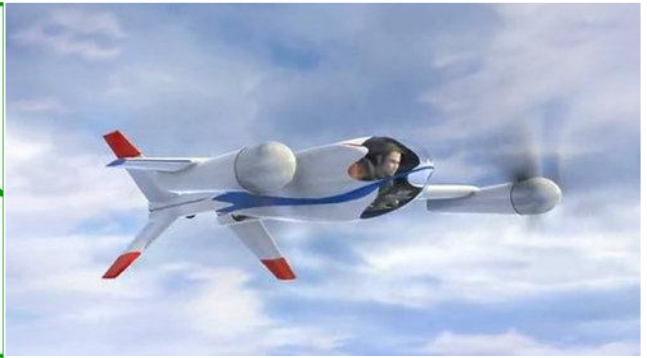


SIERRA SIGNALS

Newsletter of the High Sierra R/C Club
AMA #1362 and SAM 34
Carson City, Nevada

February 2010 Edition



Next Meeting – Thursday, February 11th, Carson City Airport Terminal – 6:30 pm

Presidents Corner

Welcome everyone to the 2010 flying season. We hope everyone enjoyed the Christmas party. In an effort to add to your enjoyment of club activities we would like to hear any suggestions and comments. We will present a preliminary schedule of activities for 2010 at the February meeting. We encourage you all to attend and give us your input.

The runway cracks have been filled and the shed repairs have been completed. A new deadbolt lock has been installed. The new lock will be demonstrated at the February meeting and a separate key will be issued. If you are a key holder your new (additional key) will be issued at no cost. Should you wish a key the standard key policy of a \$20.00 refundable deposit will apply.

We are working on a Password protected area for the web site. If all goes well, we will be posting the last month's meeting minutes, and Treasurers report for viewing by members only. This will allow those who are unable to attend the meetings to keep abreast of club planning and discussions.

Be safe, and good flying, (In a month or two).



Mr. Morse sent me pictures he took during the AMA convention in Ontario Ca. Thanks for sharing Don! Looks like you had fun!



It looks like this is turning into an annual event! Gary also sent pictures recently from the Frozen Finger Fun Fly on January 1st.



Speaking of Gary, last month I was going to include his Christmas Poem in the newsletter, but due to forgetfulness, I misplaced it! Well, the lost has been found!

It was the night before Christmas and all through the night, people were dreaming of their new planes in flight.

The Flying Dutchman was out there flying from day to day, but no one was out there more than Robert Harrington to play.

The cemetery continued to grow like sprouting Wal-Marts, but Robert Canadian kept his crashed sportsman, as he says it will be used for parts.

We had a successful roll out party and lots of planes flew in the electric fun fly too, but we continued to see other flyers with their planes old and new.

Lester became the designated test pilot and flew others planes quite often, of course his big biplane looked great until it would fit in a coffin.

Dr Steve let us through a medical trauma that still lingers, but it wasn't much fun what the prop did to his fingers.

Pylon racers from Gardnerville were really flyin' fine, while HSRCC pilots were practicing their figure nines.

We made the fun trip to Boca Reservoir on various days, with Harold, Gary, Louie, Bobs and Toms and their float planes finding their way.

With the roar of engines and the bounding jump, Mike and the new car track seemed to have made it over the hump.

We managed to get on TV thanks to John Tyson's Journal, but after all was said and done, one of the flights ended up in the urinal.

Ken doesn't do much flying at the field while concentrating on his new store, but helicopters flying above the aisles make customers head for the door.

The Calmotos have taken over the majority aircraft role, but like most aircraft that crash, make a nice hole.

Now I know that you are thinking Mr. T. is quite brash, but he sewed up the Order of the Arrow on his eighth crash.

May next year bring clear weather, light breezes, warm conditions and safety to all, and to all a good night.

- Gary Fuller

Better always to break ground and fly into the wind than to break wind and fly into the ground.

Got Gas? - continued from last month.

If you recall from last month, I mentioned that gasoline by itself can contain up to 13% water. Yes and no. The thing is, gas, by itself, takes forever to absorb that much water, so don't worry about the gasoline taking in water; the larger problem is with the ethanol.

Anyway, I was concerned about the ethanol/water in the fuel and had heard about using Coleman camp fuel. So, I purchased some and mixed oil into it at the proper ratio, and tried it out. Seemed to run great. Of course after doing that, I then decided to do this research on what gas is! I did know that "white gas" has a lower octane rating than gasoline, but what does that mean, this term octane?

"Coleman fuel "white gas" has an octane rating of 50 to 55 and none of the additives found in modern gasoline."

"Octane rating does not relate to the energy content of the fuel. It is only a measure of the fuel's tendency to burn in a controlled manner, rather than exploding in an uncontrolled manner."

"Octane is a measurement that tells how much resistance to burning a substance has... the higher the resistance, the higher the octane rating. The higher the octane, the longer it takes to burn. This does not mean you will get better fuel mileage, it means that the fuel will burn longer on the down stroke after ignition...so your gas mileage will not improve, only a longer more even burn of the fuel in the cylinder....Due to the higher octane (resistance to burn) it is less likely to pre-ignite."

Short stroked engines gain no benefit from high octane fuels, except a good cleaning, because the fuel that is not finished burning is pushed out the exhaust on the up stroke (which can blow a really cool flame out the exhaust pipe, which means you are wasting energy/fuel) You can run a leaner mixture.

The higher the octane the lower temperature an engine will run."

"It is possible for a fuel to have a Research Octane Number (RON) greater than 100; racing fuels, AvGas, liquefied petroleum gas (LPG), and alcohol fuels such as methanol or ethanol may have octane ratings of 110 or significantly higher — ethanol's RON is 129."

