RIM COUNTRY CLASSIC AUTO CLUB NEWSLETTER

FEBRUARY 2017



THE RIM COUNTRY
CLASSIC AUTO
CLUB
IS A NON-PROFIT
ORGANIZATION
FOR THE PURPOSE
OF:

- Providing social, educational and recreational activities for its membership.
- Participating in and supporting civic activities for the betterment of the community.
- Encouraging and promoting the preservation and restoration of classic motor vehicles.
- Providing organized activities involving the driving and showing of member's cars.

## Join Us

RCCAC meets at 6:30p.m. on the first Wednesday of the month at Tiny's Restaurant, 600 E. Hwy. 260 in Payson



RCCAC President Mary Cailey

Hey, Everyone, I hope you are all getting through the winter healthy and in one piece.

Even though I'm President, I would like to emphasize that this is YOUR Club, that you have the right to let your voice be heard. I know we all complain about things that have to do with the Club and I want to hear these complaints/concerns. You need to speak up during "Business from the Floor" at the monthly meeting agenda, or let me know before the meeting (I try to get there an hour before) or slip me a note explaining what your concern. Please do not come to me AFTER the monthly meeting about a concern as it's too late to bring it up for discussion and I'd rather not have to wait another month to bring it to everyone's attention. All complaints/concerns can be brought up anonymously, I don't need to know who you are, just your concern.

Along with this thought, I like to do surveys.
I think you find out a lot by doing a survey after an event, a meeting, or gathering. It gives the participant the opportunity to voice their view or comments about the event.
Oftentimes you find out that what you assumed to be true or what you thought everyone felt about the event, meeting, etc, is in fact, not true and not correct.

I will be distributing surveys throughout the year, sometimes during a monthly meeting, sometimes to find out what you think of a new idea. Please complete the surveys, this is another way you can voice your opinion.

Happy Valentine's Day to all.

The Dayton Engineering Laboratories Company became what famous acronym?

ANSWER: on page #6



#### **2017 RCCAC PIT CREW**

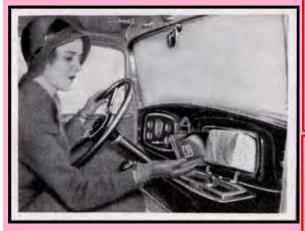
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Car Show Director for 2017

Byron Gunderson 928-476-2168
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kkg1077@hotmail.com
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thundermtn@live.com

Newsletter Margie Fowler 928-478-6676 margiefowler@suddenlink.net

## FROM THE GLOVEBOX



### **UP COMING ACTIVITIES**

## **FEBRUARY**

AT A GLANCE

1 st- Membership meeting 6:30pm

9 th- WOW at 11:30am.

11th- Memorial service for John Turner

14th- Valentines dinner

### Coming up in March



St. Patrick's Day March 17th at Kohl's Ranch. 1:00 pm

### What does **RSVP** mean?

Those who do the planning and preparation ask for a response so they can semi-accurately predict how many will participate. The percentage who respond versus the number who show up is often pretty far off, and frustrates those who do the planning. So, in case you were wondering, RSVP is from the French répondez s'il vous plaît, or please reply. Now you know!

03- Julius Zezima

04- Judy Curtis

17- Darlene Welsh

23- Dee Jayy Wells

24- Debbie Richardson Kotnik

24-Gary Allen





Memorial services for member John Turner is February 11th at 1:00 pm at Ponderosa Bible Church 1800 Hwy 87. Donna thought it would be great for us to bring our cars in fact she may bring John's. Please park on the South side of the church. Hope everyone can make it.

## Valentine's day.

Bring your Sweet Heart to Diamond



Point Restaurant for an early dinner. We will meet at the Roud's parking lot at 2:30 and leave at 2:45. Reservations are at 3 pm.



Remember to RSVP to Sandi Gunderson 928-476-2168 or e-mail a57chevyman@q.com



The movie is voted on at the monthly club membership meeting. It' will always be on either the 2nd or 3rd Saturday at 10:am and is announced via e-mail.

