray, '91, 47:10:20.



Tandem

Mixed Tandem, Cindi Staiger, Mark Patten, '96, 32:28:12.

Men's Tandem, Wolfgang Erhart and Franz Kasserer, '98, 29:58:18.

Two Rider Team

Men's Two Rider Team, Team Jackalope, '01, 29:24:24.

Mens' 50+ Two Rider Team, Team Chinook 50+, '01, 33:53:40.

Mixed Two Rider Team, Team Pelican, '01, 30:28:58.

Four Rider Team

Men's Four Rider Team, Action Sports Buffalo, '95, 21:47:12.

Women's Four Rider Team, TS Technical Bat, '95, 27:31:10.

Mixed Four Rider Team, Kern Hammerhead, '97, 24:13:38.

Men's 50+ Four Rider Team, Bicycling Magazine Peacock, '95, 23:07:58.

Women's 50+ Four Rider Team, Team Bakersfield Black Widows 50+, '01, 30:21:55.

Mixed 50+ Four Rider Team, Whippet, '99, 33:17:15.

Eight Rider Tandem Team

Women's Tandem Team, Team Tarantula, '96, 28:00:05

Mixed Tandem Team, Kern Wheelmen T-Rex, '99, 23:54:17.

Men's Tandem Team, Team Davis Drills, '01, 22:45-22.

AWARDS:

All solo and team OFFICIAL FINISHERS will receive a finisher's medal at the finish line. They will also receive an OFFICIAL FINISHER'S jersey, designed by Cycle Design, which will be shipped after the race.

NANCY DANKENBRING AWARD:

This Award is intended to encourage and increase the participation of female athletes in Ultra Cycling race events in general and the Furnace Creek 508 in specific. In particular, this Award is to encourage increased participation of female athletes who have never previously competed in any Ultra race events.

Therefore, the Nancy Dankenbring Award is to be presented in recognition of the best female rookie solo rider entered, regardless of age, who enters and successfully finishes the Furnace Creek 508 in the lowest official time recorded.



The Nancy Dankenbring Award is a perpetual award intended expressly to be concurrent with the Furnace Creek 508 for as long as this race event is properly and officially sanctioned, organized and run.

The physical award itself may be monetary, services, merchandise or product; complementary/free entry in the next year's Furnace Creek 508 and/or other UMCA event(s); trophy, plaque or other device; or any combination or proportion as determined by event officials. For more information, visit the race website.

RAAM 2003 QUALIFICATION CRITERIA:

In the men's and women's solo (not team) divisions, a rider must complete the course within 15% of their divisional winner's time to qualify for RAAM. Racers who have previously qualified for RAAM do not impact the qualification window; i.e. the 15% is based on the time of the first non-qualified racer. For riders over 50, the window is 25%. Team and tandem racers do not have to qualify for RAAM, as there is no qualification necessary for Team or Tandem RAAM. This RAAM qualification will extend for three years. Contact pactour@mc.net or visit www.raceacrossamerica.org.

UMCA MEMBERSHIP: All racers in the 508 must be a member of the Ultramarathon Cycling Association. Visit www.ultra-cycling.com for more info. Race entrants will also be able to join the UMCA at the pre-race meeting.

HINTS ON SUPPORTING A CYCLIST

By John "Hawk" Marino, founder of RAAM and the 508

A pace vehicle and crew is primarily responsible for providing a cyclist with food and drink, change of clothes, navigation, light source at night, and protection from motorists in certain situations. In order to avoid being a hazard on the roads, all pace vehicle crews should have an understanding of how to support a rider. Read and learn the information discussed below.

There are two ways to support a rider:

- 1) By playing "leap frog" with the rider, e.g. driving ahead, stopping and offering support as a pedestrian, then repeating the process.
- 2) By following directly behind the cyclist, at the speed of the rider, and giving support from a moving vehicle.

HOW TO PLAY LEAP FROG

1) Use this method when there are many cyclists in close vicinity, for example at the start of any ride or race, or when two or more riders are within a close proximity where following becomes a hazard to traffic and to the pace vehicle itself.



2) Use this method in heavy day-time traffic when following directly behind creates a bigger danger for motorists trying to pass, e.g. narrow two-lane winding roads where

passing is difficult, or when three or more vehicles are stacking up behind and there doesn't look like the road ahead will provide an opportunity for passing.

3) When driving on the roadway, always travel the speed of traffic, not the speed of the rider. Use turn indicators and arm signals at least 200 FEET prior to stopping or turning. Signaling your intent with your left arm is useful in addition to signaling with your lights.

4) When parked or stopped, always display your emergency flashers.

5) When parking or stopping, do so completely OFF the roadway, and make sure the rider has enough room to pass without having to ease out into traffic.

6) Always park or stop on the right side of the roadway. Select a safe spot that will allow enough room for the vehicle.

7) Avoid stopping on downgrades because the cyclist is moving too fast for a hand-off.

8) Stopping at the crest of a hill before the cyclist gains speed is good in case the rider wants to change into warmer clothes for descents, and for feeding purposes.

9) All hand-offs should be done as a pedestrian and not out of the window of the vehicle.

10) Select a spot with enough room for a hand-off.

11) The rider should throw empty bike water bottles, etc. on the side of the roadway next to the vehicle before the hand-off is made. Pick up all litter.

12) When passing your rider prior to a hand-off, drive far enough up the road to give yourself time to park the vehicle, get out of the vehicle, open the trunk, find the food/drink/jacket/etc. and get in position for a hand-off before the rider passes. This will take practice.

13) Any goof-ups with traffic reflect badly on the rider ahead. For example, if you zoom out into traffic in front of another motorist, that motorist could possibly take anger out on the rider ahead by a nasty remark, horns, throwing debris, spitting, or even easing a rider toward the shoulder. Show the motorists that we know what we're doing!

14) Give trucks all the room they need. Most are on strict time schedules and some feel as though bikes should be ridden on a sidewalk. Rather than try fighting, just accommodate them as best you can. They are bigger. Creating hostility does not make cycling safer. Use a CB radio to explain to truckers what's going on. They almost always take interest.

15) Drive with your lights on during the day also. This will help alert opposing traffic that something is going on.

16) Post a sign on the back of the pace vehicle that reads CAUTION CYCLIST AHEAD or CAUTION BIKE RACE.

HOW TO FOLLOW DIRECTLY BEHIND A RIDER

1) Follow at a distance that will allow you to stop if the rider falls.

2) Always display your emergency flashers.

3) Post a sign on the back of the pace vehicle that reads CAUTION CYCLIST AHEAD or CAUTION BIKE RACE.

4) Always check your rear view mirrors on a continual basis for traffic to the rear. Be able to identify a motorist that is not responding to your flashing lights.

5) The rider should ride as far to the right as is reasonable, given the road conditions when being followed.

6) Prior to a hand-off, make sure traffic to the rear is clear. Carry out the hand-off as quickly as possible. If traffic comes during the hand-off, carry out the hand-off, but make sure traffic responds to your presence.

7) If the rider flats, pull off to the right as far as possible. The cyclist should get off the roadway and stay far enough from the vehicle as not to be hit by the pace vehicle should the pace vehicle be hit from the rear. If there is no place for the pace vehicle to safely stop, then drive ahead to the first possible stopping place. The rider should tend to the flat or wait for the crew to come back.

8) All hand-offs should be carried out through the right passenger window and never from the driver's side.



9) At least two people should be in the pace vehicle, a driver and a feeder/passer.

10) A system of horn signals should be worked out between the rider and pace vehicle in case of an emergency situation to the rear, e.g. many quick honks means get over to the right, a wide load is coming up the rear, etc.

11) A PA system is useful to speak to the rider and give directions, e.g. turn right at the next street by the Mobil Station, etc.

12) A CB radio is useful to speak to your other support vehicles or to truckers.

13) On a narrow, two-lane road with traffic backing up to the rear, the pace vehicle should try to ease over to the right to let traffic pass. Stopping is sometimes advised, but signal the rider that you are stopping momentarily. If stopping won't solve the congestion problem, signal the rider and drive up ahead to the first stopping place. Traffic can then pass.

14) If the police stop the pace vehicle, for whatever reason, deal in any manner you see fit and reasonable. Pace vehicles will generally be permitted providing a greater hazard isn't being created. Police departments interpret direct following differently. The bottom line is safety to all traffic.

15) All additional support vehicles must drive at the speed of traffic. Caravanning is **ABSOLUTELY PROHIBITED**, under all road conditions, day or night. Caravanning is when two or more vehicles follow directly behind a rider. This makes passing difficult. Additional vehicles should play "leap frog," or just drive up the road 5 to 10 miles and wait.



NIGHT FOLLOWING

1) The rider must be equipped with a front and rear light, plus reflectors just as if there were no pace vehicle. Moving reflectors or lights are advised, e.g. pedal/crank reflectors; leg lights; spoke reflectors; reflective vest; reflective tape on helmet, gloves, and shoes.

2) Always stay behind the rider at a safe following distance, unless a greater hazard is created. If traffic cannot safely pass, e.g. winding road with poor visibility to oncoming traffic, both the rider and pace vehicle should pull over and stop at the first possible place to allow traffic to pass.

3) If the pace vehicle has to stop for gas or food, the rider must wait. It is important to do all shopping during daylight hours.

4) Use low beam lights when traffic is approaching from the front. Any additional headlights should be shut off. They can be blinding to approaching motorists.

5) Plan rest, clothes, or food breaks around when the vehicle needs to stop during the night for fuel.

•508

EQUIPMENT LIST FOR FURNACE CREEK 508

By Beth "Dingo" Dawson, April 1990 508 winner and October 1991 508 runner-up

REQUIRED EQUIPMENT

At least one, but not more than two, support vehicles, no more than 78" wide.

Minivans such as the Dodge Caravan, Ford Aerostar, and VW Van are popular, although any vehicle less than 78" wide is legal. Recreational vehicles are prohibited, except as secondary vehicles for relay teams. A roof rack for storing the bikes, extra wheels, and mounting the flashing lights and sound system is highly recommended.

Rear-facing, flashing amber lights.

These are mounted on the rear of the roof. You can get turn signal lights and wire them into the vehicle's rear flashers. Mars lights (rotating lights as on an ambulance) can be used, but the front must be covered; the lights must be visible only from the rear. For the amber lights, you have two easy options:

Buy amber lights, wire, cigarette lighter plug, and relay (a small electrical unit that pulses the electricity to make the lights blink) at an auto supply store and assemble them yourself, or

Buy yellow strobe lights (which already blink and thus don't need a relay), wire, and cigarette lighter plug at Radio Shack and wire them up. The Radio Shack strobes are light enough to be duct-taped to the upper corners of your rear hatch or roof. Note: The dome of the lights must point straight back, not UP.

Slow-moving vehicle triangle and Caution Bicycles Ahead sign.

Commercial signs and the triangle are available or make your own. The Caution Bicycles Ahead signs may be ordered in

advance from the race office. Make sure the sign is neatly lettered and visible from a distance.

At least two crew members

Some riders prefer to have three crew members so that one person can sleep or work while the other two share driving and doing hand-offs. You will need more people if you have two vehicles.

Bike with lights

Be sure to make any equipment changes many weeks before the race, and make sure the bike is in top condition. Also, for night riding, the bike must be equipped with legal lights, front and back, and as many reflective materials as possible.

