Montana 500 Newsletter

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Cover photo: Doug Langel in a pensive mood. Taken during 2002 Montana 500. Come to think of it isn't Doug always in a pensive mood?

General News, Editorial and Sermon.

I have heard back from the cylinder-head committee, so as promised here is the next issue of the newsletter with the ballots to vote on the rule changes. Your vote won't count unless your dues are paid up.

We have been invited to Rendezvous Days in Eureka, Mt April 25 and 26th. There will be a whole host of activities including a car show.

It has gotten back to me from people that have never even been to the Montana 500 that all the winners for the past few years have won by cheating. What upsets me is not that this may be true, but rather it may be false! Since we didn't have a tear down until last year how does anyone (other than the alleged perpetrators and their cohorts) know for sure that they have cheated? The answer is: they don't. I think it reflects poorly on this club to talk that way. I personally trust every person that has run and believe that they are all above board. That is not to say that some folks may not have a different interpretation of the rules. That is what tear-downs are all about in my judgment. Also, just because someone does something that is not covered in the rules does not make him a cheater, in my opinion. I think it has a lot to do with intent. For example: one member admitted to me that he had a Watts clutch in his car. It doesn't say in the rules that you can have a Watts clutch. Is this guy therefore a cheater? I don't think so because a Watts clutch can't help you go any faster or longer. On the other side of the coin I don't think that using trick or one-off parts, even if they are original is in the spirit of this event either. There used to be a rule that said that anything that gave an unfair advantage would not be allowed. I think that is a good rule of thumb.

Driver's Profiles:

My Friend Jon De Vick

By Bob Mac Neil

Jon was full of fun. He was a very outgoing person, the kind that is very easy to get to know. In 1957, we were roommates in the Washington State College (now WSU) dorm. Jon loved girls, the coed type. We lived in Mc Allister Hall, and Jon took a job as houseboy in the Alpha Chi Omega sorority. He made some good coed connections that way. At that time Jon (his real name was John, but he didn't care for that spelling) drove a Model T sedan. It was a big attention getter, especially with the ladies. He was always running around with a Model T full of them.

Once on the way home from Pullman, Jon spotted a speedster in a farm building. He stopped and talked to the owner, and eventually made a deal for it. It was a very desirable Laurel speedster with all the original Laurel accessories.

We caught a crow and put it into a cage in our dorm room. Early in the morning, at sun up, that crow would do his calling. Jon thought the rest of the dorm needed to be annoyed along with us, so he rigged the intercom to broadcast the crow's wake up call to all of the rooms in the dorm. The consequence of this little stunt was that I was not allowed to return to the dorm the next year!

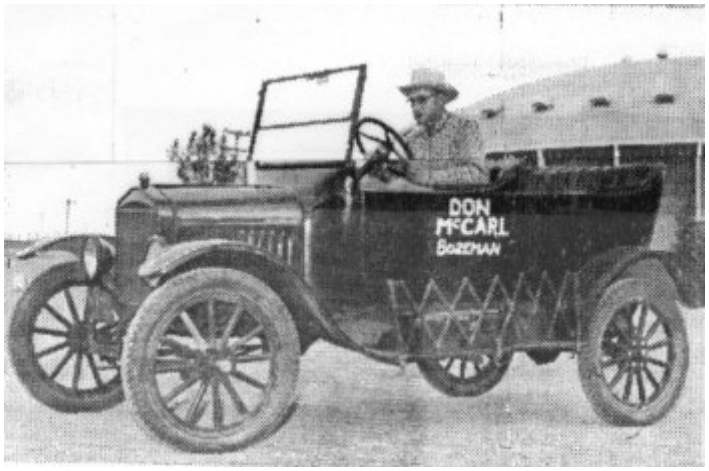
Jon did not return to college the next year, and for a while I lost track of him. He got married, had a son and a daughter. He lived in the Seattle area and worked for Boeing. In addition to the Laurel speedster, Jon had a 1926 sedan and a 1919 coupe, which I believe is the car that he drove in the 1974 Montana 500. That was the only year that he entered, and he finished near the bottom of the pack.

I ran into Jon at the Puyallup swap meet in the 1990's. He had a brain tumor, which had changed his personality. He was rather introverted and seemed to have some trouble remembering me. It was very sad to see someone as vibrant and full of life as Jon become so withdrawn and quiet.