Make sure your e-mail is up to date! \$7.00 gets you the movie, a small drink and a small popcorn.

See you at the Movies!



Women On Wheels

Next month we will be going to Gerardos. Always a nice place for lunch. Please try and join us, as it's a blast. Remember, guests always welcome. Try and **RSVP** back to me a few days before the date so I can call ahead for seating.

Remember, Gerardos Feb. 9<sup>th</sup> at 11:30.

# News from the Backseat





This year we have moved the Car Show to May 12th & 13th hoping for better weather than we have had the last three years. The show is also at a new location the Mazatzal Casino, we are trying a two day event, to see if we can increase attendance.

Friday will have paid participant games with cash prizes, 50/50, a new cruise route, our burger burn (with public paid attendance) will be inside at the casino along with a sock hop with a "live band' and prizes for best 50's dress, dancers, etc. Saturday will be judging and awards for participants, TOP 20, "Best Of", 50/50, basket raffles, and kids cars.

We still could use help at the show, the more volunteers the easier on everyone even if its for a few hours setting up

running the games, selling 50/50 or working the hospitality tent.

Members voted to show their cars for our own club awards, just like our show participants you must fill out a registration form and pay to receive a goodie bag and t-shirt, voting will be by non club members only.

Byron



Again, the Women On Wheels luncheon went off with lots of laughs and fun at our Jan luncheon.



We met at Chilis for a great lunch. I haven't been there in quite awhile, and was pleasantly surprised at the good food and service. We did give our waiter a run for his money, LOL!!!

Margie Fowler's friend Dawna from Utah (the one Margie has been work/traveling with) was with us too and it was fun to get to know her.

After lunch a few of us gals went across the parking lot
 and enjoyed a movie. Fun to have a full day with the
 "girls".

### **EVERY Wednesday 12: NOON**

Come join the fun each Wednesday for lunch or a treat at a GREAT price. Plus the best company, with time to catch up on all the happenings.

Get to know each other in the club better.

601 S. Beeline Hwy





FEBRUARY

# IN THE HEADLIGHTS

Dick Hedman was involved in the after market auto industry from an early age of 10 years old. Dicks father, Bob Hedman, had Dick starting from the ground up, making parts kits after school. Little did Dick know that someday he would be running the company for his dad who retired in 1975. During this period, Dick involved himself in all the facets of the automotive industry, from racing and engine running to vehicle restyling and customization.



school started building Superformance Cobra replicas.
Although the cobra business was doing well, Mr. Bondurant decided to stop producing the vehicles. Dick was offered to go to work for Courtesy Chevrolet in Phoenix as the Performance Center Manager.

At Courtesy, Dick developed the Thunder Truck
Performance Series truck. These trucks featured performance upgrades including superchargers, exhaust systems, suspension components, air induction systems and more.
Dick was pleased to have sold more than 150 of these performance trucks! During this time Dick was offered a chance to be on the GM Performance Parts Advisory Council which he considered a honor!

In the racing realms, Dick was the crew chief for Hedman Motorsports, campaigning racecars in the NHRA Pro Stock (The Hedman Husler 1970 Maverick) and SCCA Road Racing series campaigning formula fords and formula Atlantic cars.

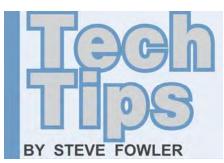
In the Automotive aftermarket ranks. After running the Hedman Hedders for years, he went on to own Clay Smith Camshaft Company (Mr. Horsepower). After selling that business, Dick moved to Phoenix permanently in 1991, Dick and his brother Ken purchased Paradise Valley Auto Service. Eventually Dick decided he missed the performance end of the industry, Dick sold his portion back to his brother and went on to become Project Manager for Bob Bondurant, when the



From this Dick went on to become Director of

Motorsports Operations for Gorilla Motorsports. With his 40 plus years of knowledge and expertise in vehicle restyling this led to producing the Silverback Edition vehicle creations at Gorilla Motorsports.