SUGGESTED EQUIPMENT

Food

Most RAAM racers consume 400-500 calories/hour, which requires constant eating or drinking. There will be few opportunities to buy groceries on the route, so stock up before the race. The rider should be very familiar with his/her eating preferences, but have "back-up" food ready; something that tasted good on a 40-mile training ride in cool weather might not sit well in 90° heat. Many 508 racers have had excellent luck with the products from Hammer Nutrition and E-CAPS Endurance Supplements.



Water, ice, and ice chests

Set a goal of drinking at least one big water bottle an hour; sometimes, up to three bottles is needed to beat the heat. Ice is available at the Circle K Market leaving Valencia, Mojave, Trona, and maybe in Shoshone and Baker.

Health supplies

Sunscreen, lip balm, massage oil, soap, a first aid kit, towels, and a variety of medications such as aspirin, ibuprofen, Maalox, and No Doze are recommended. For saddle sores, try baby powder, Noxzema, or anesthetic "jock itch" creams. Experiment with all supplies on training rides - the race is a bad time to discover you're allergic to a particular brand of sunscreen.

Bicycle parts

Don't count on finding bike shops (there is one in Mojave). In addition to tires, tubes, spokes, chains, lube, rags, and cables, remember to bring tools to change, fix, pump up, or adjust the parts you bring. For saddle sores, a comfortable saddle and a padded cover is a good idea. Most racers bring two bikes and as many spare wheels as possible.



Clothes

Bring suitable clothes for everything from 90-100° days to 30-40° nights. In daylight, pay particular attention to sun exposure. The best protection is wearing a specially designed, SPF30-rated cycling jersey by Sun Precautions. Visit www.sunprecautions.com for more info on their products designed for

sun sensitive and sun sensible people. When it gets cooler, leg warmers, arm warmers, and jackets help you add and remove layers quickly. Booties and a good jacket may be useful, especially for cold downhills. Rain is rare, but it has happened. It's a good idea to change shorts every 100-200 miles. Don't forget extra socks and gloves.



Miscellaneous gear

Lots of things are generally useful for the race - clear tape for putting signs on the van, a pocket knife, duct tape, electrical tape, flashlights, batteries (for the bike's lights), paper towels, garbage bags, a clipboard with blank paper, calculator, stopwatch (for timing stops), camera, film, a sound system (ideally, speakers on the roof for playing tunes to the rider), scissors, and anything else that comes to mind. Oh yeah, don't forget the official route!

•508

508 DETAILED COURSE DESCRIPTION

By John "Hamster" Hughes, 1989 and 1993 solo winner. Originally published in Ultra Cycling magazine.

Stage 1: to California City, Time Station (TS) 1: 82.25 mi.

After a 10-mile ride across town, the race starts up San Francisquito Canyon. In the next 15 miles, you will climb 2,500 feet. The climb is generally moderate; the climb before the turn to Elizabeth Lake is short and steep. At the top is a good place to drop warmers and grab new bottles before the fast, tailwind-driven descent. A windy flat section through the Mojave Desert leads to the windmill climb at mile 44. Over 8 miles, you'll climb 1000 feet into a stiff headwind. Another fast descent takes you down to the town of Mojave with a couple of quick turns. After the second turn, there is a shopping center on the right where the crew can grab food.



Stage 2: to Trona, TS #2: 70.25 mi. (152.5 mi.)

From California City, head north over flat desert terrain to the Johannesburg climb at mile 110. You'll climb 1500 feet in 7 miles; the desert climb is steeper than it looks and grows progressively steeper. Drink plenty; each year some riders overheat here. After Jo'burg, you'll ride over a series of pesky

rollers before a long fast descent to the road to Trona. The crew must gas the vehicle in Trona: no gas overnight for 230 miles.

Stage 3: to Furnace Creek, TS #3 99.2 mi. (251.7 mi.)

Just north of Trona (mile 160) there is a 1000 foot climb up the Trona bump; the descent is winding and may be fast with a tailwind. The road through the Panamint Valley is very rough. At mile 200 you'll begin the 13 mile, 3800 feet climb up Townes Pass (EI 4956'). The climb up to 2000 feet is gentle; then steep grades of 10-13% to 4000 feet; the last few miles are gradual. It will be chilly at the top and you have a fast 27 mile, 5000 foot descent to Stovepipe Wells, where it may be hot! Desert rollers take you to Furnace Creek.



Stage 4: to Shoshone, TS #4 73.6 mi. (325.3 mi.)

South through Death Valley, the alluvial fans are invisible, but you climb and descend several thousand feet through Badwater (EI - 282') to the base of the exit passes. The first climb starts at mile 300 and about 1000 feet in 5 miles to Jubilee (EI 1285'). A one-mile descent leads to the next climb, about 2300 feet in 9.5 miles to Salsberry (EI 3315'). Each climb has sustained sections of 5-5% grade.

Stage 5: to Baker, TS #5 56.3 mi. (381.6 mi.)

After an easy 750 feet climb up Ibex pass, the road to Baker is boringly flat. The crew should stock up on gas, ice and food in Baker: no supplies until the finish.

**Stage 6: to Amboy, 74.1 mi. (455.7 mi.)**

Leaving Baker, you climb 2500 feet in 20 miles. It may be heating up, so drink plenty. A long descent leads to Kelso at mile 418 and the next, slightly steeper climb: 2000 feet in 12 miles to the top of the Granite Mountains (E1 4000'). The downhill to Amboy is fast and long — watch for cattle guards.

Stage 7: to Twenty Nine Palms 52.8 mi. (508.5 mi.)

From Amboy, you cross the valley and at mile 472 begin the last climb: 1500 feet in 10 miles to Sheephole Summit (site of the new Time Station 7). The climb begins gradually and gets steeper near the top. The shoulder is very sandy; the crew should be careful with the vehicle. A quick descent leads to the rough road and rolling uphill to the finish line.

•508

ANOTHER 508 COURSE DESCRIPTION

By Beth “Dingo” Dawson, April 1990 508 winner and October 1991 508 runner-up

This course description was written to give riders a feeling of familiarity as they venture across the deserts of Southern California. As abilities vary, everyone will have their own opinions about the climbs, the scenery, etc. The list of major climbs does not attempt to account for every elevation change. Along the road, you will encounter many ups and downs, so to speak!

(#) These numbers refer to climbs, see “Major Climbs” following. Miles are estimates based on the official route.

**Out of San Francisquito Canyon
Miles 1 - 30**

The course begins on San Francisquito Canyon. In these first miles, there are some small climbs (#1), one longer one, but nothing exceptional. The weather may be cool and foggy. Stay left on Spunky Canyon and continue with rolling hills. There’s one short, steep hill just before the left on Elizabeth Lake; the top of this climb is a good place for the crew to wait and be ready for the rider to ditch leg warmers, jackets, etc. and prepare for hot weather ahead.

**Windmills to Mojave
30 - 110**

After the right on Johnson, the Avenues are flat. With luck there’ll be a tailwind, but you may get strong cross winds. There are a few small climbs (#2) and one last longer hill up Backus/Hwy 114 until the right on Oak Creek. This right is right past the top of

the climb, and usually has bad gravel in the inside of the turn. Then there's a great downhill into Mojave. Time Station 1,



California City, is on the flats past Mojave. The crew should help navigate turns at Ave. A (miles 40 - 44), Oak Creek (mile 60), Mojave (miles 70 - 72), and in Cal City. By this time, the weather is usually dry and hot. Take precautions for hot weather before it becomes a problem. Be prepared with light-colored clothes, ice, sun screen, and lots of water. Try ice on the feet for swelling. Put a small towel under the helmet and down the neck to protect from the sun. Also, pour ice water on the rider's back and neck to keep cool.

Climbs into Panamint Valley 110 - 200

Past California City is a long flat section with a few rollers. The hill into Jo'burg (#3) is steeper than it looks. A good climbing gear is recommended. It's a gradual, straight climb with a couple of turns at the top. The next miles past Randsburg are rolling hills, with awesome downhills at miles 125 and 135. A good aero position gives you an opportunity to hit top speeds and rest the legs.

Trona, Time Station 2, has gas, ice, and food supplies at a small market. Stock up; you may not see an open store again until

Baker on Sunday morning. In fact, the race leaders may go through Baker before dawn on Sunday, which means that if the van stop, the rider will have to stop, too. Be prepared to finish the rest of the race without stops.

The miles out of Trona are pretty flat and easy. There's a gradual climb (#4) before the turn on to Panamint Valley Road. The road surface gets pretty bumpy; wide tires with less air pressure and a gel saddle cover ease the pounding.

Townes Pass through Death Valley 200 - 330

Townes Pass (#5) is the real mountain climb of the whole race – 10 miles up to 5000'. There are elevations markers at 2000' and 3000', but the only one at 4000' is on the other side of the road facing the downhill traffic. After the right turn, the climb is gradual to 2000', steeper from 3000' to 4000', then it does level off for the last mile even though you'll probably be too tired to notice. Be prepared for this climb with a bail-out gear around 40 inches or lower (a front/back of 39/26 or 42/28). Invariably, riders with a triple chain ring win the race to the top of this climb, passing those who are struggling with a 42/24 or worse yet, walking.

The top of Townes Pass is a good place for some hot drink or food and to prepare for the cold downhill into Death Valley. If it's not already dark, go ahead and get ready for night following - check flashing lights, put on slow-moving vehicle triangle, put lights on the bike, change to clear glasses, and maybe wash off the sunscreen.

The descent from Townes Pass into Stove Pipe Wells dips down in a series of stair-like steps. If you are riding at night, the rider will go over the edge of a dip and

plunge into total darkness, a couple of seconds ahead of the van's lights. The road surface here is very good; fresh asphalt was laid down just a couple of years ago. After Stove Pipe Wells, the course turns south and goes through Death Valley. Road conditions deteriorate and aren't very good until 29 Palms. There may be headwinds from this point to the end of the race. The Valley itself is flat, descending to a low elevation of -282' below sea level. Once past the ranger's houses and the campgrounds at Furnace Creek, time station #3, the valley is mostly featureless. In past years, the headwinds have been so bad that some riders actually walked their bikes. It can make reaching down to grab a water bottle difficult. In any case, sometimes upbeat music on the speakers can help motivate the rider through this section.



Climbing out of Death Valley are two gradual hills (#6), Jubilee Pass, 1000', and Salsberry, a 2000' climb that goes up to 3300'. The climbing starts after Ashford Mills; there are elevation markers only on the second hill, Salsberry.

The downhill off Salsberry Pass goes into Shoshone, Time Station 4. After 8am, the store is open, but be warned that the gas prices are outrageous. Most riders will go through this time station at night.

For riders who are considering a sleep stop, Shoshone makes a good place. The motel is comfortable and friendly, with small kitchenettes in each room. Also, although the winds in Death Valley may be frustrating, the temperatures during the day can be downright dangerous. It is a good idea to get through it during the night.

Baker and the Desert Climbs 330 - 400

After one short climb (#7) past Shoshone, the road to Baker is flat. After sunrise, the temperatures will rise. Watch for heavy traffic, including RVs and trucks from the motorcycle raceway. Even though the sun may rise during this section, it may be a good idea to continue following to make sure the rider is safe from traffic.