Eventually the cancer took him. He passed away in 1999. His son still has his Model T's.

Don Mc Carl

By Tom Carnegie with help from Bob Braun



Don Mc Carl was part of the group that came from Bozeman. He ran in 1965 and 1966, which were the largest races based on the number of drivers that entered. In 1965 there were 35 drivers and in 1966 there were 36. 1965 was the year that the route took the drivers up into Canada. It was also during this run that Glenn Embree filmed most of the footage for his motion picture called Flying Flivvers. Apparently this excursion into Canada caused some interesting episodes with washed out roads and such like that. Bob Braun, who was also from Bozeman, recently told me a little story about this situation. Because the roads had some problems, the drivers had adopted a signal (raising their hand above their head) to show when they were going to slow down for a bad spot. Don and Bob had a friendly rivalry going. Bob's car was generally faster than Don's but Don was always telling Bob, "I'm going to catch you on this leg". On one particular leg Don's T was running well and it looked like he was going to catch Bob. Just as he was about to make his move, Bob raised his hand. Don apparently thought this a trick so he continued at speed. It wasn't, as indeed there was a big bump in the road. As Don hit the bump he was thrown out of control and went off the road. Bob stopped to help him and both drivers were shaken but not hurt and continued on. Don was one of the few people that has run a touring car. Today this exact car can be found at the home of Mark Hutchinson. It still has the signs on the door!

Abel and Knott

By Tom Carnegie

I'm not sure of the spelling, or if Abel and Knott are even their real names, but everybody calls them that, including each other. Abel and Knott are business partners. They have been partners for as long as anyone can remember. The story goes that as young men they decided to split all of their earnings fifty-fifty for the rest of their lives. They then sealed the deal with a handshake. When the railroad was being built, Abel got hired, Knott did not. Knott got half of Abel's wages. Knott won a little at the poker table, Abel got half of it. Now mind you, the money is always split fifty-fifty, but not their possessions and not their women. Abel and Knott have both worn out a wife apiece. I don't presume that either will marry again. Abel has a mule that he calls B-cup, which is short for Buttercup. Knott doesn't have any livestock, but does own a little mining equipment. Abel and Knott have a hankering to look for gold. They have been prospecting in the hills north of Baton Noir, and have staked a claim.

As Joseph Vant stands outside the Model T Garage, he sees two figures in the distance walking into town. As the figures get a little closer, they become Abel and Knott. Abel and Knott have been working their claim and come into town periodically, but this time is different. This time there is no B-cup. When they get close enough to engage in conversation Joseph asks Abel where his mule is. "She's buried up on yon mountain" is the reply. "Oh, I'm sorry to hear that." Says Joseph, and then as if to change the subject, continues, "I heard that there is a registered letter for you at the post office. Maybe it is some good news." It turns out that the letter is more good than bad.

Apparently Abel's aunt, whom he didn't even know he had, has passed away and left him $1000.00. That means Abel gets $500.00 and Knott gets $500.00.

The first thing they do with the money is to go to the movie house and watch their first motion picture. They invite Joseph Vant to go with them and he does. The name of the film is Broken Blossoms starring Lillian Gish. After the show, Joseph thanks them for treating him, then says, "I'm glad I got to see one before they don't show them any longer." "You think they'll quit making them?" asks Abel. "Yes I do, and I'll tell you exactly why. In order to enjoy a motion picture you must suspend your disbelief. This is very difficult to do for two reasons: First, the screen is flat. In a play for instance, there are three dimensions, with a motion picture there are only two. Second, is that annoying piano player. It would be better if they had people behind the screen shouting the dialog. This would help, but even if the actors own voices magically came out of the screen it wouldn't salvage a fundamentally flawed form of entertainment. In the future, motion pictures will only be used to document news events, and then only to a limited extent." Knott and Abel don't really understand all that Joseph Vant just said, but they too are glad that they got to see a motion picture before they are no longer being made.