So, the Coleman fuel burns fast and hot. No wonder the engine had so much power! I did not notice an issue with heat though.

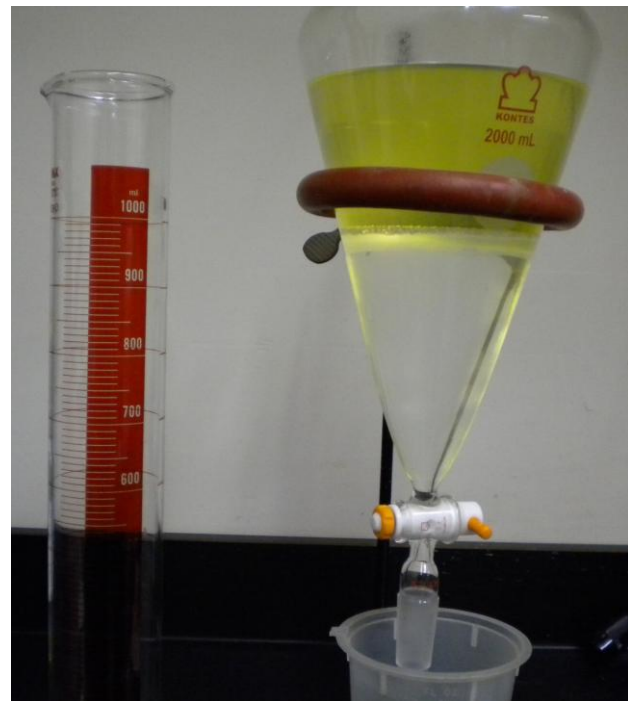
"It might seem odd that fuels with higher octane ratings are used in more powerful engines, since such fuels explode less easily. However, an explosion is not desired in an internal combustion engine. An explosion will cause the pressure in the cylinder to rise far beyond the cylinder's design limits, before the force of the

gases can be absorbed by the piston traveling downward. This actually reduces power output, because much of the energy of combustion is absorbed as strain and heat in parts of the engine, rather than being converted to torque at the crankshaft."

"A fuel with a higher octane rating can be run at a higher compression ratio without detonating. Compression is directly related to power so engines that require higher octane usually deliver more motive power. Engine power is a function of the fuel, as well as the engine design, and is related to octane rating of the fuel. Power is limited by the maximum amount of fuel-air mixture that can be forced into the combustion chamber."

Not sure what to think now about the Coleman fuel. Short stroked engines don't need high octane fuels, but low octane fuels create more heat/strain. It does cost a whole bunch more, but doesn't have all of the tars and sludge in it that gasoline has.

Back to the ethanol/water in the gas problem, last fall, I took some gas and checked if it had ethanol in it.



If you measure out a known amount of gasoline, add water, shake, then separate off the gasoline and re-measure, you can determine the % of ethanol that was in the gas. You are combining the water and ethanol and causing "phase separation" (remember from last month). Much to my surprise, there was no ethanol at all. I guess I should not have been surprised. This was at a time when gas prices were low and they are not mandated to include ethanol in gas until the winter.

More about gasoline next month! In the mean time, here is some information on the chemistry of gas; on average, a fart is composed of about 59 percent nitrogen, 21 percent hydrogen, 9 percent carbon dioxide, 7 percent methane and 4 percent oxygen. Less than 1 percent of their makeup is what makes farts stink. Oh! Sorry! I thought they were talking about gasoline.

The Scheduling committee has been hard at work. They will present a tentative schedule of events at the next meeting. Come to the meeting and discuss what they have and/or add your own thoughts/ideas. It's not cast in stone. Your input is valuable!

- APR 17 Roll Out Party - T. Reinbolt
- MAY 15 Silver Springs Air Show
- 22 Float Fly Washoe - L. Scheel
- JUN 19 Carson City Airport Open House
- JUL 17 Float Fly Washoe - B. Jones
- 24 Warbird Fun Fly - D. Morse
- AUG 7 Float Fly Topaz - B. Heitkamp
- 14 Electric Fun Fly - G. Fuller
- 28 Old Timer Fun Fly - D. Morse
- SEP 11 Old Timer Fun Fly - B. Jones
- 25 Picnic - T. Howell
- JAN 1 Frozen Finger Fly In

Tentative Schedule submitted by Gary

* The people listed are considered "Hosts" and additional activities may be added to supplement our calendar or make adjustments because of conflicts. In regards to including other Clubs, our calendar will be shared with them and they are always invited. Activities or demonstrations are up to the hosts (such as Jet demos or glider launches). Gliders will be included as part of both the Old Timer events. Boca Float Flies will be arranged off the regular calendar most likely on Wednesdays. The Club Open House is pending as of now.

If you have not looked in awhile, we got us a new "Members Only" area on the web site! In it will be semi-private information concerning the club, including financial reports and our membership roster.



If you cannot get in, it means you do not have the user name and password. If you do not have the user name and password, it means you did not pay your dues and receive an email giving you the user name and password. And that kind'a means you aren't a member of HSRCC. So join the fun, pay your dues, be a member, and receive your user name and password. Oy!



Member Access Only

2010 HSRCC	Officers and Crew	Phone
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<i>Treasurer</i>	Joan Seymour	883-5553
<i>Field Marshall 1</i>	Bob Harrington	883-1511
<i>Field Marshall 2</i>	Mike Santiago	450-1292
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<i>Safety Officer2</i>	Larry Johnson	885-9016
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