Retiring and living in the cool mountains of Pine was a dream come true and this finally happened in the fall of 2010. Now you can find Dick in his shop working on cars from 1907 to current cars. Another passion of his is driving his 550 horsepower GMC pickup truck of which he built!!



Last month I introduced the basic concepts behind today's fuel injection systems, this month I want to dig a little deeper. I talked briefly about the five key sensors and promised to explain more, so here goes.

If, as a child, you touched a

hot object and immediately pulled back, you did what an engine control computer does. You sensed the heat, your brain made a decision, and your muscles acted in response. In simple terms, that's what an engine computer does. Sense, decide, act. So let's look at those sensors.



Engine speed or tach- In its simplest form, this sensor gets a pulse every time a cylinder fires or is scheduled to fire, but often does much more. Two types are common, Magnetic and Hall-effect. The first uses the principle that when a magnetic field moves over a coil of wire, a voltage pulse is created. The Hall-effect is a little more sophisticated, but still uses a magnet to create a signal. The key differences are that the magnetic pickup uses just two wires and generates its own voltage signal which increases with speed, which makes control a little more difficult. The Hall sensor uses three wires (power, ground and signal), requires a voltage supply, but produces a very accurate on/off signal at all speeds. Most of today's cars use either or both of these, most commonly located on the crankshaft and/or the camshaft or distributor to signal both speed and position so that the computer can calculate both ignition events and fuel injection pulses, which are typically synchronized to cylinder firings. Both sensor types are very durable and relatively easy to test.

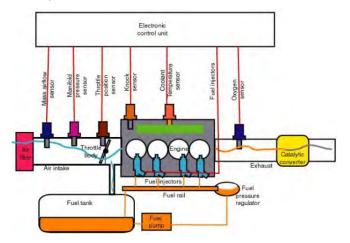
Engine load sensors are usually either manifold pressure (MAP) or mass airflow (MAF). MAP sensors compare manifold vacuum or pressure to a sealed reference chamber, usually by measuring the flexing of a separating diaphragm. Too involved to explain here, but typically they use three wires like the Hall sensor, and either output a varying DC voltage or a varying frequency signal to the computer to indicate load. Generally very reliable, the most common problems involve either leaks in the connection to the manifold or contamination from fumes within the manifold. The MAF sensors are trickier and somewhat less reliable. The most commonly used today is a hot wire sensor that calculates airflow by heating a wire to a specified high temperature, then monitoring the current required to keep it at that temperature while in the incoming cooling air stream. These have been refined to be very accurate and relatively cheap and reliable. The biggest problem is with dust and/or oil (usually from your K&N) coating the wire and insulating it so readings are lower than correct. Aftermarket systems that use MAF usually use this type.

Throttle position is usually monitored by a potentiometer, which is a mechanically varied resistor much like the old volume control on a radio. These are subject to wear over time, and can be the source of "hiccups" in operation. Again, three wires like the Hall sensor. The computer uses the info to provide for a richer mix at wide open throttle and to give a little extra fuel during sudden throttle opening, just like an accelerator pump did on a carb. It may also act as a backup signal for load in case of a sensor failure.

Temperature sensors are generally two-wire sensors that are NTC

thermistors, which are semiconductor devices that PAGE5 have resistance that drops as they get hot, and do so to a very predictable degree. They are usually fed a 5-volt signal (that is the standard for most computers and for most of the sensors mentioned above) and the voltage lost across the sensor is monitored for a temperature signal. They are used to monitor coolant, air, engine oil and often transmission oil temperatures. On a cold engine, they signal the computer to fatten up the mixture just like a choke did on a carb.

