

Official Newsletter of the Ozaukee Corvette Club

February 2017 Issue

"Cruisin' Since 1979" www.ozaukeecorvetteclub.com Facebook.com/OzaukeeCorvetteClub

President: Vice Pres: Secretary: Treasurer: Newsletter Editor:

Jeff Myers Ron Giese Sue Montana Myers Sue Giese Jim Nowlen

Membership: Parades: Web Masters: Advertising: Directors: Ron Giese Thom Brown Pat Murray / Dana Drennen Mark Hobler Gregg Goetz, Mark Hobler, Pat Murray

The Ozaukee Corvette Club meets the 3rd Sunday of the month!

The Ozaukee Glass, official Newsletter of the Ozaukee Corvette Club, is produced monthly and provided to all members, advertisers and other car clubs. Articles printed in Ozaukee Glass are believed to be accurate and correct. The Ozaukee Club assumes no responsibility for the completeness or correctness of the articles.

2017 Post Meeting Bowling Party!!!

Right after our meeting at what became a very noisy Firehouse Restaurant we adjourned to Harbor View Bowling Alley in Port Washington for 3 frames of bowling. See Website for Photos....

Club Meeting Minutes:

This section of our newsletter is set aside for meeting minutes. However, as this is a print publication to members, it makes sense to reserve this section for <u>ratified</u> minutes.

Before publication of this month's newsletter, there were some legitimate questions about possible mistakes of our draft February minutes. It is notable that our meeting was not in our normal room, but in the middle of a busy Firehouse Restaurant dining room. It was exceedingly difficult to hear each other. But, as I reflect on this; it really makes more sense to only publish minutes that have been reviewed, adjusted where necessary and approved. So my plan for the March newsletter will be to make any corrections to the draft minutes from February, and publish them in the newsletter. I will bring a few copies of the February draft minutes with me to the March meeting so that members in attendance can review and offer corrections as part of our ratification process. I will bring up if and whether to make this a regular practice at that meeting.

I also want to set in place publication targets. Going forward and with regard to our newsletter, let's please operate as follows:

- 1. Newsletter content cutoff 7 days post meeting. Content includes ads, articles, classifieds, ratified minutes, stories, etc.
- 2. Content not received by the cutoff will be deferred to the following month newsletter.
- 3. Publication target 14 days post meeting; but no later than the end of that month.
- 4. Targets are just that. I have intentionally left enough openness in "7 days" that the most generous interpretation of that time frame applies.
- 5. My pattern will be to have a draft of the subsequent month newsletter (really the emerging document) with me at each meeting to serve as my notepad.

Thank you in advance for bearing with me on this rather late publication.

March 2017 tentative agenda

Date is March 19, 2017 at Firehouse Restaurant in Saukville. We have a guest speaker, Ed Saari from Corvettes in the Dells.

April 2017 tentative agenda

The April meeting is Sunday April 9th to avoid Easter conflict. We have a guest speaker, Mike Binsfeld from Ice Kold, LLC in Grafton. Mike is a master mechanic and AC specialist with Ice Kold, LLC in Grafton WI. Ice Kold primarily sells and services Freon recovery units. This is the equipment that your local mechanic uses to service your vehicle AC. Ice Kold also will work directly on vehicle AC in their single bay facility although more typically they are the place our local shops go to when they hit an "impossible" situation.

Mike will expand our knowledge of how our AC systems work; and how this has changed from 1954 to now; including implications of service intervals.

Member Anniversaries:

Al and Nancy Neville celebrated their wedding in February. Sandy and Tom Hansen celebrate their wedding in March. Ann and Pat Murray celebrate their wedding in March. Trent and Karen Schanen celebrate their wedding in March.

Birthdays Coming Up: February Birthdays:

Walter Baatz Fred Kellbach Brian Mayer Sally Post

March Birthdays:

Gary Bush Carie Drennen Dave Drew Jeanie Gillitzer Jan Griesmeyer Doreen Lettau Jim Nowlen Diane Rehm Trent Schanen



W194 N16747 Eagle Drive phone: (262) 677-4313 Jackson, WI 53037 fax: (262) 677-4396 jacksonvisioncenter@gmail.com





none: 262-3**77-0784**

CLIMATE CONTROLLED VEHICLE STORAGE AT 5CORNERS & MEQUON STORAGE 262-236-0612

- Tem per ature between 50 80 degrees
- Electric garage door
- Optional outlet for battery charger hock up
- Gated facility with security cameras
- 24/7 access
- Conventionalstorage also available





www.car-feteria.com Custom Vehicle Stereo & Security Systems Sales & Installation 6767 N. Teutonia Milwaukee, WI 53209



Patti Steeber Sales Manager

M-F 9:00-5:30 Sat. 10:00-2:00

414-352-3510

Proneer ^bjockford fosquio.