In Baker, Time Station 5, stock up on food, water, ice, and gas. This is probably the last opportunity until the finish line, and if you finish at night the stores in 29 Palms may not be open. The race leaders may go through Baker before dawn on Sunday, which means that if the van stop, the rider will have to stop, too.

The road out of Baker into the Mojave Scenic Area has several cattle guards. The climb (#8) is the first of three left in the race. It isn't too steep but it goes on forever – around 20 miles. There is a section with a couple of turns, but otherwise it's straight. There probably won't be traffic other than race officials. Again, the road surface is fairly rough. Most racers will see sunrise somewhere between Shoshone and Kelso.

Kelso and I-40 400 - 450

Watch for hazardous railroad crossings in Kelso. Be sure to ride over them at a 90° angle to the rails. The next climb (#9) is also deceptive, but not as long as the last. At the top is where the dirt road drive-through section used to be, but not anymore. The downhill to I-40 is fast; watch for cattle guards and other obstacles.



Amboy to the Finish Line 450 - 508

Don't count on the gas station in Amboy being open. Past Amboy is the last climb up the Sheep Hole Mts., (#10). The road into 29 Palms usually has a strong headwind. Try sprinting for landmarks to break up the monotony in this flat, unending section. In this crucial section of the race, be sure to keep the rider well-fed, well-hydrated, and focused on that finish line!

•508

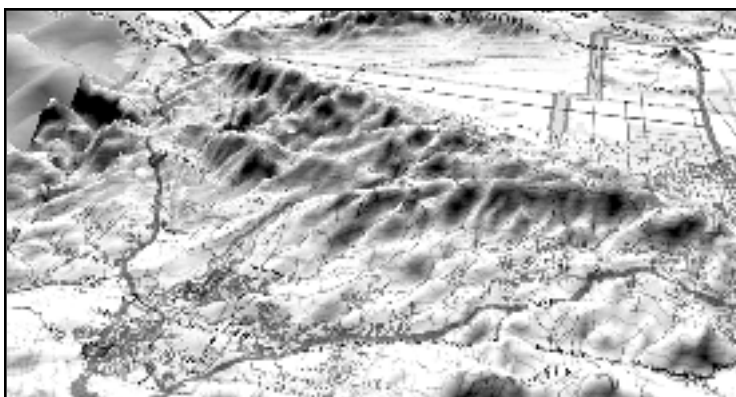
MAJOR CLIMBS

By Beth "Dingo" Dawson, April 1990 508 winner and October 1991 508 runner-up

#	Climb Name	Feet of Climbing	Highest Elevation	Mileage	Location
#1	San Fran Canyon	2500'	3500'	10-25	Rolling hills; the climb before the turn to Elizabeth Lake is short and moderately steep
#2	To Mojave	1000' +	4000'	44-58	There is a gradual climb up Hwy 114 before the right turn on Oak Creek; look for windmills
#3	Jo'burg	1500'	3500'	110-117	This deceptively steep climb begins after the right to Johannesburg; there is a steeper section at the top
#4	Panamint Valley	1000'	2600'	160-175	On Trona Road before Panamint Valley Road, gradual uphill, twisty downhill with bad road surface
#5	Townes Pass	3800'	5000'	200-213	Hwy 190 to Stove Pipe Wells; elevation signs at 2000' and 3000'; climb is gradual to about 2000', then steep grades of 10-12% or more to over 4000'; the last mile is gradual; overall, this is a long and challenging climb best ridden with a triple chain ring, or at least a 39/26 gear ratio
#6	Jubilee, Salsberry	3000'+	3000'	300-317	Gradual climbs from below sea level out of Death Valley; short downhill after Jubilee at 1000' then uphill to the top of Salsberry just past 3000'
#7	Ibex Pass	750'	2000'	337-344	Easy, short climb out of Shoshone
#8	Kelso Peak	2500'	3500'	388-419	Gradual, very long 20-mile climb out of Baker
#9	Granite Mtns	2000'	4000'	422-434	Gradual uphill out of Kelso to the dirt road
#10	Sheeps Hole Mt.	1500'	2200'	475-485	Past Amboy, shorter and steeper than the previous two climbs, last climb of the race •508

COURSE 3D IMAGES

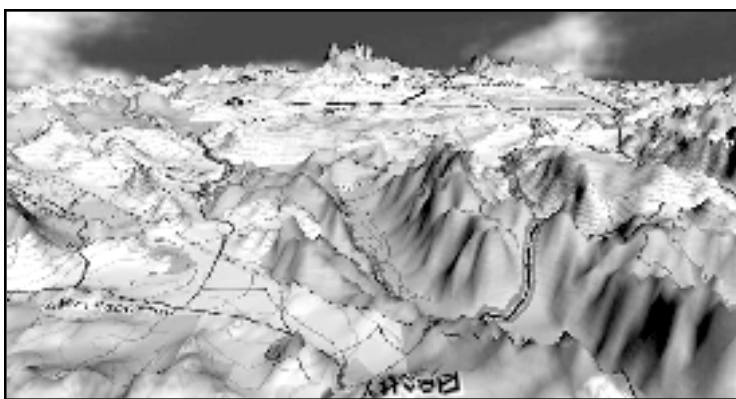
By Doug "Dog" Sloan.



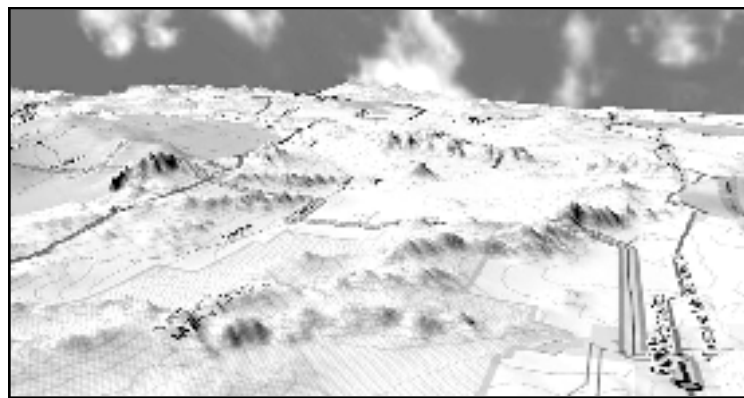
View of the Start



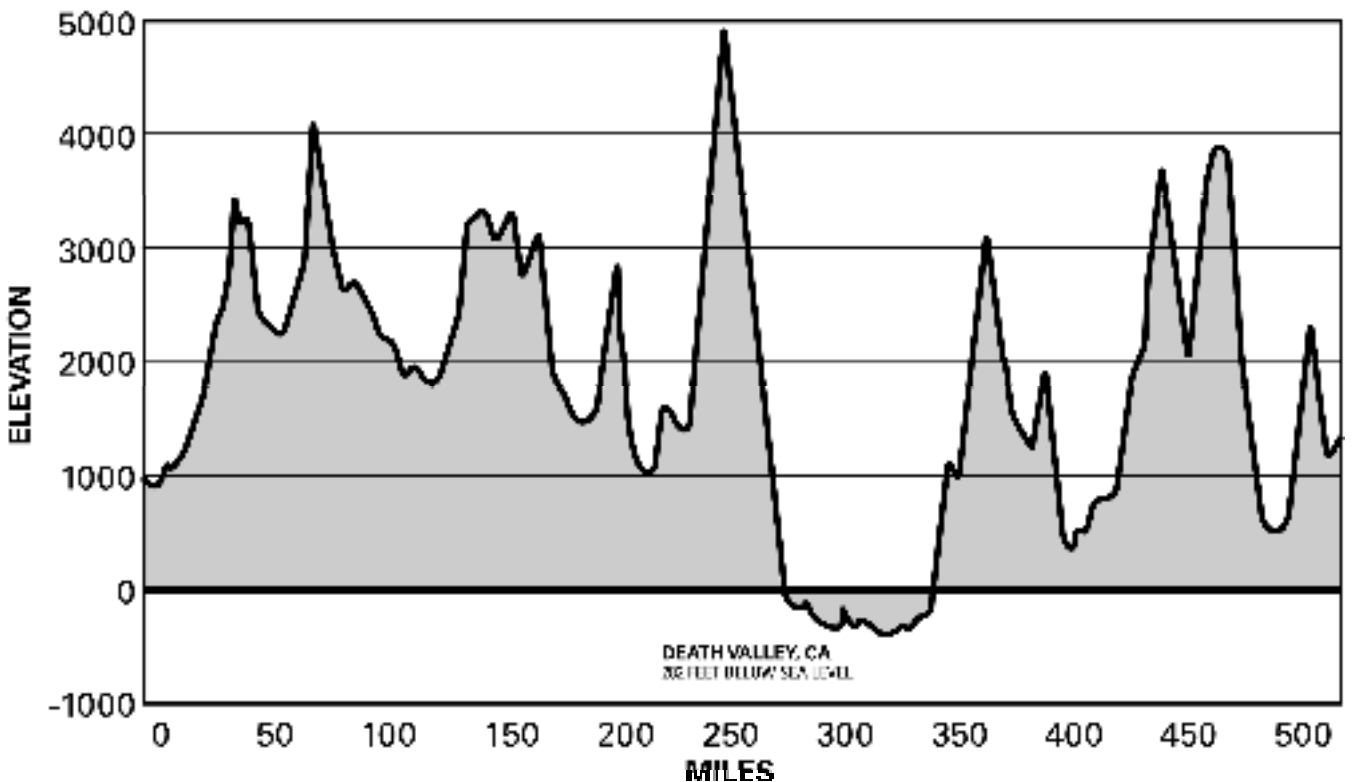
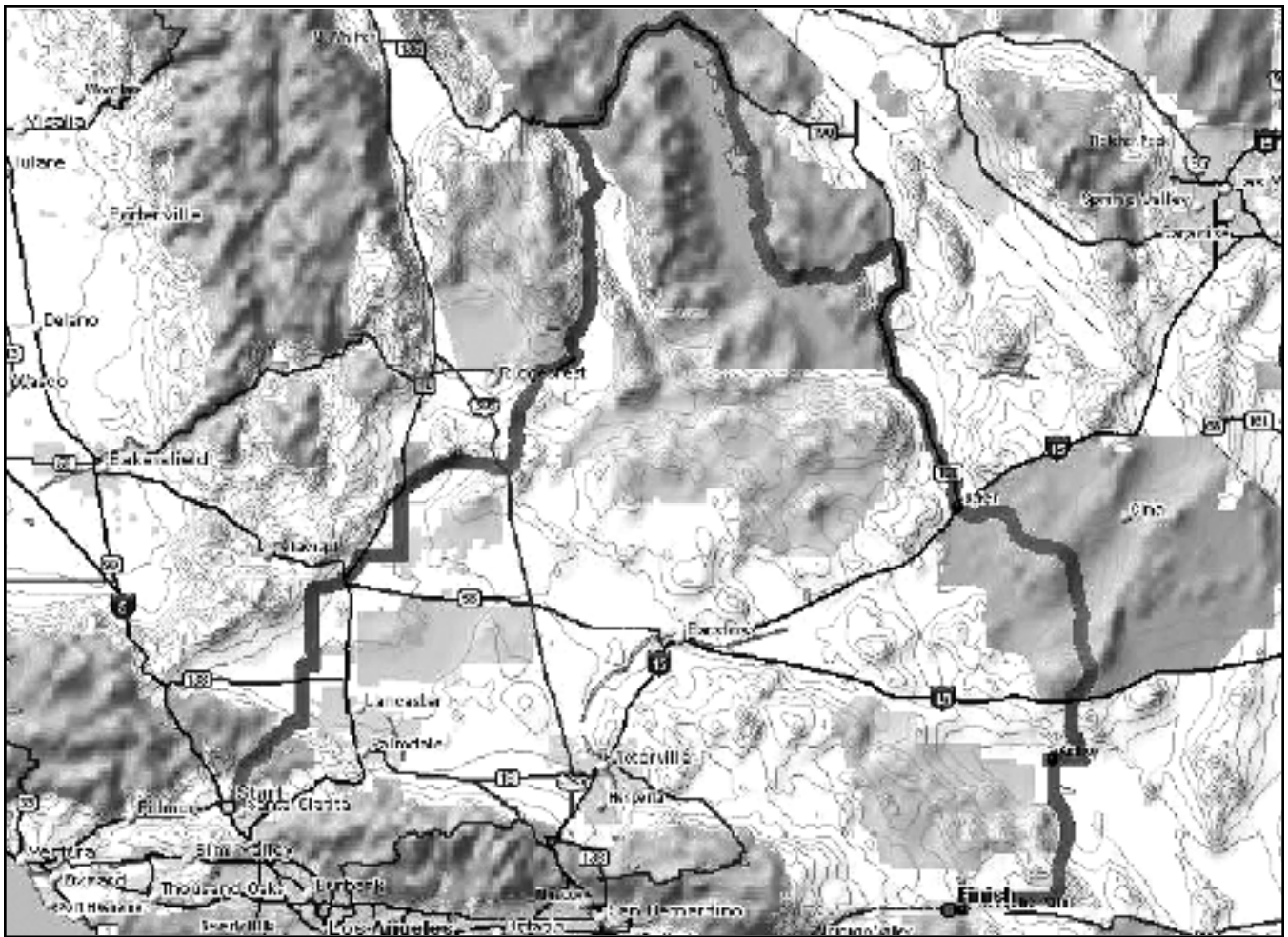
Course View, Looking North