The last key sensor is the oxygen sensor, which is one incredible invention. It actually acts like a battery when it is **HOT** (600+ degrees). It generates a tiny voltage that changes based on comparing the oxygen left over in the exhaust with reference air that has access to the inside of the sensor. With a rich mixture, it will put out about 900 millivolts and with a lean one about 100 millivolts. Older systems monitored this change from rich to lean and back, which occurs over a very narrow window of mixture (about 14.2 to 15:1) and adjusted the mixture constantly and rapidly to maintain an average near ideal for emissions and mileage. For situations that required a richer mixture, they had to be ignored and the system operated in "open-loop" or on basic program values. Thus the need for "tuning" a modified vehicle. As mentioned in my first article, a newer development is the Wide-Band oxygen sensor, which actually basically combines two sensors stacked together and controlled by a controller circuit that reverses the "battery" function of one sensor to "pump" oxygen to and from the one exposed to the exhaust. This allows these sensors to monitor the mixture over a range from about 9:1 to 25:1, and thus be in control of fuel under all conditions. That makes them wonderful for controlling aftermarket systems designed to be used on modified engine. They DO require electric heaters to get them up to temperature and keep them there, and they aren't cheap, but competition has brought their cost down from the many 100's to about \$80-100. As with the original sensors, they can be "killed" by contamination from silicon (dust, silicone sealers and old-style antifreeze), lead (fuel and old gas tank coatings) or several heavier metals (like the zinc in motor oil that's designed for older cam designs- which is why newer cars are using roller cams).



There are other sensors and signals that the car manufacturers use to make their systems run even smoother, but these five are the ones that are used by the aftermarket to control their fuel injection systems. In next month's article, I will try to explain how these signals are processed by the computer to control fuel delivery and ignition timing, and how the actuators (injectors, ignition coils, etc) respond.

PAGE 6 The Dayton Engineering Laboratories Company became what famous acronym?

# Car Trivia Answer!



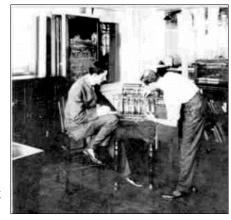
Charles Franklin Kettering 1876-1958

Teacher, salesman, engineer, inventor, scientist, executive, philanthropist, philosopher. "Boss Kett" was an apostle of progress.

Bare foot on a small Ohio farm, Charles Kettering was born and raised. Son of a minister and among the last wave of children taught in a one-room schoolhouse. After graduation, he taught in a small-town school to finance his college education. Entering Ohio State University at the age 22, he dropped out in his sophomore year, plagued by poor eyesight. After two years working as a telephone lineman, Kettering returned to Ohio State,

graduating 1904. He was 28 years old.

NCR and Delco Era Kettering was hired as an experimental engineer with National Cash Register Company in Dayton. Over the next five years, Kettering electrified the cash register, developed a low-cost printing cash register, and invented a credit system that tied phones to cash registers and accounting machines. Working "on the side" while at NCR, Kettering invented the first electric automobile starter, a major advancement in automotive engineering that ended the use of the formidable hand crank. In 1909 "Boss Kett" left NCR to form the Dayton Engineering Laboratories Company (Delco) with his friend Edward Deeds. That same year, Cadillac ordered 8,000 of Kettering's ignition systems. First offered on the 1912 Cadillac automobile, the electric starter was followed by other Kettering inventions such as electric headlights and emergency brakes.





**GM Years** In 1916, Delco – in exchange for nine million dollars – became a subsidiary of United Motors Corporation, itself later acquired by General Motors. Headquartered in Dayton, Ohio, at the inventor's insistence, Delco was quickly renamed the G.M. Research Corporation and Kettering was made the Vice President and Chairman of the Board. Head of GM Research for 27 years, Kettering dictated and directed the advancement of thousands of products. Over three hundred patents were registered in Kettering's name, the most notable inventions: the electric starter; ethyl, an anti-knock gasoline additive, diesel engines for locomotive use, and the non-flammable refrigerant, Freon.