Vehicle Security Alarms | 2-way Communications | Keyless Entry | Remote Start | Smart Start

KENWOOD

Mobile Audio Systems Car Stereos | Speakers | Amps | Subwoofers | Custom Enclosures

Video & DVD Systems Backup Cameras | In-Dash Navigation | Monitors (in-dash/overhead/headrest)

Vehicle Accessories

Cruise Control | Custom Lighting | Truck Accessories | Heated Seats IPOD & Bluetooth Adapters | Auto Dimming Mirrors (Homelink, compass, monitor) Curb Finder | Blind Spot Detection | Proximity Sensors | Directional Mirrors

Classifieds:

C-5: • Soundboard for trunk • Taillights & license plate louvers (Painted mell. yellow) • Relay for low & high beam lights (turns on both high and low headlights beams on the highway) easy to wire in • Dr. Color chip kit Mell. Yellow (never opened) •Leather steering wheel cover (yellow & black)
• Emergency hood release • Touch up bottles (3) • Can of NAPA spray paint (Millennium yellow)

• 2-yellow key fob rubber covers • Yellow grab handle -5. Contact Ron at: ronhgiese@gmail.com

CORVETTE Storage in Cedarburg area. Very clean, dry, bird proof and secure. Reasonable annual rates. Thom Brown 262-377-6857.

Storage in Germantown. Very clean, dry and secure. Reasonable seasonal and annual rates. Electricity available for battery tender at additional charge. Wally Baatz 262-751-5011

Recognition Specialists, Inc. **Celebrating Over 25 Years in Business !** Corporate Awards - Trophies - Plaques - Signage Nametags - Clocks & Giftware - Ribbons - Medals In-House Laser Engraving 1201 6th Avenue Fax (262) 377-7178 Email: recspec1201@alt.net Grafton, WI 53024 (262) 377-5528 www.recognitionspecialists.net

WBAATZ

WB Accounting And Tax Service

 W210 N19797 Appleton Ave.
 Walter D. Baatz

 Germantown, WI
 262-250-0550

 53022-3711
 fax: 262-250-0890

wjb.acctgntaxsvc@gmail.com



February 2017 Tech Tip – Traction and Traction Control.

Back in the 1950's, 60's, 70's, the goal of any manufacturer was to build their sports cars (and their regular passenger cars) to a level of 50-50 weight distribution. This was a very lofty goal for any manufacturer. The car that could achieve that would handle better than one that wasn't perfectly "balanced". Corvettes were always a little "nose heavy", and came in at 53-47 with a small block and manual transmission. So what does that mean? 53% of the Corvette's weight was in the front half of the car and 47% was in the rear. We are talking about the '58.'59 through '62 Corvettes. Zora Duntov, Corvette Chief Engineer, wanted to get weight off the front end knowing it would make for a better handling Corvette. He created aluminum heads, developed aluminum intake manifolds, used aluminum radiators, and developed magnesium frame cross members. All these specialized parts were for a few racing teams, and these same parts were added very quietly to GM parts manuals. Zora wanted the Corvette to be the dominate sports car, and was obsessed to do whatever was possible to make the Corvette a winner. The public would be able to order these parts sometime in the future. However, when the cost to make these parts was found out by the GM accountants, they killed the projects. Those individuals that ordered those parts for their cars in 1960, are still waiting for them! On the few Corvettes that got those parts, enough weight was saved that the cars were actually 51-49.

Close but not perfect. So, what is the big deal? If a car has 50-50 weight distribution, the entire car drifts evenly coming out of a turn. A nose heavy car will have the rear end break loose and come around before the front end does, and the Corvette becomes a real handful to drive. The obvious answer would be to add some weight to the Corvette's trunk area. However, the added weight would make one's Corvette a little slower than another Corvette. The cardinal rule was to make your sports car 50-50 and keep, it as light as possible. This is why the thought of adding weight to the rear is blasphemous. One interesting side note- because Zora was creating those special aluminum heads and aluminum intake manifold from scratch, he could and did create a set of heads that would breathe better by allowing massive amounts of air in and just as massive amounts of exhaust out. The powers to be saw a great opportunity and created Zora's design into the cast iron 2.02/ 1.60 fuel injected heads. They are marked by a distinctive "double hump", also known as "Camel Hump" heads, and you can see these heads on Jim Baker's 1965 coupe along with the aluminum intake manifold that Zora developed. Engineering convinced management that Zora's designs were well founded, and they gave the green light to include them on later cars, but in cast iron. This incredible breathing is the core reason Chevys make such tremendous horsepower. This was a time in history when Chevrolet pulled away from Ford in the horsepower wars, and Ford has been trying to catch up ever since.

