

# Montana 500 Newsletter

Apr. - Jun. 2011

Volume 11 no. 2



Montana Cross Country T Assn.  
1004 Sioux Road  
Helena, MT 59602

[www.montana500.org](http://www.montana500.org)

## 2011 Officers and Directors:

President: Mike Stormo  
Vice President: Mike Robison  
Secretary: Jillian Robison  
Treasurer: Janet Cerovski

### Directors:

Mike Stormo 2013  
Mike Robison 2013  
Janet Cerovski 2013  
Tom Carnegie 2012  
Doug Langel 2012  
Mark Hutchinson 2012  
Nan Robison 2011  
Tony Cerovski 2011  
Garrett Green 2011

Meeting Secretary: Jillian Robison  
Correspondence: Tom Carnegie  
Newsletter Editor: Tom Carnegie

Membership dues \$10.00  
Touring class: \$25.00  
Endurance runner: \$35.00

Cover picture: Bud Peters waits to flag out. Picture from 1969 endurance run. Bud finished 7th that year.

### Corrigendum

The officers were listed incorrectly in the last newsletter.

## **EDITOR'S PROPAGANDA**

Tom Carnegie

As of this writing there are about three people from the Spokane area ready to go. Here is a brief rundown:

1. Rick Carnegie - same losing car as last year. Nothing done to the motor, other than drive it for a year.
2. Tom Carnegie - same losing car as last year. Nothing done to the motor, other than drive it for a year.
3. Bill Mullins - new motor. Not happy with new motor, may go back to losing motor from last year.
4. Mark Hutchinson - new motor. Who knows?
5. Skeeter Carlson - Overhauled last year's motor. Overhauled rear axle. Who knows?
6. Mike Stormo - New car in the works. Is not assembled. Has last year's car as a backup, if needed.
7. Jillian Robison - needs to change a rod.
8. Nan Robison - New motor near completion.
9. Mike Robison - motor from last year has serious issues. Repairs have just begun.
10. Gator Waldron - new guy. Never seen his car.
11. Jamie Allen - new guy. Built a complete touring car up with a special Montana 500 motor, then proceeded to blow it up.

- UPDATE -

Rick has torn his motor out and is intently looking at it. Stormo's Stormtroopers (Jamie Allen, Rick and Tom Carnegie, Mark Hutchinson, Bill Mullins and Mike Robison) stormed over to Davenport and in a marathon session have Stormo's new car about ready. Jillian changed her rod - still has some issues. Tweetybird's motor is freshened up and reinstalled. Mike Robison's motor is back in and running. Jamie's motor is back together. I don't know if it is in and running yet.

Looks like a couple of new guys from California may come. Maybe Doug will bring a second car. Janet says she will make it. YAY! I don't think I could stand two years in a row without a purple car fix. I heard a rumor of possible national media coverage of the run this year.

This space reserved for president's message

Coil Operation  
(or, the bucket analogy)  
by Tom Carnegie

All analogies are flawed. If they were perfect, they would be the thing they were trying to represent. Analogies do serve a purpose though. They can be a handy teaching device if you don't get too carried away. Representing electricity with a hydraulic analogy has been done for years and with some success. As I mentioned before, of course there are flaws, but some things translate well. In this analogy, the coil will be a bucket. A bucket that holds electrons.

In a normal ignition system, the bucket is filled at leisure, and at the correct moment, something triggers it to dump (the points of a distributor, for instance).

In a T system, the bucket dumps when it is filled to a certain level. The need is anticipated and the filling operation begins in the hope that it will complete at the correct moment. It supposes that if all four coil's sensing devices are set to dump at the same level, then it will take the same amount of time to fill them. This is roughly true. Unfortunately, for the Montana 500, we don't want anything to be rough. The main reason that the coils dump at different times, assuming that they are adjusted the same, is coil vagaries. In actual fact, as "electron buckets" all coils leak.