**Philosopher & Philanthropist** In addition to earning acclaim in the world of business, Kettering was highly regarded as a public speaker and philosopher. From 1945 until 1948 Boss Kett hosted a radio show about science and

the art of invention. Kettering retired from General Motors in 1947, but continued to serve as a research consultant until his death in Dayton, OH in November 1958. During his lifetime Kettering received more than thirty honorary degrees and dozens of awards, citations, and medals. Boss Kett is memorialized in the Charles F.

My interest is in the future because I am going to spend the rest of my life there

Charles F. Kettering

Sloan, Jr. in 1945. Look up this man on the internet,

Kettering Institute for Cancer Research, founded with GM chairman Alfred P.

Kettering Foundation and the Sloan-

for more of his quotes and interesting information about this remarkable man and his accomplishments.







1960 Ford F-350 pickup.

Ground-up restoration, 292 V-8 engine completely overhauled, HD manual 4-speed transmission, new upholstery, 9-food bed. Is on a 4 st5raight wheels, has a set of dually wheels. Original Academy Blue paint. Asking \$12,000. Call John at 474-8305, or e-mail at oldbuck8247@yahoo.com.



Custom/Concept Sports Car.: Allan Sicz. is a retired Senior Engineering Associate/Car Fabricator (GM Desert

Proving Grounds—Arizona). Allan built this car from the ground up. He built this Concept Sport Car in his workshop and completed the final design changes over the last five years. The car price is \$50K or best offer. For all the specifications contact- Allan, cell phone number is 406-366-2859. or his brother Ken who is helping him sell the car he can be reached at ksicz@npgcable.com or my cell phone 480-209- 2816. Ken has more info and pictures to share.



2- 15X7 Chevy rally style wheels with dual bolt pattern - 5 on 4 1/2 and 5 on 5 3/4. Excellent condition. \$60 for the pair

Two sets of "Yukon" diff gears for a Chrysler 9 1/4 rear end (3.90 and 4.10) \$50 each.

Two fiberglass lo bucket seats (Speedway #1412400) and black seat covers (#1412408). New! \$150. \$230 if you buy them from Speedway.

16 inch chrome electric fan (2100 cfm ). Speedway #91015499-16. New! \$50. Call John Cailey 928-474-3560

**NOTE:** If you want to advertise or remove your ad please send an e-mail to **margiefowler@suddenlink.net** not the clubs e-mail.

Just

Because

I Had

The Room!

Happy Valentine's Day







## **Upcoming Car Shows**

### February

4	Bullhead City, Az.	The Fifth Annual Fundraising Car Show - "Roarin' On The River"
11	Indian Wells. Ca.	15th Annual Dr. George Charity Car Show

11 Sun City West, Az. ARC 5th Annual Car Show & Swap Meet

25 Casa Grande Az. Still Cruisin Car Show

#### March

4	Phoenix, Az.	Chester's Classic Car Show
25	Goodyear, Az.	Cruiz'n To The Lakes Car Show

### April

8 Safford Az. Cruisin into Spring Car Show & Swap Meet

22 Fountain Hills Az. Collector Car Show

29 Prescott, Az. 6th Annual Cruise-In For The Veterans Car Show

### May

5 - 7	Seligman, Az	Kingman, Az	Topock, Az.	Historic Route 66 - Fun Run
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12-13 Payson, Az. Beeline Cruise-In Car

20 Prescott Valley, Az. The Home Depot 4th Annual Classic Car Show

27 Alpine Az. Blast From the Past Car Show

### June

3 Show Low Az. Cruz'n The Rim

10 Holbrook, Az. Rt. 66 Festival and Gunslinger Car Show

## www.cruisearizona.com www.cruisinarizona.com/carshows.html

If interested in going as a group, contact Sandi Gunderson to see if something can be arranged for a group caravan.

If you know of any FUN upcoming car shows not listed.

Please let Margie know as soon as possible to add them to the listing.

Check out the clubs website: http://clubs.hemmings.com/rccac/