(Continued next page)

As some of you know, GM decided to add Big Block engines in the Corvette. The 1st. motor was the 396 in '65. Chevy increased the size of the Big Block to 427 in '66,'67,'68', and '69, and the 454 in '70 thru '74. However, it made the Corvette very nose heavy. Add in all the available options which added more weight over the front axles along with all the extra horsepower and torque, and the rear end could break loose and come around very easily if hustled too much. The weight transfer was a terrible 60-40, they ran very hot, ate massive guantities of fuel, were obscene to insure, and overall made for a somewhat poor Corvette. Please believe me, I owned one and hated it. However, this article is about traction and traction control. Those early Corvettes were all about weigh distribution and weight transfer. The current C-5,6, and 7 are also about weight distribution with a ton of help from computers, specifically the Engine Control Module (ECM), and the Body Chassis Module (BCM). The engineers managed to get a weight transfer of 49-51 on the C-4 and C-5 and 51-49 on the C-6. However, the C-7 is engineered so well, they nailed 50-50 very early on. Another reason for C-7 Corvette's incredible handling and acceleration is Traction Control and Stabilitrac. I was listening to someone who was saying the 6.2 liter LS-3 has 430 hp and is more desirable than the 6.0 LS-2 at 400 hp. Looking at the horsepower numbers that would be true, except for one glaring fact- the zero to 60 times of each car are identical- 4.2 seconds. If the LS-3 has 30, or 7% more horsepower, why does it accelerate to 60 mph at the same time? The answer is Traction Control. As the Corvette accelerates, the computer counts and compares wheel spin, and compares that to the rate the front wheels are turning. If the computer "sees" the rear wheels spinning more than 2 to 3% faster than the front rolling wheels, the BCM actually sends a message to the ECM to actually close the throttle opening even though the driver has his foot to the floor.

That is also why there is no physical connection between your right foot and the throttle. The accelerator pedal is actually a very complex sensor switch. That is why the C-5 thru C-7Corvette is a "fly by wire" system. This prevents the tires from going up in smoke, and delivering almost zero traction. Then the real crown jewel of GM/ Delco Engineering kicks in to deliver straight line or controlled drifting in corners. That would be "Stabilitrac". Stabilitrac measures wheel slip, vehicle drift, and vehicle direction. If the Stabilitrac system picks up any unwanted side to side movement, as well as one driving wheel slipping more than the other driving wheel, the system applies short bursts or pulses to the disc brake of any one wheel to restore straight ahead movement. Anytime a potential disastrous skid is beginning and before the driver loses control of the Corvette, these very short pulses of brake cause the skid to stop before things get out of hand. The tech tip here is to not disable your traction control system, because you have no idea how hard these systems are working to keep you and your Corvette safe, and to keep your Corvette out of the body shop. Yes folks, your Corvette is a lot smarter than you may think. (Continued next page)









Another side note. In 1988 I was working as a volunteer for Championship Auto Race Teams or CART. We were the sanctioning body for Indy car racing back then. No one knew it, but Team Penske showed up at the Milwaukee Mile with a very small nondescript module on Rick Mear's Pennzoil Indy Car. During qualifying, the cars all race for position at the end of the straight going into turn 1. Racing is so close, it is a wonder everyone manages to find a place to make it through turn 1- it's a real meat grinder. As they enter the corner, almost every car scrubs off tremendous speed and momentum. It takes a significant amount of time to accelerate and get up to speed after passing through turn 1 and 2. I was always amazed at the ability of these talented drivers to navigate the tight corners of the Milwaukee Mile at State Fair Park. However, these qualifying sessions were very different. The top drivers are always the ones to get through the turn 1 and 2 before anyone else, and add to their lead in the back stretch. The reason is, these top drivers go deeper into the turns, at faster speeds before applying their brakes, and relying on their spoilers to keep the car firmly planted. This particular day, Rick Mears was even (Continued Next Page)



with Bobby Rahal going into the turn. It would normally be like the biggest game of chicken to see who lifts out of their throttle first. Rahal finally lifts and touches his brake, expecting to blow by Mears and go into turn 2 in the lead, except Mears never got out of his throttle! The engine was way up in rpm, the rear end seemed glued to the track, and Mears came out of turn 1 ahead of Rahal by 2 car lengths.