It stands to reason that if coils leak they probably leak at different rates. Also the buckets may be shaped differently (different wire size, or more turns of wire, for instance). Some buckets may have wide tops that are easy to fill. Some may have narrow tops that make filling more difficult. The question then becomes, "how to minimize the variations?" First and foremost is to fill the coil with the biggest hose that you can. The magneto is usually the biggest hose. Furthermore, it is accurately timed. It gives huge blasts of electrons at precisely timed intervals. Even furthermore, it gives bigger blasts the faster the motor goes. As a practical matter, even though more is better, in regard to magneto voltage, good enough is usually good enough. What is more of a problem, but a problem that can be ameliorated somewhat, is mismatched coils. The definition of matched coils are "coils that ramp up at the same rate, given the same voltage". In other words, coils with the same magnetic and electrical characteristics. In other words, buckets shaped alike that leak at the same rate.

I spent a good deal of time trying to figure out a way to find four coils with similar properties. I discovered that if you supply a coil with a controlled pulse of electricity, and record the oscilloscope trace, each coil has a unique pattern that is repeatable, to a large degree. A coil "fingerprint" so to speak. I won't go into the details of exactly how I did this operation, but I believe it was successful. There is little use to describe it as most folks don't have an oscilloscope, plus, I'm going to tell you an easier and better way to get four matching coils.

Buy four new coils.

(end of article)

## TIMERS

by Susie Carnegie

I know, I know, the title caught your eye and you are all geared up for Model T timers and how they work, etc. Well, this is about Model T timers and how they work, only they're the kind of timers with two legs that you'll spot at the beginning and end of each leg of the Montana 500, and are not necessarily attached to your Model T.

You'll first notice a team of timers at the beginning of a leg. There are generally at least two, one with a stopwatch in hand, the other a clipboard and pen. They're the ones who get the show on the road by working on lining up the T's in the order they need to be timed out, then send each T off in 1 minute intervals, just enough time to say howdy and briefly kabitz with each driver before the timer holding the stop watch brings her arm down and a flagger waves them out with a green flag. Once all of the T's are on the road, this set of timers hop into their vehicle and follow behind enjoying the beautiful Montana scenery, wildlife, and watch for T's to root them on with their first-hand glance at where each T is, and how close or far apart the T's are as they pass them by. Taking the back seat to all of the action is the trouble trailer driver who has the greatly appreciated task of rescuing any T's that have mournfully broken down.

At the end of each leg you'll find another team of timers who time and flag the T's in. They rush ahead to locate a safe spot to park and time the T's in. These timers, like most of the T drivers, are not necessarily familiar with the routes and face the challenge of being sure they reach the intended destination in plenty of time to find a good place to park and be ready to spot the first T, get its number, and write its time down as it screams by and heads on in to the

first gas station. Once all of the T's are timed in, these timers check in with the other team of timers, checking the stop watches to be sure they're in sync, and give the order that the T's were timed in. They then take off to their next destination and prepare to time the T's in again.

I have timed T's out, timed T's in, flagged T's out, flagged T's in, and one year I even road along in the trouble truck. Each position has its own flavor of perspective. As simple and uneventful as the task of a timer may seem, timers from over the years could most likely share a story or two of humor, craziness, or maybe even toe curling things they have experienced or witnessed.

Just to mention a few:

While riding along behind the T's one year, we timers and flaggers in a modern iron heard a big BANG! A good sized bird had gotten off course and hit our front windshield head-on causing this horrendous noise and leaving behind unpleasant evidence of the hit. For some reason this has stuck with me. I suppose its because I was busy talking and didn't see it coming, so it took a moment to realize what had happened and get my heart out of my throat and back into its intended position.

Then there was the time we were driving ahead of the T's to find a place to park and time the T's in. Using a GPS we found ourselves a nice little nesting spot, but somehow it just didn't feel right, it seemed like we should have further to go. Fortunately we had someone who had driven along in a separate vehicle who graciously drove ahead to scope things out while we watched for T's, ready to time them in, just in case. The GPS had failed us, we had a ways to go to be where we actually needed to be. We quickly headed out and made it to our true destination

with very little time to spare (even though we rush ahead of the T's in modern iron, it doesn't always mean we have lots of time on our hands, its amazing how quickly they follow behind us).

The forces were with us another time when the last leg of the 500 involved driving a relatively short loop out of town and back again. We were to drive down the main highway to a certain point, turn off onto a side road and loop back around joining up to that highway again, then tour back in to town. The timers who timed the T's out were also going to time them in, so after the T's were on the road these timers then set up at the end of the leg, a short bit before the T's would come to the stop sign on the side road to get back on the main highway.