Course View, Looking South



View of the Finish



THE INSIDER'S GUIDE TO FURNACE CREEK 508

By Mike "Whale" Wilson, multiple 508 finisher. Originally published in Ultra Cycling magazine.

I understand you are thinking about doing Furnace Creek 508. It is a unique race, a RAAM qualifier you know. Yes, I have ridden it several times. I would be glad to give you my thoughts on how to be successful. Have you decided what you want to get out of it? Although lots of people do it only as a major ride, I suspect that even these folks have a secret desire to be RAAM qualified. I speak from experience. So let's put together a plan for finishing and possibly becoming RAAM qualified at Furnace Creek.

The Course

The course is perfect for ultracyclists. There are few towns, signals or stop signs to slow you down. It is only you and that big California desert. There are several climbs, but most are not steep. Townes Pass will get your attention at 200 miles into the course. It is the steepest. Most of the others are typical desert climbs with fairly flat grades that go on forever. You will wonder if they actually have a summit.

I break the course into three sections. The first is the 200 miles from the start to the base of Townes Pass. There are only four climbs and lots of flats. The race starts with a neutral group ride through Valencia to the base of the first climb. Everyone will still be close together and riding hard. Pace yourself — this is just the start, not a sprint finish.

After the first time station in California City you will head to Mojave then Randsburg, your first experience with the hot desert climbs. You will wonder why you are going

so slowly and whether you made a good decision to enter this race. . . and then there is a great descent into Trona. Keep rolling over the Trona bump and through the Panamint Valley as the sun starts to get low. The road? It's rough. Be light on the bike if you can. You'll do this section in daylight, with your crew doing leap-frog support.

The next section, a 180-mile stretch, from Townes Pass to Baker, is ridden at night. This is where many riders pull out of the race. It is not that tough, but the course catches up with you. During nighttime, a personal support vehicle (PSV) must drive behind each rider whenever he is riding. Townes Pass is wondrous. There are few things more inspiring to an ultracyclist than heading up this pass as the sun is setting. You can see the flashing yellow lights on the PSVs as they wind up the pass with riders slowly making the climb up to the 5,000-foot summit. It is time for the pace vehicle to play some tunes that make you feel good. This climb will take a while.

After the summit, the other side is quite fast and pretty scary in the dark — you can easily go 50 mph. You will roll through Death Valley eventually descending to several hundred feet below sea level. If you are anticipating views in the valley, too



bad. It will be very dark. The climbs out of the valley at the south end are not steep. The second of the Jubilee/Salsberry duo is the longest. It is good that it is dark so the lack of a summit won't fool you. There will then be a nice down hill, one more small bump called Ibex pass and then on to Baker. It ought to be light by now.

For me, the challenge of the 508 starts at Baker. There are three more long gentle climbs without summits. This last section will be hot and tough. The downhill sides have some incredibly long runs. The last of the three, Sheep Hole, increases in steepness just before the top. From this last climb, the finish in Twenty-nine Palms is only a short distance away, but the finish is still a lot of work. You will climb through some more rollers into a head wind and wonder why you can not reach the finish line. But you will.

Clothing and Equipment

There is only one very steep climb on the course, but the rest can be demoralizing. I have measured about 28,000 feet of climbing on the course. No, the desert is not flat. I have used a 39/28 for the climbs and recommend it on Townes Pass. The desert wears you down. Some people bring a spare bike in the unlikely event of a major breakdown. Having a climbing bike and a flat land bike may also make sense. I just ride one bike and bring an extra set of wheels. You will want to carry a tube and a pump as far as Townes Pass, while your crew is leap-frogging you. At Townes Pass you can dump the pump but will need to put on lights. A simple LED rear light will last the night, and a 2.5 watt head light will work fine for all your night riding with a following vehicle except for descending Townes Pass. You want as much light power as you can get for the descent. I

have used a 20-watt system for the descent, and I have used my 2.5-watt light. More watts are better if you can get it.

Bring every kind of clothing you own. In October it can be either summer-like, winter-like or anything in between. The desert can be either very cold or very warm. Even a raincoat can be useful for that extra layer of wind proofing or for a freak dump of rain or hail. Be prepared for just about anything. That goes for your crew too.



Pacing

I know you are pretty fast but you need to consider this: You need to get to Twenty Nine Palms to finish. If you look at the past races you will find that about half the people who start the race finish. Pacing will be the most important aspect of the race. You must pace yourself, especially early in the race. Trust me. You need to get to Townes Pass feeling good, not sick or cramped up. You will pass many riders late in the race if you stay on the bike and don't over do it. A heart rate monitor will help you stay honest.

One way I approach the race is to see myself riding to Baker. The hills in between are not major destinations. This helped me keep a pace that would allow me to finish. And so will you.

Let's look at why people drop from Furnace Creek. Most of the time it is related to stomach problems. Riding in the heat will put a huge load your body, so you will need to keep yourself well fed and hydrated. This is how your crew can help you. Hydrated means more than drinking water. You are losing a lot of electrolytes so make sure you replace them. Consider high salt food or salt tablets. You won't believe how good a cup of soup tastes at the top of Townes Pass. Liquid foods work well for lots of people. They are convenient and it is easy for the crew to determine your calorie intake. A good target calorie intake for me is around 400 per hour. Your crew can help you determine if you are getting too far behind. You may not feel like eating or drinking but you must if you plan to finish. Bring a variety of things like individual servings of fruit, fruit drinks, pastas, cookies, pop tarts, soups and different electrolyte drinks. If you get sick, you may not want your standard "preferred" cycling food. On a hot day in Baker my crew brought me a hot cup of soup. It was exactly what my body wanted.

If you have never ridden through the night and you are only looking to finish, you can catch a couple of hours of sleep and still do fine. One strategy that works well for me is to sleep for a few hours, then get up as the sun rises. I did this between Salisbury and Jubilee passes on my first ride. If you want to be more competitive, plan to ride through the night. Another plan is to take a few minutes of sleep when you feel you need it. You will be pleasantly surprised how much a 5 minute "power nap" can help. You may go into the event not sure what you will need to do . . . but that is OK. You should have some options in mind and see how things go. Be sure to share your thoughts with your crew.

Crew

You need a couple of good friends to crew for you, three if you can get them. This provides enough people so each person can get a little sleep and do a good job of supporting you. Typical assignments are Driver, Navigator and Feeder. During those times when someone is sleeping, the navigator can double as the feeder too. Make sure all your crew know how to keep track and monitor your electrolytes and food.



Good cycling friends or family members make good crew. You will want to pick people who will help you finish and not get bored following you for 30 or 40 hours. You can use a car or even a pick-up truck as the following vehicle, but a van is ideal. To be legal you will need to have flashing lights mounted on the roof, a "Bikes Ahead" sign and a slow moving vehicle triangle. It is pretty easy to set these up. The "Bikes Ahead" sign is on the rear of the vehicle throughout the race. The triangle is displayed and the overhead flashers are on only when the vehicle is following directly behind you. Additionally, you can put on an external speaker so the crew can talk to you and maybe play some inspiring music. This probably won't make much difference in your performance but it will make you feel like the other more experienced racers.

The veterans know some of the little secrets of Furnace Creek. These are not race winning secrets, but they do help. First, the crew should start off with a pretty full load of ice. If it is hot you will feel smart. If it is not hot you have spent a couple of extra bucks. Once you are into Mojave, the crew can send you down the road alone while they stop at Subway's on the way out of town and pick up crew food and maybe more ice and bottled water. Don't count on bottled water in Trona or Stovepipe Wells. By the time the tail-enders come through, there will be none left. The crew can get good burritos at the time station in Trona. The last place for fast foods before the finish is in Baker. The trip would not be complete without a stop at The Mad Greek. They do have some great soup (even for breakfast), and other food suitable for crew. This will be the last real town until you get to Twenty Nine Palms, so buy what you need. During the day on this course, rider can take off and not worry about getting lost while the crew stocks up on gasoline and foods. Don't run out of gasoline. There are few places to pull over and tank up out in the desert. Fill up in Trona, which will get you through the night, and then fill up again in Baker.



Still interested? Sounds like you are serious. OK, here is my last hint on how to do well. Just stay on the bike unless you are sleeping. It is amazing how creative riders become with reasons to stop or take a little rest in the van. Your crew can do you a big favor by agreeing that they will NOT let you in the van. The only way to get to Twenty-nine Palms is to ride your bike.

So what do you think? Yes, I think you could do it. It is one of those rides you will be proud to finish. It is only one full weekend with friends and a lot of riding. You might actually qualify and then get this RAAM invite letter and . . . well, you know how that one ends.