4 cars after turn two and half a track by the 10th lap of the qualifying session. There was Rick Mears with his foot to the floor never getting out of the throttle pulling away from the rest of the field. The fastest anyone ever circled the Mile was Rick Mears the previous year. He covered the mile in 21.4 seconds- that's over 170 mph average! That day, in clean air, he clicked off 20.2 second laps, and that much improvement is unheard of. A couple of "tenths" here and there, but never a full second or 1.2 seconds. Every team owner filed a protest, and the Penske Pennzoil car was impounded in the tech area while we looked for infractions and violations for over an hour- we found nothing illegal on the car at our first look. Upon closer examination one of the tech people found what looked like a little relay that seemed out of place, and a second pre-lube pump that was connected to brake lines. Once that was found , the chief mechanic refused to answer any questions from the CART tech team, and summoned Roger Penske to talk with the CART officials. Once the meeting broke up, the Penske car was returned to their transporter to have the strange equipment removed. (Continued Next Page)



We later found out that the Pennzoil car had a very secret traction control device put on for testing. This was the first Stabilitrac system that applied short pulses or bursts to individual wheels, keeping the Indy car tracking through a turn without spinning out by using a combination of reduced throttle and brake application making 26,000 corrections a second. As good a driver as Bobby Rahal is, he could not make adjustments as fast as the Stabilitrac computer.

In previous tech articles, I have written about the physical limitations of the front engine Corvette. The zero to 60 time of the Z06 is 2.8 seconds regardless of the power output of the engine. 650 horsepower, 750 horsepower, and 800 horsepower- it doesn't matter. The ability of the Corvette to get to 60 mph is still 2.8 seconds. That is all that is physically possible with the current layout of front engine, rear transmission using all the technology in the traction systems. The factory Corvettes are campaigned by Pratt and Miller Racing. Their engineers have said that in competition, the current C-7R is slower going into and coming out of turns than all their mid-engine competitors. Those mid-engine cars have most of their weight over the rear tires giving them better traction in turns, and they are 49-51 weight distribution.

(Continued Next Page)



The brute power of the Corvette kicks their butts in the straights, and sweeping turns, but it is getting tougher to win. They say there will be a all-new mid-engine Corvette coming very soon. The massive plant expansion in Bowling Green will be for this very special mid-engine car. By adding over 400,000 sq ft, they are effectively doubling the size of the plant. You didn't really believe they were building a 400,000 sq. ft. paint shop like they told everyone, did you? This new mid-engine Corvette will be well over \$100,000. GM has also announced for the time being, the C-7 with front engine rear transmission will continue to be made. They are not officially calling the mid-engine Corvette a C-8...yet. Pratt and Miller Racing will get their mid-engine Corvette, and the competition will try and counter this move. It is my feeling that the drive shaft will be eliminated, and the engine will be moved to the rear and attached directly to the transmission/ rear axle.

The driver and passenger will sit just ahead of the engine, and like other rear or midengine cars, the front hood will be the area for the trunk storage area. These are exciting times for the Corvette, and those of us that love these cars. In the end, the Corvette, GM and the customers all win!

Save the Wave,

Jeff Myers (Continued Next Page)



Member's Spotlight

About the owners: Ron and Sue Giese, Hartford, WI After having our 2003 Sunvette totalled on our way to a Corvette show in Michigan, we searched for a month before finding Big Red. This is our 3rd Corvette because once you own one, you're hooked for life.



About the Corvette: Year: 2012 Model: Grand Sport Convertible Engine: LS-3 Color: Torch Red Nickname: "Big Red" Outstanding Features: We are the second owners and the odometer had 1400 miles on it when we bought it.



100 South Main Street
Saukville, WI 53080
(262) 284-8886
Owner – Jim Keller

(See web site calendar for latest information) Mar 12 th - 3:00pm Chili Cookoff! The Delafield	Upcoming	Cal	endar	Events	
Mar 12 th - 3:00pm Chili Cookoff! The Delafield	(See web	site calendar	for latest	information)	
Brewhaus, Delafield, WI	Mar 12 th - Brewhaus, De	3:00pm Chili lafield, WI	Cookoff! T	he Delafield	

Mar 19th – OCC Meeting at Firehouse Restaurant, Lunch at 12PM, Meeting at 1PM.

Apr 9th (revised date) - OCC Meeting at Firehouse Restaurant, Lunch at 12PM, Meeting at 1PM.

Ozaukee Corvette Club PO Box 371 Cedarburg, WI 53012