Meanwhile, the other team of timers were driving the route ahead of the T's. When we reached the point where we needed to turn off the highway and onto the side road we discovered unexpected road construction blocking our path. With the trouble truck driver's assistance, it was quickly decided to wave the T's as they arrived to turn around and head straight back. This meant we, the timers there at the scene, needed to race back to alert the other timers that they needed to move from their current position (on the side road, a ways from the main highway) and get to the main highway to time the T's in before they could reach that point. We did it! What a rush!

Yes, the Montana 500 timers, flaggers and trouble trailer drivers have a history of their own. Over the years the timers have endured rain, sleet, snow, and sun scorching heat. They have maneuvered around a variety of road hazards and dodged wildlife...or not. They have enjoyed their front row seat to view the goings on of T's enroute

as they'd strive to reach the front of the pack. They have experienced countless mishaps and kabobbles that go with the territory. And some have dutifully acquired a Montana 500 gray hair or two.

-A Timer's Perspective-

### Top One Hundred Finishes by Tom Carnegie

There have been 1000 entrants in the Montana 500 to date. Of those 1000, 80% have finished without being disqualified. The routes are different each year, and restrictor plates were used for a while, so comparing average speeds from year to year is somewhat meaningless. Still, it can also be somewhat interesting. I have compiled a list of the top 100 times in the Montana 500, based on average speed. The information that I used to compile this list is a bit sketchy at times, but overall I think it has some validity. Below are the top 100 finishes by driver.

9 Top 100 finishes: Terry Peters

7 Top 100 finishes: Tom Carnegie, Bud Peters

6 Top 100 finishes: Jim Halseth

5 Top 100 finishes: Doug Langel

4 Top 100 finishes: Ed Delzer, Ray Habel, John French,  
Scott Rawlings

3 Top 100 finishes: Garrett Green

2 Top 100 finishes: Dick Bergan, Rick Carnegie, Steve Coniff, Norm Eberhardt, Ed Hencz, Mark Hutchinson, Frank Iverson, Dave Meuli, Tillman Oblander, Al Rieker, Mike Robison, Nan Robison, Floyd Rossell, Chuck Worthington, Dutch Watters

1 Top 100 finish: Sonny Bishop, Tony Cerovski, Mel Chapman, Joey Coniff, Dennis Dakan, Gary Ebbert, Don Englmann, John Frick, Clay Habel, Cliff Hellwig, Perry Mathews, Ron Miller, Sam Nickol, John Pope, Dave Ratzburg, Fred Upshaw, Hal Wilson

24 of the top 100 finishes took first place - 20 second place - 16 third - 12 fourth - 10 fifth-

7 sixth - 4 seventh - 3 eighth - 2 ninth - 2 tenth - 1 eleventh

The year with the most top 100 finishers was 1977 with 11. Bud Peters came in eleventh that year, Tom Carnegie came in first.

Everyone who placed on the list more than twice has won at least once, except John French, whose best finish was second place. Of those who placed twice or less, Sonny Bishop, Tony Cerovski, Mel Chapman, Joey Coniff, Gary Ebbert, Don Englmann, Clay Habel, Ed Hencz, Sam Nickol, Tillman Oblander, Al Rieker, Floyd Rossell, Fred Upshaw, Hal Wilson and Chuck Worthington never won (or have yet to win).

No cars before 1970 were in the top 100. 23 of the top 100 were cars that ran with restrictor plates.

The lowest speed on the top 100 is 50.83 MPH by Scott Rawlings. The highest speed is 54.12 MPH by Garrett Green.

**The 2011 Montana 500 will  
be held in Conrad, MT**

**The 2011 Run will be the Bud Peters  
Memorial Run in honor of five time  
open champion Bud Peters of Ledger,  
MT**

Inspection day will be the 19th of June

The run begins on June 20th

**The base hotel will be the Super 8 the rate will be  
\$73.85 + tax, reduced from \$86.00. They will hold  
25 rooms until June 12th. Callers are to indicate  
they are with Montana Ford "T" 500. The  
telephone # is 406-278-7676**

If you can't get a room at the Super 8, you  
may try the

**Northgate Motel**

(406) 278-3516

5 N Main St, Conrad, MT 59425

If that doesn't work, Shelby is about 27  
miles away

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