•508

Photo Info

Front Cover: Team Armadillo's Michael Olstad
 Page 2: Eric Ostrich Ostendorff
 Page 3: Climbing out of San Francisco Canyon
 Page 4: Catherina Bumble Bee Berge
 Page 5: Jim Pteradactyl Pitre
 Page 6: Nancy Devilray Dankenbring
 Page 7: Starting up San Francisquito Canyon
 Page 8: Paul Sparrow Hawk Biron
 Page 9: Lisa Deerhound Dougherty
 Page 10: Jeff Bluejay Born and Steve Beaver Born
 Page 11 left: Mark Panther Patten
 Page 11 right: One-fourth of the Tandem Team Davis Drills
 Page 12 left: Ben O'Neal of Team Mongoose
 Page 12 right: Time Station Captain Dennis Brown
 Page 13: Bun Boy and the World's Biggest Thermometer
 Page 14: Time Station Captain Rex Reese
 Page 15 left: Suzanne Mink McNeil and Time Station Captain Dave Reese
 Page 15 right: Othmar Old Fox Altmann
 Page 16: Finish Line Goodies
 Page 20: Debbie Dolphin Caplan
 Page 21: Eric Red Rooster Wilson
 Page 22: Roehl Red Robin Caragao and crew
 Page 23: Useful directions at Time Station Seven
 Page 34: Tandem Team Davis Drills and crew in 29 Palms
 Back Cover: Dan Horse Dibb and Greg Polecat Page, time station captains

FURNACE CREEK 508 OFFICIAL RULES

Penalty for violation of these rules is either a Time Penalty (TP) or Disqualification (DQ), as noted.

1. GENERAL RULES

A. Attendance at the Pre-Race Meeting is mandatory. Solo entrants must be represented by the racer or two crew persons instead of the racer. Team entrants must be represented by a combination of at least two racers or one racer and one crew. -DQ

B. All racers must sign and turn in the Release of Liability / Agreement to Terms and Conditions prior to the race. -DQ

C. All Emergency Evacuation costs for participants or crews will be borne by that person or their heirs. The race organizers are in no way liable or responsible for emergency evacuation.

D. To be declared an OFFICIAL FINISHER in the race, all entrants must complete the course within the following limits: 48 hours for solo entrants, 45 hours for two bike teams, and 42 hours for four bike teams.

E. Divisional racers start simultaneously. The fastest time for each division will be declared the winner, e.g., the first person to arrive at the finish wins.

F. The clock will not stop for any reason.

G. A racer may not receive any type of push-off from a person or vehicle, except for teammates if on a team. -TP

H. All racers may walk or run if they so desire, providing they keep the bicycle with them. -TP

I. The Race Director has the authority to overrule, modify, or invent a new rule based on extenuating circumstances.

2. BICYCLE REGULATIONS

A. Bicycles must be propelled solely by human force and be no more than 2 meters long and 75 cm. wide. Foot propulsion only.

B. A Race Official may disallow a bicycle or component before or during the race.

C. Conventional bicycle components which are aerodynamically designed in some unique and unusual manner are subject to approval by the Race Director before the race. -DQ

D. Devices attached to the bicycle or racer designed to reduce wind resistance or increase speed, e.g., air foils or sails, are prohibited. -DQ

E. Recumbents and HPVs compete in their own divisions and must enter in one of the following standard categories: Stock, Superstock, Superstreet, Streamliner, and Unlimited. For further details on these categories, visit the race website.

3. ACCOMPANYING RIDER RULES

A. No cyclist of any kind, except a Race Official, may ride with a racer. Drafting is never allowed. -DQ

B. Racers may not ride by side at any time, except for the first few miles while under yellow flag conditions. -DQ

C. No racer will attempt to block or impede the progress of another racer. -DQ

D. Crew members may not cycle within one mile or visual sight of their racer at any time. Crew members may never cycle at night. -DQ

4. BICYCLE LIGHTING

A. While riding at night, each bicycle must be equipped with a legal front and rear lighting system and this system must be ON at all times. The front light must be visible from 300 feet and the rear light from 500 feet. -TP

B. While riding at night, racers must have something reflective on their bike and/or body, facing in all four directions. We suggest wrapping reflective tape around both crankarms, the forks, rear stays, and helmet. -TP

5. CLOTHING FOR RACERS

A. ANSI approved helmets must be worn by racers at all times when on the bike. -DQ

B. No racer or crew member may wear clothing that displays poor taste or which promotes tobacco or hard liquor products. -DQ

6. DRAFTING / SPACE RULES

A. The following space between racers must be maintained:

1) When riding with no follow vehicle: 12 meter split (three car lengths) from another cyclist or vehicle. -TP

2) When riding with a follow vehicle: 100 meter split (a football field). There must be enough room between racers for rear traffic to comfortably pass one racer and his/her pace vehicle at a time. -TP

7. SUPPORT VEHICLES

A. Racers must be accompanied by a pace vehicle 78 inches or less in width at all times. The ideal pace vehicle is a minivan or small size SUV. Campers, mini RV's, supersize SUV's, full size pickups with large shells, and the like are essentially not allowed as pace vehicles, even if they are less than 78" in width. -DQ

B. Solo racers and two rider relay teams may not have more than two support vehicles. Four racer relay teams may have three vehicles and eight racer tandem relay teams may have four vehicles. Motorhomes are not allowed for any purpose for solo racers, while relay teams may have up to one motorhome. -DQ

C. Solo racers may have no more than one support vehicle anywhere on the race course between the start and Mojave (mile 69). Any secondary vehicle must be driven directly to Mojave on an alternate route. Additionally, secondary vehicles for solo racers are to be used only for support of the rider, relief of the crew, or as back up. Because of the number of support vehicles, road congestion, and safety considerations, secondary vehicles are not to be used for leapfrogging other riders, i.e. spying, and should do their utmost to stay away from other competitors and their support vehicles. Likewise, team racers must minimize the amount of leapfrogging at all times. -DQ

D. Motorcycles may be used for support if the racer also has a four wheeled support vehicle. A racer may be followed at night by a motorcycle instead of a car.

D. All vehicles must obey the vehicle code laws of California. It is the responsibility of the driver to be familiar with all laws. -TP or DQ

F. Following vehicles cannot pull a trailer of any kind. -DQ

G. Vehicles wider than 78" may never be used to follow the racer. -DQ

H. All support vehicles must meet the minimum requirements of property damage and personal injury liability automobile insurance for the state of California and proof of this must be submitted to the Race Director prior to the race. -DQ

I. Pace vehicles must be equipped with the following:

1) At least two amber (not red) flashing lights mounted on the far left and right rear of the roof visible only from the rear. The pace vehicle must use the flashing roof lights at all times when following its racer. These flashing lights must be powered by the electrical system of the vehicle, not by internal batteries. These flashing lights may NOT be little bicycle lights taped to the back of your van! Go to Radio Shack and/or auto supply stores to prepare these lights. Do not wait until the last minute to do so. -DQ

2) A sign that reads CAUTION BICYCLE AHEAD. This type of sign can be ordered through a sign shop, pre-ordered from the race office, or homemade using yellow or white adhesive shelf paper with 4 to 6 inch letters. -DQ

3) Rear reflective equilateral triangle having a minimum height of 12" with a red reflective border not less than 1.75" in width. The triangle can be purchased at most auto parts stores and it signifies a "slow moving vehicle ahead." Attach this triangle to the back of the pace vehicle when following behind your racer, but not at other times. -DQ

8. FOLLOWING YOUR RACER

A. Vehicles may not follow racers during daylight on Day One. Vehicle to racer handoffs during daylight on Day One are prohibited. Use "leap frog" support on Day One only. Direct following is permitted during daylight on Sunday and Monday. During the day when using the leap frog method of support, park in safe spots, completely off the roadway. At night (and during day two if you desire), follow directly behind your rider using your roof-mounted flashing lights and display your slow moving vehicle triangle. -TP or DQ

Hints during daylight support:

- 1) Use two way radio communication.
- 2) Use arm signals between racer and crew.
- 3) Plan nutritional regime before the race.

4) Drive ahead of racer, pull over and stop, get out of vehicle and listen for racer's request. Obtain necessary items in vehicle, drive ahead of racer, park and get out, then pass off the requested supplies.

B. All racers must be literally and directly followed by an appropriate pace vehicle at night. Racers may not ride at night for even one second without an appropriate pace vehicle directly behind them, except as outlined in Rule 8I. (Using Valencia as a reference, Civil Twilight begins at 6:30AM and Sunrise is at 6:57AM, while Sunset is at 6:22PM and Civil Twilight ends at 6:47PM. Riders must have full lights and reflectors on, and be followed directly by their pace vehicle, between 6:00PM and 7:00AM.) -DQ

C. Support vehicles shall not be allowed to travel in front of a racer within 50 meters unless traffic prohibits otherwise, day or night. -TP or DQ

D. Under no circumstances may two or more support vehicles follow behind a racer. Caravanning, or a procession of support vehicles behind a racer, is absolutely prohibited. -TP or DQ

E. Support crews shall not in any way impede the progress of one other. -TP or DQ

F. Support vehicles shall not be allowed to travel alongside a racer, except when passing off food, beverage, or information. Under no circumstances should a pace vehicle disregard traffic to the rear when travelling alongside their racer. -TP or DQ

G. A support vehicle is not to create any advantages for a racer by means of breaking the force of the wind to the front or side. -TP or DQ

H. Communication with a racer can be done with the use of a public address system or other loudspeaker. However, in residential neighborhoods and QUIET ZONES designated in the route book no sound amplification is allowed. -DQ

I. If traffic cannot pass the racer and pace vehicle safely, the pace vehicle must pull over to the right, when possible, and allow traffic to pass. If there is nowhere to pull over and the pace vehicle is causing a significant traffic problem, the driver should pull over or drive on ahead of the racer and find a spot to pull over to let the traffic pass. Signal the racer of the situation because he/she might want to momentarily pull over also. -TP

9. NIGHT RIDING

A. A Race Official may prohibit a racer from continuing for safety reasons. Ex: a racer being too sleepy to ride.

B. Pace vehicles must dim their front headlights when any oncoming traffic approaches within 500 feet. Lights must also be dimmed when following within 300 feet of the rear of another vehicle, or when another vehicles passes. -DQ

C. Additional spotlights may not be mounted higher than the standard built-in headlights of the support vehicle, except for a pass-off light mounted on the right side of the support vehicle which is used to temporarily light the road when driving next to a racer during a pass-off of supplies. -DQ

D. Hand-held spotlights are forbidden. -DQ

E. If all legal support vehicles are unavailable during dark hours, for any reason, the racer may not continue riding. -DQ

10. ROUTING / DIRECTIONS

A. Every inch of the prescribed course must be traveled by each racer. In the event of a routing error, e.g., wrong turn, the racer may be driven back to the exact original spot where he/she left the course and continue riding from that location. There will be no allowance made for lost time or miles ridden in the wrong direction. -DQ

B. If a racer is seen being driven up the course, without a Race Official present, with the intentions of making up for lost time and mileage, the racer will be disqualified. -DQ

11. SAFETY

A. Safety must be the single most important concern of everyone connected with the race.

B. In an emergency condition where human life is in jeopardy, all concern should be directed to the injured. If a rule is violated in an emergency situation, the Race Director will make necessary allowances.

C. It is the racer's responsibility to make sure that the support crew members are receiving enough sleep necessary for the safe operation of a motor vehicle. If a racer does not have the necessary manpower to safely drive the vehicles, the racer will be detained until the crew can safely support the racer. If a driver has become too sleepy, he or she must relinquish the driving responsibility. If no one is awake enough to drive, the racer must stop until a crew member has obtained adequate sleep. -TP or DQ

Crews must observe these safety hints:

-Try to stay calm and cool, no matter what happens.

-Trade off driving duties as often as possible.
-Always have two wide awake crew members at night.