Knott then takes most of his money and buys what is likely the most impractical thing he could get. A grandfather's clock. He doesn't even have a house to put it in, but he's been eyeballing this clock in Herr Uhr's shop for a long time, and now it is his. Abel spends his money on a far more practical item. A 1917 Model T Runabout. It has no turtle deck, but rather a small wooden box in its place. It is in pretty nice shape as it is only a couple of years old. It also has a low head that has been milled about an eighth of an inch, a Bosch high tension magneto and a Stromberg OF carburetor. Abel names his new friend P-cup, which is short for pickup.

P-cup moves down the road quite nicely, and Abel loves to drive her fast. He has developed a new emotion that he has never experienced before - greed. Abel is greedy for speed. It seems as if some people, once they get a taste for something, just want more and more. Such was the case with Abel. Abel stops at the Model T Garage and thumbs lustily through catalogs. How he drools over pictures of high compression heads and special manifolds! In order to purchase these goodies, Abel needs money. So with the clock loaded in the back and Knott in the front of P-cup, it's off to their cabin in the hills to pan for gold.

Nobody in town knows for sure how well the gold digging operation is going. There is much speculation. The fact is that Abel and Knott are doing quite well. When they come into town for supplies or to play cards or to just say hello, they don't breathe a word about their operation.

Today Knott is coming into town alone. He has his clock roped to the back of P-cup. As he drives by the Model T Garage, Joseph yells to him, "It has come in!" "O.K." says Knott as he slows to a stop. "I have to get my clock looked at. There is something wrong with it. It goes tick, but won't go tock."

Herr Uhr is a clockmaker from the Black Forest of Germany. As Knott explains to him how his clock just goes tick, but won't go tock, Herr Uhr peers intently into the face of the clock. "Vee have vays of making you tock!" he says. He does

too. A simple adjustment is made - the clock is reloaded and Knott heads back toward camp. Knott stops by the Model T Garage on the way and tells Joseph that he will be back in one week.
A week later Abel senses that something is not right. Knott left very early this morning in P-cup. To top it off, he feels that some of the gold is missing. With all the luck that they have been having, Abel is sure that Knott is getting greedy. "Now that we are into some real money, greedy old thievin' Knott is going to pull a fast one on me." Abel has pretty well worked himself into a lather by now. He stomps over to the shed they use to store P-cup. He opens the storage box and pulls out the gunnysack. In the gunnysack is the gold and a Colt .45. He weighs the gold. Now he is even more convinced that Knott is robbing him. "There should be more gold than this. I'm gonna watch that Knott like a hawk." Abel puts the gold and the gun back into the sack and puts the sack back into the storage box.
Late that night Knott returns. He backs the T into the shed and heads for the cabin. "Where ya been all day?" asks Abel. "Had to run a few errands." says Knott. Rather than push Knott for more information, Abel decides to let it go so as to not tip Knott off that he is on to his little scheme. He is going to catch Knott red-handed. "Good night Abel. I'm turnin' in. I'm just plum tuckered." It isn't like Knott to turn in so soon. So Abel knows something is up. When Knott thinks Abel is asleep he gets up, grabs the lantern and heads for the shed. Abel isn't asleep though. He waits a few minutes, then grabs the rifle and creeps out to the shed. By the glow of the lantern Abel sees something that confirms his suspicions. There is Knott with a gunnysack in his arms. Abel lowers the rifle to Knott's chest and calls out, "You are a thief, Knott. You are a demnation thief" "No, No, Abel, you don't understand. Here, I'll show you." Knott starts to reach into the sack. Abel knows he's going for the Colt .45 and he knows it's loaded. Abel shoots first. Down goes Knott. As he crumples to the ground, a model T cylinder head falls from the sack. Abel walks over to Knott. As he looks at Knott he notices that the hood of the T is open. Installed on the motor is a brand new Roof-Laurel cylinder head. Attached is this note:

Dear Abel,

I don't no when your birthday is, butt I took some of my share of the gold and bot you this hear cylinder head. The folks at the Model T garage put it on for you today. I'm sorry to be so sneeky about it butt I wanted to supprize you. I no you wanted it real bad and it makes me happy to give it to you. Your partner for life.

Knott.

Knott makes a couple of gasps for air. As Abel cradles Knott's head he repeats over and over, "I'm so sorry Knott, I'm so sorry."

The partnership is now over.

How Do You Make Your T Go So Fast?

