

Newsletter October 2020

Elected Officers

President:	Ron Howard
Vice-President:	Cathy Cardoza
Secretary:	Paul Mitchell
Treasurer:	Carol Misner
Sergeant-at-Arms:	Patrick Smith
Membership:	Robin Miranda
Past President (2019):	Ron Howard

Appointed Positions

Sunshine:	Sandee Anderson
Activities:	Cathy Cardoza
Event Reminder:	Pat Dobson
Internet Site:	Sharon Hook-Martino, Elaine Ellis
Parade Coordinator:	Sheron Leigh, Kerry Razza
Natl Corvette Museum:	Len Atlas
Historian:	Group Effort
Photographer:	Group Effort

Next Club Social

The next club social is Saturday, October 24, **5:00 p.m.**, at Outback Steak House, 3613 Crater Lake Highway, Medford.

Upcoming Meeting

General Membership Meeting, Wednesday, November 4, 2020, **6:00** p.m. at the **Rogue River Community Center**, 132 Broadway St., Rogue River

Visitors are always welcome!

Why Join SOCA?

- Promote *esprit de corps* among Corvette enthusiasts.
- Create interest in the Corvette as a true dual-purpose sports car.
- Provide a means of technical information and service to members.
- Encourage dealer and manufacturer cooperation.
- Organize and promote events of a social nature and provide social gatherings for enthusiasts with common interest.
- Sponsor or participate in activities to benefit the community through recognized charities as selected by the members of the Association.

SOCA Logo Apparel

Competitive Athletics, 105 NE 7th St., Grants Pass
(541) 479-1001

November Birthdays		November Anniversaries
Amanda Davis	Gary Masters	Ken & Judy Axling
Kathy Dennis	Milton Reasor	Bob & Yolanda Bruton
Pat Dobson	Jim Roarty	Gary & Kellie Vancour
Shellie Farber	Larry Vance	Chris Wilson
Lucien LeBlanc		Dale & Dee Yellin





WWW.SOVETTE.COM

P.O. Box 865 • Medford, Oregon 97501
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2020 Southern Oregon Corvette Association (SOCA) Events

	Nov	Dec	2021>> Jan	Feb
Club meeting (Wed.)	4	2	>> 6	3

(Most dates, times and locations listed below are tentative after October 31. All dates are Saturdays, except as noted.)

OCTOBER

- Cruise 10 – Sea Cruise Classic Car Show, Crescent City, Oct. 9-11
<https://www.facebook.com/Seacruiseclassiccarshow/>
 Sigel Show & Shine 17 – Jim Sigel Show & Shine, Grants Pass
 SOCA Social 24 – Outback Steakhouse, 3613 Crater Lake Highway, Medford (5:00 p.m.)

NOVEMBER

- Thanksgiving 26 – Thanksgiving holiday

DECEMBER

- Parade 5 – Grants Pass Christmas Parade
 SOCA Social 19 – SOCA Christmas Party, Grants Pass Golf Club, 230 Espey Rd., Grants Pass

For additional events, information and links ... see the SOCA website "Events Page:" <https://www.sovette.com/events>



Members gather for a few minutes at a Palmerton Park, Rogue River, park bench Milton (left) and Sharon Reasor (right) recently donated to the Palmerton Park in memory of their son, Danny Reasor



Techin & Toolin



DEFYING PHYSICS

July 15, 2020

Active Suspension Prototype Corvette Donated

Defying the laws of physics – that was the promise of Active Suspension. Instead of using springs, dampers, and anti-roll bars to react to and manage a vehicle's dynamics, Active Suspension systems used sensors, computers, and high-pressure hydraulics to completely control a vehicle's behavior. An "active" automobile could lean into a curve while preventing any bumps in the road from upsetting the steering and cornering dynamics of the car.

Like many revolutions in auto racing, Team Lotus invented Active Suspension for Formula One. Development began in 1981, and by 1983 the system would see limited action with Nigel Mansell at the wheel. Around the same time, Lotus Engineering was beginning development of the engine and chassis of what would become the ZR-1 Corvette. In December 1985, Lotus was purchased by General Motors, and by 1987 GM had budgeted \$27 million to develop Active Suspension for the ZR-1.

CPC (Chevrolet-Pontiac-Canada) Engineering established a program to evaluate the technology by building a fleet of 50 Active Suspension Corvettes with the ZR-1, 32-valve engine. Initially, the project called for the Buick Touchscreen CRT system, which was developed for the 1986 Riviera and Reatta, but the engineering team preferred to have the instrumentation on their new laptops. The fleet were delivered to GM Bowling Green Assembly, complete with software operating as specified.

Meanwhile in the F1 world, Lotus never fully came to grips with the technology, yet it proved to work with lap times of nearly two seconds faster than competitors without the Active Suspension. With an unfair advantage and high costs of developing the systems, F1 banned Active Suspension for the '94 season. This, coupled with a hydraulic failure on Alex Zanardi's Lotus during the Belgian Grand Prix causing a horrific crash, caused the systems to be gone by mid-1993.

Though Active Suspension had many benefits, it never made it to the production ZR-1. At a press preview event for the 2009 ZR1, Harlan Charles, Corvette Product Marketing Manager, shared that the system could consume over 25-hp in a hard turn, though only 3-hp was needed at rest. The hydraulic fluid, circulating at 3,000 psi, required extra heat exchangers and vents for cooling (bringing durability into question), while the added components brought the total weight of the Corvette to nearly 4,000 pounds. With cutting-edge electronics, aircraft-grade pumps and actuators, the cost of Active Suspension on the ZR-1 was estimated at \$35k-\$40k – yielding what would have been the most expensive Corvette ever made. An additional issue would have been high-pressure hydraulics allowing no room for error when it came time to service the car.




Chevrolet is thought to have built 50 or more Active Suspension Corvette prototypes. Three are known to remain: EX5878, EX5881 and EX5886. This vehicle was purchased by the late Greg Mauzy and his wife Michelle of Midland, TX from the Barrett-Jackson auction in West Palm Beach in 2009. The vehicle is formerly of the General Motors Heritage Center collection, but was mandated to be liquidated (along with other prototypes and hard assets) to assist with the company’s financial recovery as part of the U.S. government bailout of GM.

Despite the shortcomings of Active Suspension, it did help pave the way to new technology in automotive design, including Active Handling in '96 and Magnetic Selective Ride Control in '03.

Thank you to the Mauzy family for their generous donation!





Disclaimer - Discretion is advised. The preceding information may not apply to specific vehicles or all circumstances. Always refer to the manufacturer’s specifications, service manuals, technical data, and product information.

“Thank you” to Florin Baldridge for providing “Techin and Toolin” articles for the SOCA newsletter each month.

Southern Oregon Corvette Association 2020 membership dues

Dual membership: \$50.00	Single membership: \$35.00	Initiation (one-time): \$15.00
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Make checks payable to “SOCA” and mail to: SOCA, 2603 Garden Meadow Dr, Grants Pass OR 97527