-Watch for drunk drivers.

-Obey all traffic laws.

-Watch for traffic approaching from the rear.

-Watch turns and stops.

D. If you see another rider or crew behaving in an unsafe manner, please say something to that crew and to a race official.

E. Since FURNACE CREEK 508 uses public roads, it is impossible to control traffic or get road closures for every racer. Like unknown weather conditions, traffic simply has to be dealt with. This is part of the FURNACE CREEK 508. Never risk human safety for the

FURNACE CREEK 508. Racers and crews must "size up" every road situation and decide how best to proceed or not to proceed. Use common sense and think safety first!

F. Safety begins with reading, studying, and knowing the race rules in their entirety. To demonstrate that the rules have been studied completely, each entrant must bring a one dollar bill in a sealed envelope to the pre-race meeting. The racer or team totem must be written on the outside of the envelope and it must be hand-delivered to the Race Director when called upon to do so.

G: REMEMBER: Safety supersedes competition!

12. SUPPORT CREW RULES

A. A support crew member is defined as anyone who actively assists the racer in any manner on a continual basis for a given block of time. A person who is not a member of the support crew, (does not travel in the support vehicles, does not eat crew food or associate with support crew members) who aids the racer in any way without the opposition of the crew captain and/or the racer, can be considered a crew member.

B. All crew members must sign and turn in the Release of Liability / Agreement to Terms and Conditions prior to the race. -DQ

C. One person shall be assigned the title of crew captain, and will act as the spokesperson for the crew and racer.

D. There are no restrictions on the number of support crew members, but at least two are required for the duration, regardless of division. -DQ

E. A racer may add crew members at any time and anywhere during the race. The crew must notify Race HQ immediately and the new crew member must sign the Release of Liability / Agreement to Terms and Conditions. -DQ

F. Each racer is responsible for the actions of their crew. -DQ

G. The crew may not use drugs, stimulants, dope, or alcohol. -DQ

H. A support crew must not hinder the progress of any racer. Actions that offer a disadvantage to another racer are prohibited. -DQ

I. A support crew may offer assistance to any racer or crew at any time.

J. Each support crew is responsible for their own welfare.

K. Support crew members must not run along with, next to, or behind their racers for any reason. -TP

L. It is the support crew's responsibility to locate gas stations, food stores, camp sites, medical facilities, motels, restaurants, etc.

M. Racers who drop out of competition may join another racer's crew, however a Race Official or Race HQ must be notified.

13. STAFF AND TIME STATIONS

A. Race Officials will be stationed along the route as well as in race vehicles. A Race Official may ride with any crew in any support vehicle at any time.

B. Race Officials have been instructed to only reveal racers' positions and arrival times at Time Stations, if known. Racer position information is subject to human error. The Race will not be held responsible for the reporting of inaccurate positions and times, regardless of the source.

C. Time Stations are located in designated places along the race route, as noted in the Official Race Route.

D. The FURNACE CREEK 508 is not to be held responsible for inaccurate information disseminated through Time Stations. Mistakes are not likely, but possible.

E. All racers and crews are required to make their presence known at each Time Station. The racer does not have to stop, but at least one vehicle or crew member must stop. At night hours, if a racer has only one support vehicle, neither has to stop, but the crew should have their windows down and sound systems / radios off in order to receive information from the Time Station as they pass. -TP

14. RELAYTEAM RULES

The FURNACE CREEK 508 Rules and Regulations for solo racers apply to team racers, where appropriate, plus:



A. Unlike the Race Across America, only one racer per team may cycle at any time, except for less than 30 seconds during the switch from one teammate to another.

B. Drafting is not permitted within or between teams. Intentional drafting of a racer not on the team, such as another team's racers, a crew member, or other cyclist who happens to show up during the race is prohibited. -TP

C. There is no requirement as to how much time or how many miles each person can or must ride.

D. Each team must enter with two or four racers (or eight if it is in the eight-racer tandem category). If one or more of the team members gets hurt or cannot ride, no substitutions or additions are allowed. -DQ

E. At least one racer must finish. This means that the rest of the racers can drop out.

F. The bicycle requirements are the same as for the 508 solo division.

G. In the event of a sprint to the finish, the front point of the front wheel of the racer on a team must cross the plane of the finish line, as in traditional bicycle racing.

H. The rules for changing off racers (racer exchanges) are as follows: Imagine that each bike is sandwiched between two vertical planes, one extending up from the rear most point of the rear wheel and the other plane extending up from the forward most point of the front wheel. When one plane on one bike intrudes on another bike's plane, a legal racer exchange has taken place. There is one other type of legal bike exchange, explained as follows: A new racer may begin from any point on the route that has already been passed by another teammate. Example, team member #1 passes mile marker 129 and continues riding up the route. Team member #2 gets on his bike at mile marker 129 and begins riding up the route. Team member #1 can stop riding at any point beyond mile marker 129.

I. Each point on the route will only count towards forward progress if all previous points on the route have been ridden.

J. Opposing teams cannot ride together at all except at the very beginning of the race while under "yellow flag" conditions. If one team is about to pass another, the team being passed must yield right of way to the passing team and both teams must maintain the appropriate splits.

K. For the last one mile of the race, all members of a team may get on their bikes and ride into the finish together.

15. TIME PENALTIES

Non-DQ rule violations will result in the following time penalties for solo and tandem racers, which will be served at TS#7, approximately 29 miles from the finish line:

1st offense: 15 minutes total
 2nd offense: 30 minutes total
 3rd offense: DISQUALIFIED

Team Racers have the following penalty structure:

1st offense: 5 minutes total
 2nd offense: 10 minutes total
 3rd offense: DISQUALIFIED

Upon observing a racer's violation of a traffic law or race rule, a Race Official will issue a time penalty or a disqualification to the crew, whose responsibility it is to inform the racer. Race HQ and all Time Stations will be informed, thus disseminating the information to everyone.

16. IMPORTANT NOTES ON TRAFFIC LAWS:

A. The FURNACE CREEK 508 uses public roads, requiring the observance of traffic laws. Racers disregarding stop signs/lights and traffic laws have a very damaging effect on the race in general, significantly more than "running" a light during a training ride. These violations can be the reason for authorities not granting permission for races. -DQ

B. One racer violating traffic laws really affects all the other racers. It's reasonable to believe that if one does it, they all must. Obey all traffic laws! -DQ

C. Please view violations of this rule as you would drafting, holding onto a vehicle, or being driven up the route. They reflect a cheater's approach to the event that must not be tolerated! -DQ

D. One infraction may cause the demise of this event. -DQ

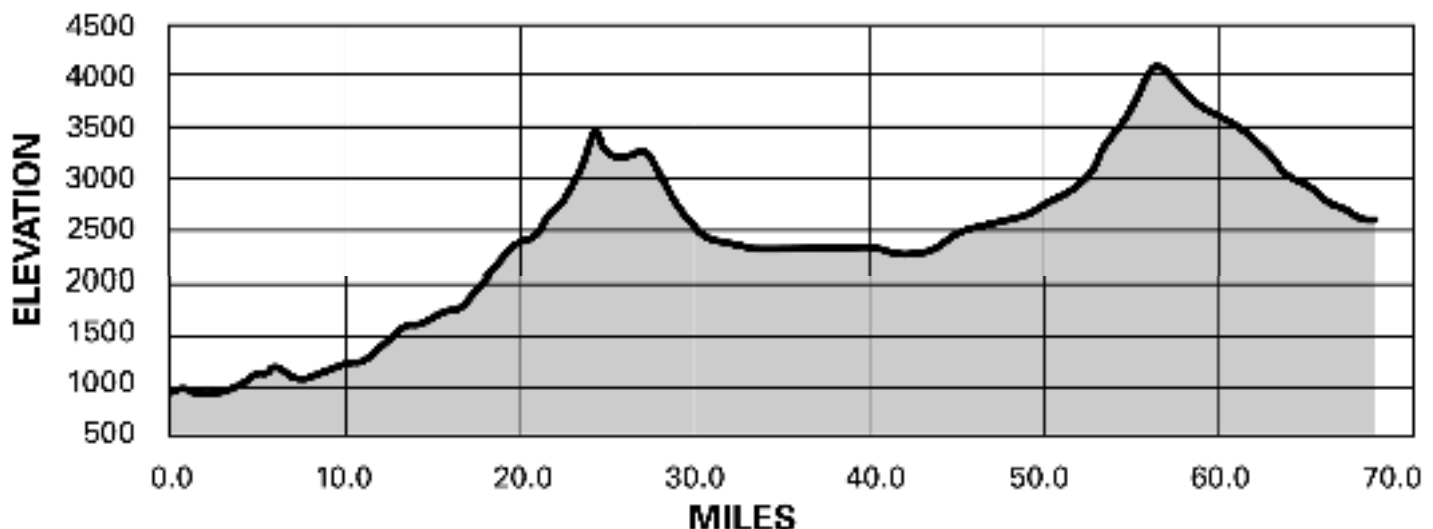
17. BANNED SUBSTANCES

The list of prohibited drugs for the Race Across AMERICA and any of its qualifying events is available through the RAAM office. As a condition of these qualifying races, a racer must be willing to submit to a drug urine test. If any of these drugs are detected, the racer will be disqualified from competition and the final standings of the race itself. Furthermore, if any drug not on this list and considered to be illegal by the United States Olympic Committee is detected, the same penalties will result in immediate disqualification.

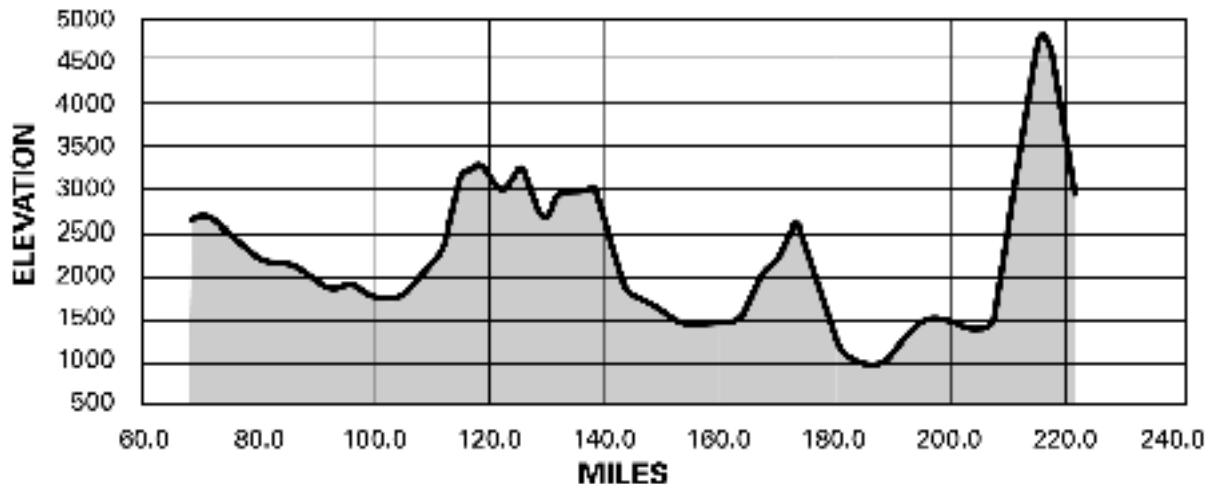
If a racer has used steroids within six months of the race, written notification must be sent in duplicate to the Directors of both the Ultra-Marathon Cycling Association and adventureCORPS. This information will remain confidential. Our medical staff will review the type of substance used and the reasons involved and a written response will be sent to the racer. Racers who qualify for RAAM through the 508 may not use steroids in the period between the 508 and RAAM.