Part one: Mechanical

Henry Ford said that the top speed of Model T Fords was 45 miles per hour. A lot of them now days are hard pressed to achieve that speed. Sometimes after someone has taken a ride in my car, they will ask me: "How do you make your T go so fast?" My stock, off-the-cuff reply is that there are only two things to make a T go fast - compression and aspiration. This is essentially true, but is an oversimplification. There are really THREE things! The three things are: 1. Mechanical efficiency 2. Thermodynamic efficiency and 3. Volumetric efficiency. This article will deal with the first issue, mechanical efficiency.

What are we talking about when we say mechanical, thermodynamic and volumetric efficiency? Efficiency is getting as much work done with as little energy (or fuel) spent as possible. Does this mean the best gas mileage possible? It can, but what we are looking for in the Montana 500 is the most power possible given the obvious limitations of the Model T motor. Mechanical efficiency (henceforth M.E.) deals with things such as friction, vibration and wind resistance. Thermodynamic efficiency (henceforth T.E.) deals with things that make the bang of the power stroke stronger. Volumetric efficiency (henceforth V.E.) deals with getting the biggest and best charge of fuel into the combustion chamber.

What are some ways to maximize M.E.? The number one thing to help here is to reduce friction whenever and wherever you can. Let's start at the front and work to the back. Wheels. Bad or overly tight wheel bearings can cause extra friction. Imbalanced, or under-inflated and poorly aligned tires use more energy, as do bent rims. Engine. Within the engine there are many areas where M.E. can be increased. Friction of all moving parts can be reduced by using the best lubricant possible. Some people use S.T.P. and such like that to help reduce friction. Having proper clearances on your bearings, wrist pins and cylinder walls helps. Boring your engine to the maximum size also increases M.E. Wait a minute! I thought that increasing the bang of the power stroke (which a large bore does) fell under the heading of T.E.! Yes, it does. But it also falls under the heading of M.E. It increases T.E. because it causes the compression to rise. It increases M.E., because all other things being equal, a larger piston will apply more force to the crankshaft than a smaller one. It is sort of like a wheel cylinder, the larger wheel cylinders on the front wheels apply more pressure to the brake shoes than the smaller rear cylinders, even though they are both supplied with the same amount of pressure from the master cylinder. Bigger pistons also slightly decrease M.E due to the added weight and added surface area. These factors are negligible though, and more than made up for by the increase to M.E. that bigger pistons cause. Increasing the stroke of the crankshaft increases M.E. Again it also increases T.E., because it causes bigger displacement and more compression, but it also increases M.E. because it increases the rod angularity, which gives you a mechanical advantage (more leverage from piston to crank pin). This is not allowed on the Montana 500 though and is merely mentioned for the sake of illustration. I presented this article to Steve Coniff to check for errors and omissions. He pointed out that the optimum rod length for a piston engine is twice the stroke of the crank. Since the crank stroke is four inches on a T, the theoretical optimum rod length would be eight inches. The stock rod length is seven inches. The rules allow for increasing the rod length to 7.030". Reciprocating weight always decreases M.E. Rotating weight decreases M.E. only on acceleration. **Vibration and imbalance always decrease M.E. Misalignment increases friction therefore decreases M.E.** There is one more mechanical thing that the engine does that I'm not going to go into right now other than to mention it. It really should be under the heading of M.E., but I'm going to go into it in depth in the article on V.E. After the

power stroke the engine has a major job yet to perform to which we don't give much thought. That is, pumping the burnt gasses out of the cylinder. A good deal of effort is required to do this, and there are ways to make it easier on the poor engine. Rear end. Poorly set-up rearend gears decrease M.E., as do bad axle shafts and bad axle bearings. Wind resistance. There isn't much a guy can do for this other than run a 26-7 body, which is a little more streamlined. It also helps to use proper 26-7 springs, which have a lower crown. This sets the car lower for better aerodynamics and helps the ride and rearend alignment too. Another important consideration is weight. On the level, a heavier car takes just a bit more energy to propel at any given speed than a lighter one, probably not a significant amount. Where weight really matters is going up a hill. Of course going down hill weight helps a little, although you never get back the energy that

you spent going up the hill. Most driving time is spent on fairly level ground. Therefore I'd say that weight was less important than wind resistance if you had the choice of trading one for the other.

This article doesn't give a lot of specifics, but it should give some food for thought. The article in the next newsletter will be about T.E.