•508

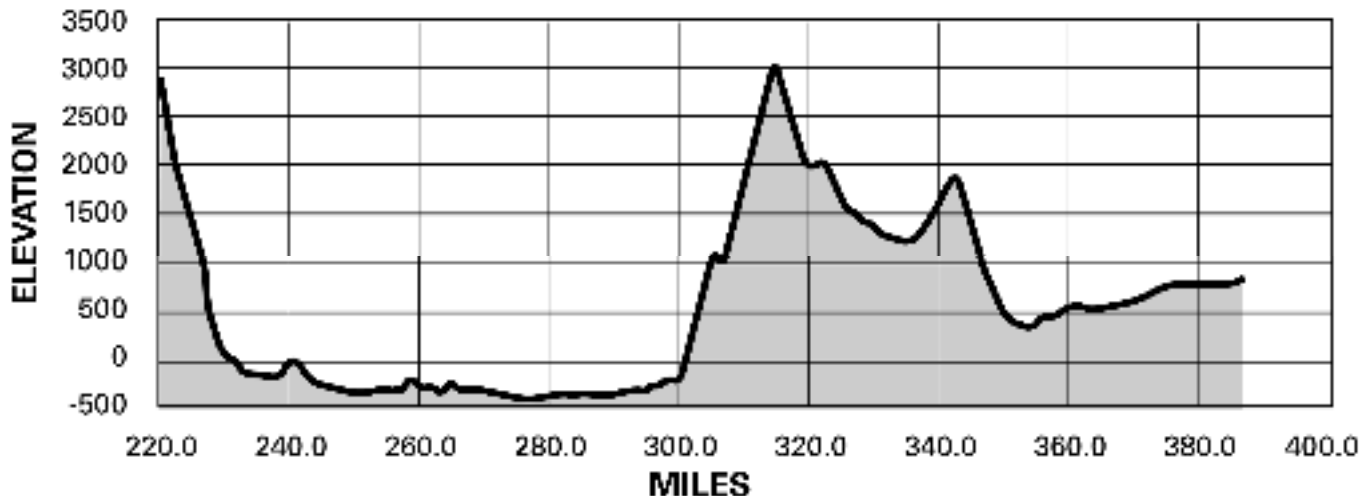
CP	After	Description	City	Services	MTNT	MTF	MTG
1	0.00	Right exit from Hilton parking lot onto The Old Road, north <i>Start at Hilton Garden Inn, Valencia, CA (EI 1100 ft.)</i>		A	0.50	0.00	508.50
2	0.50	Right Rye Canyon (TL)			4.20	0.50	508.00
3	1.10	X Newhall Ranch (TL) - becomes Copper Hill			3.10	1.60	506.90
4	2.60	X McBean Pkwy (TL) <i>(Official Race Start - End Yellow Zone)</i>			0.50	4.20	504.30
5	0.50	Left San Francisquito Canyon Rd. (EI 1360 ft.) Warning: dangerous turn; oncoming traffic doesn't stop!			19.15	4.70	503.80
6	3.30	*Angeles National Forest' sign on right			15.85	8.00	500.50
7	2.50	Ranger Station on right (EI 1560 ft.)			13.35	10.50	498.00
8	1.60	Straight roadway with climb and large shoulder <i>(Support vehicles wait here for rider to pass, then begin leapfrog support)</i>			11.75	12.10	496.40
9	5.75	False summit (EI 2520 ft.)			6.00	17.85	490.65
10	2.95	Stay Left Spunky Canyon Rd. (SS/Oblique T-INT)			3.05	20.80	487.70
11	2.30	Summit (EI 3740 ft.)			0.75	23.10	485.40
12	0.75	Left Elizabeth Lake Rd (SS/T-INT)			0.75	23.85	484.85
13	0.75	Right Johnson Rd. (SS/T-INT) (EI 3330 ft.)			14.00	24.60	483.90
14	1.30	Johnson Summit (EI 3535 ft.)			12.70	25.90	482.60
15	4.69	Ave 'I' (SS) (EI 2400 ft.) <i>Your're on 110th St / Cross traffic no stop</i>			8.01	30.59	477.91
16	4.99	Ave. 'D' / Hwy 138 (SS) <i>Cross traffic no stop</i>			3.02	35.58	472.92
17	3.02	Right Ave 'A' (SS) <i>Cross traffic no stop</i>			2.03	38.60	469.90
18	2.03	Left 90th St. West (SS) <i>Cross traffic no stop</i>			17.17	40.63	467.87
19	3.00	Rosamond Blvd. (SS) <i>90th St. West becomes Teh Will Springs Rd.'</i>		R	14.17	43.63	464.87
20	6.09	Backus Rd. / Hwy114 <i>Begin Climb to 4000 ft.</i>			8.08	49.72	458.78
21	8.08	Right Oak Creek Rd. ### TURN ON DESCENT ### ### CAUTION - GRAVEL POSSIBLE IN TURN ###			10.08	57.80	450.70
22	9.55	Koch St. <i>First buildings on right</i>			0.53	67.35	441.15
23	0.53	Left Holt St. (4-way SS) <i>Power substation to right</i>			0.88	67.88	440.62



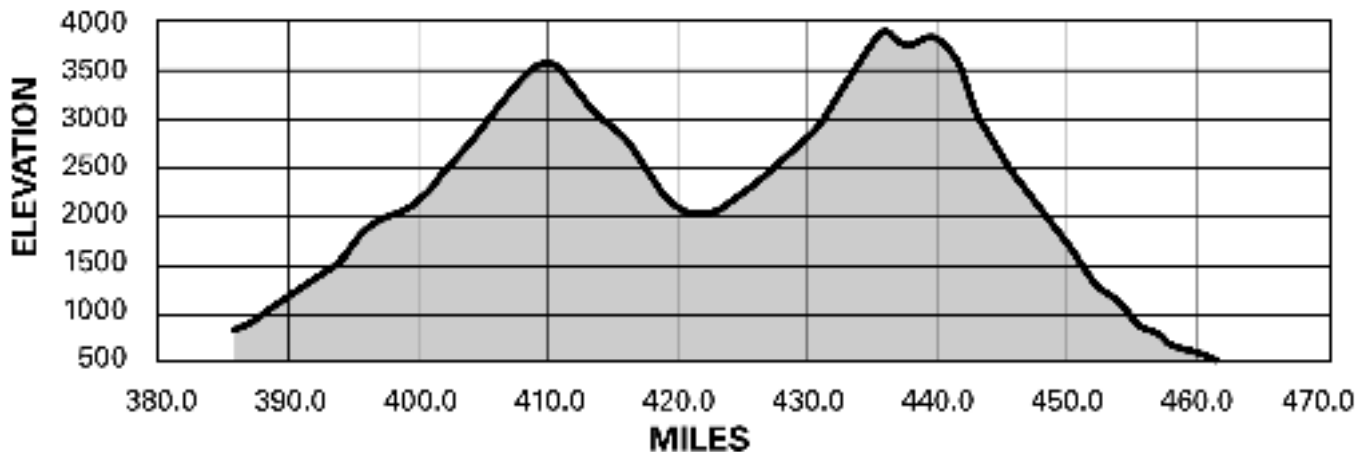
CP	After	Description	City	Services	MTNT	MTF	MTG
24	0.88	Right Arroyo Ave. (L-Int)			0.40	68.76	439.74
25	0.40	Right State Hwy 58 (SS) (EI 2756 ft.) <i>Turn after RR crossing</i>			0.15	69.16	439.34
26	0.15	Left 14 North / Bishop / Reno (TL) Mojave <i>Car must activate left turn signal</i>		A	5.15	69.31	439.19
27	5.15	Right California City Blvd. / 'To California City' (EI 2850 ft.)		G/M	7.79	74.46	434.04
28	7.79	Left Neutralia Rd. (SS/Flash) (EI 2375)	California City	G/M	12.90	82.25	426.25
TS #1		### TS #1 (70.28 to next TS) on right - vacant corner after left turn ###					
29	12.90	Right Red Rock / Randsburg Rd. (SS/T-Int) <i>Rolling terrain next 12 miles (EI 2100 ft.)</i>			12.00	95.15	413.35
30	12.08	Stay Right at 'Y' (To Johannesburg / Randsburg) <i>(EI 2100 ft) Begin climb to Randsburg</i>			8.45	107.23	401.27
31	8.45	Left Butte Ave. (T-Int) (EI 3523 ft.) <i>Yield if no stop sign / Randsburg Fire - 760-374-2455-05</i>	Randsburg	G/M	1.07	115.68	392.82
32	1.07	Right Three Flags Highway / Hwy. 395 (SS/T-Int) ### CAUTION Heavy traffic next 1.9 miles ###			1.89	116.75	391.75
33	1.08	Minib gas station (EI 3536)	Johannesburg	G/M	0.81	117.83	390.67
34	0.81	Left Trona Rd. / Trona			21.17	118.64	389.86
35	3.41	Begin rolling climbs (EI 3120 ft.)			17.76	122.05	386.45
36	4.52	Begin 3 mile descent (EI 3500 ft.)			13.25	126.57	381.93
37	3.17	RR Crossing (EI 2800 ft.) <i>Begin climb in 1 mile</i>			10.00	129.74	378.76
38	2.21	Rolling terrain (EI 3250 ft.) <i>After 2.3 miles begin 6 mile descent</i>			7.86	131.95	376.55
39	7.86	Right Hwy. 178 / Trona (SS/T-Int) (EI 2000 ft.)			45.55	139.81	368.69
40	12.72	Gas Station on left (EI 1669 ft.)	Trona	A	32.83	152.53	355.97
TS #2		### TS #2 (99.23 to next TS) ###					
41	3.62	Gas and Market on left / 24 hr. ### No night services 228 miles ###			29.20	158.15	352.35
42	12.38	Summit (EI 2800 ft.)			16.82	168.53	339.97
43	3.57	Nadeau Rd. / Dryx Mine <i>You're on Trona Wildrose Rd.</i>			13.25	172.10	336.40
44	3.62	Ballarat Rd. (EI 1300 ft.) <i>Descend in 1100 ft. / Rough road ahead</i>			9.44	175.92	332.50
45	9.44	Left Panamint Valley Rd. (EI 1286 ft.) <i>Death Valley via 190 / Panamint Springs</i>			13.93	185.36	323.14
46	13.93	Right 190 E / Furnace Creek (SS/T-Int) (EI 1580 ft.) <i>After 1.6 miles begin 10 mile climb mostly 6-10% up to 13%</i>			53.71	199.29	309.21
47	7.02	Scenic Point <i>Radiator water</i>			48.09	206.91	301.59
48	3.65	Towne Pass / Death Valley Nat. Monument (EI 4956 ft.) ### Absolutely no external sound or music next 45 miles ###			42.44	210.56	297.94



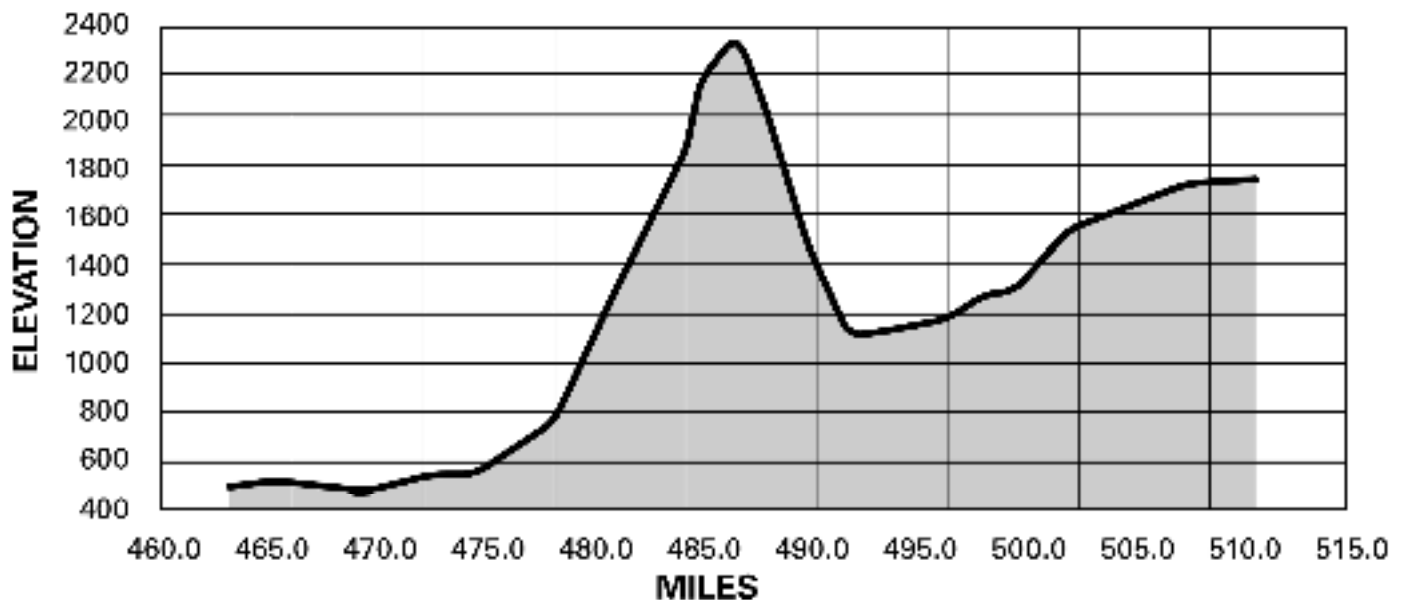
CP	After	Description	City	Services	MTNT	MTF	MTG
49	0.00	Townes Pass <i>Downgrade next 17 miles / 6% grade next 3 miles</i>			42.44	210.56	297.94
50	7.55	Trossa turnoff (E 2200 ft.) ### Campground / Quiet Zone ###		C	34.09	218.11	290.39
51	0.38	Rest area on left and right <i>(Death Valley information / phone / water / bathrooms)</i>			34.51	218.49	290.01
52	8.82	Motel (E 5 ft.)	Stovepipe Wells	A	25.69	227.31	281.19
53	7.26	Beatty / Scotty's Castle turnoff (E 151 ft.)			18.43	234.57	273.93
54	16.69	Furnace Creek Campground on right (E -178 ft.) ### Campground / Quiet Zone ###		C	1.74	251.26	257.24
55	0.50	Death Valley Visitor Center	Furnace Creek	A	1.24	251.76	256.74
TS #3		### WTS #3 (73.57 to next TS) ### Chevron (760) 786-9901					
56	1.24	Right Badwater / 17 miles (E sea level) <i>External sound OK 2 miles after turn</i> ### No services next 75 miles ###			45.65	253.00	255.50
57	10.96	Devil's Golf Course turnoff			34.69	263.96	244.54
58	5.55	Badwater turnoff <i>Lowest elevation (-280 ft.) in Western Hemisphere</i>			29.14	269.51	239.99
59	27.13	Ashford Mills Historic Ruins turnoff			2.01	296.64	211.86
60	2.01	Stay Left Shoshone / Baker			25.17	298.65	209.85
61	4.73	Jubilee Pass (E 1285 ft.) <i>Descend 1 mile to 1050 ft.</i>			20.44	303.38	205.12
62	9.66	Salsberry Pass (E 3315 ft.)			10.78	313.04	195.48
63	10.78	Stay Right 178 / Shoshone at Jct. 127 (SS) <i>You're on 178 East / 127 South / ### Quiet Zone Next Seven Miles###</i>			1.67	323.82	184.68
64	1.18	City sign (E 1572 ft.) <i>Showers \$7 - see mgr. / trailer park</i>	Shoshone	A	0.49	325.00	183.50
65	0.33	Chevron - open 8am/9pm every day			0.16	325.33	183.17
TS #4		### WTS #4 (56.27 to next TS) ### General Store (760) 852-9903					
66	0.16	Straight 127 South <i>Jct. 178 East / Palompa (24 hr. gas 30 miles off route to east)</i>			131.39	325.49	183.01
67	5.22	at Springs / Tecopa Turn / End quiet zone ### No services here or next 50 miles ###			126.17	330.71	177.79
68	2.95	Hot Springs / Tecopa turnoff			123.22	333.66	174.84
69	6.47	Ibex Pass (E 2090 ft.) <i>5% downgrade next 3 miles - descend 8 miles total</i>			116.75	340.13	168.37
70	7.57	Dumont Dunes (E 400 ft.) <i>Abandoned trailer park on left</i>			109.18	347.70	180.80
71	4.12	Henry Wade Historical Monument <i>Gradual up/down terrain between 600-1000 ft. next 29 miles</i>			105.06	351.82	156.68
72	28.21	Baker Airport ### Quiet Zone Through Town ###			76.85	380.03	128.47



CP	After	Description	City	Services	MTNT	MTF	MTG
73	1.15	City sign (EI 923 ft.)	Baker	A	75.70	381.18	127.32
74	0.42	Baker Blvd. (SS) Park in loading zone			75.28	381.60	126.90
TS #5 ### TS #5 (47.73 to next TS) ### Mad Creek is on Left (760) 733-9916							
75	0.07	Jct. I-15 / Go over bridge / cattle guard ### No services next 76 miles ### Rough pavement next 4 miles / End quiet zone			.21	381.87	128.83
76	2.14	Cattle guard / begin steady climb <i>Average 2.4% grade for next 21.4 miles - some dips</i>			73.07	383.81	124.69
77	21.14	Cattle guard / Summit (EI 3600 ft.) <i>Begin 11 mile descent</i>			51.93	404.95	103.55
78	9.28	Cattle guard ### Quiet zone on descent ###			42.65	414.23	94.27
79	2.22	Kelso - Cima Rd. / Quiet zone <i>Stay straight Kelbaker Rd. / no services</i>	Kelso		40.43	416.45	92.05
80	0.04	RR Track / multiple (SS) (EI 2125 ft.) ### Caution - high speed train crossing ###			40.39	416.49	92.01
81	0.65	Cattle guard / end quiet zone <i>12.3 mile climb</i>			39.74	417.14	91.36
82	7.14	Kelso Dunes 3 miles off to right			32.60	424.28	84.22
83	5.05	Time Station on Right in middle of nowhere: Historic site of the old dirt road section			27.55	429.33	79.17
TS #6 ### TS #6 (65.83 to next TS) ###							
84	1.61	Cattle guard / Microwave tower <i>Granite Pass / unmarked EI 4024 ft.</i>			25.94	430.94	77.56
85	2.19	Large turnout on left <i>Historic site of end of old dirt road / begin 20 mile descent</i>			23.75	433.13	75.37
86	5.63	Cattle guard ### Caution - rebar welded to top of grate ###			18.12	438.76	69.74
87	0.08	Jct. I-40			18.04	438.84	69.66
88	0.13	Cattle guard ### Caution - may also have rebar on grate ###			17.91	438.97	69.53
89	11.33	Right National Trails Highway / Amboy (SS/T-Int)			6.58	450.30	58.20
90	5.40	City sign (EI 639 ft.) Amboy variable <i>Post Office on left, former TS #6 location ### Quiet Zone through town ###</i>			1.18	455.70	52.80
91	0.79	RR tracks / Multiple <i>End quiet zone</i>			0.39	456.49	52.01



CP	After	Description	City	Services	MTNT	MTF	MTG
92	0.39	Left Amboy Rd. '29 Palms / Yucca Valley' ### Caution sandy shoulders ahead ###			45.86	456.88	51.62
93	13.52	Begin 10 mile climb <i>Climb begins gradually - gets steeper</i>			32.34	470.40	38.10
94	8.63	Time Station on Left Just Before Summit - Penalty Box			23.71	479.03	29.47
TS #7		### TS #7 (29.47 to the finish) ###					
95	1.37	Sheep Hole Summit (EI 2368 ft.) <i>Begin 5.5 mile descent / microwave tower</i>			22.34	480.40	28.10
96	3.20	Sign on left 'Welcome to Wonder Valley' ### Quiet Zone to Finish ###			19.14	483.60	24.80
97	2.56	Wonder Valley East (EI 1200 ft.) Barnett's on right			16.58	486.16	22.34
98	5.72	The Palms on left <i>Pay phone (760) 367-9022</i>			10.86	491.88	16.62
99	3.28	Wonder Valley West fire station <i>(Former Location of TS #7 and Penalty Box)</i>			7.58	495.16	13.34
100	7.58	Left Utah Trail			2.00	502.74	5.76
101	1.00	Two Mile Rd. (SS) (EI 1800 ft.)	29 Palms	A	1.00	503.74	4.76
102	0.25	Joe Davis Dr.			0.75	503.99	4.51
103	0.75	Right 29 Palms Hwy. (SS/Flash Red)			3.76	504.74	3.76
104	1.00	Adobe Rd. (TL) <i>Arco Gas on far right</i>			2.76	505.74	2.76
105	1.00	Mosquito Springs Rd.			1.76	506.74	1.76
106	1.00	Morongo Rd.			0.76	507.74	0.76
107	0.50	Encelia Ave. <i>Watch on left for Best Western</i>			0.26	508.24	0.26
108	0.25	Left Panorama Ave. (Sprint Finish Line before turn, if needed) <i>Turn just before Best Western</i>			0.01	508.49	0.01
109	0.01	Right into Best Western Driveway ### Finish at Best Western (760) 367-9141. Congratulations crew and racer!!! ###				508.50	0.00





***Wishing each and every rider the very best
508 experience. Have a great race! - Matt***

Matt Frederick Design provides a full range of services including:

- Identity development and branding
- Online identity and websites
- Flash CD Rom business presentations
- Logo, letterhead and business systems development
- Iconography (pixel and vector styles)
- Brochures, catalogs and flyers

I invite you to visit <http://www.mattfrederickdesign.com> and take a few minutes to find out a little more about my services and perhaps take a peek at my portfolio.

If you like what you see, drop me an e-mail at mattfrederick@thevision.net or give me a call at 209.996.4561.

theMirrorpool.com

Visit <http://www.theMirrorpool.com> for desktop pictures, photos, art and more.



FURNACE CREEK 508, 2002