

The Pit Stop



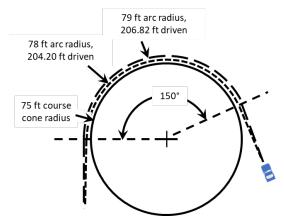
SCCA Southern Indiana Region Monthly Newsletter April 2020 Volume 67 Number 4



I hope this issue of the Pit Stop finds you and your family doing well. Obviously, our Southern Indiana Region activities have slowed dramatically due to the Corona virus. Please check our www.sirscca.org website for meeting and event updates. I'm spending more time at home and for this issue of the Pit Stop I've decided to get a little deeper into autocross strategies. Please bear with me. If you follow this advice and "do as I say, not as I do" I believe you'll find ideas for improving your autocross times

We just had a fantastic Snow Buster autocross. The attendance was great! The competition was very interesting and across the board every driver found ways to reduce their times. Afterwards, I had conversations with a new autocrosser, Carolyn Dornburg, which followed along the lines of, "if you don't hit a cone every now and then you're not trying." A few minutes later I got a smile and a nod of agreement from Paul Dornburg when I said autocross is all about putting our experience with repeated course challenges together with different distances and combinations. I believe this completely and I intend to make a case for why I believe it.

The SCCA Solo Rules book Section 2.2 includes a table of Cornering Speeds in Miles Per Hour. The rule book includes a gold mine of information and clues for improving your performance. This table gives potential speeds for different corner radii based upon a vehicle's cornering g-force capability. Regardless of your vehicle's g-force ranking on this table, I can show you how the saying, "Sometimes you've got to go slower to get faster," is true. Hold on, because things are quiet here today and I'm going to get into a little autocross math and geometry.



Mustang Magazine's pitch on the Mustang GT with (handling) performance package puts its g-force capability at about 0.96 g's. This is with stock tires on an asphalt skid pad of some unknown (to me) radius. Fast forward to wider stickier tires, our MAAC rough-aggregate concrete surface, adjustable shocks, heavier anti-roll bar, an aggressive alignment, etc. and we get a sustained 1.15 g's in a smooth constant speed turn. The Section 2.2 table shows that the 1.15 lateral g capability should allow me to maintain 35 mph in a turn with a 70 ft radius and 37 mph in an 80 ft radius. There can be other considerations for entry and exit speed transitions, but when the focus is on the turn (course challenge) the math is clear.

We frequently use a 75 ft turn in our autocross setups. With a 4 in gap between the cones and my Mustang, my line for the vehicle centerline would run a 78 ft radius. Interpreting the table for a 1.15 lateral g capability for that radius says that I could run up to 36.6 mph through the 204.20 ft

long arc. I can move outward 1 foot and run a 79 ft radius at my grip limit at a slightly faster 36.8 mph along a 206.82 ft long arc, but I would take 3.826 seconds versus 3.798 seconds or 0.028 seconds longer to do so. If you are truly driving at your vehicle's lateral grip limits the shorter course at your grip limit will give you the faster time.

Add 5 radius strategy improvements like this and you've taken 0.14 seconds off your time. Add tighter slalom routes and you'll see the same types of improvements. Driving with fewer steering inputs and smoother (not slower) braking and acceleration inputs will maximize your vehicle's grip. That grip combined with choosing the best line will minimize your time.

Speaking of grip, we're postponing our MAAC patch parties because of the COVID-19 restrictions. Our BOD meetings are held the first Wednesday of each month. Our next membership meeting will be held online on Tuesday, April 14th. Watch your email for connection information.

Dave Lehrschall Regional Executive Southern Indiana Region

2020 Board Members

2020 Board Wembers			
Regional Executive	David Lehrschall	812-549-5498	re@sirscca.org
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Advisor	Terry Davis	812-453-1376	advisor@sirscca.org
Newsletter Editor/Website	Paul Dornburg	270-314-9069	pitstop@sirscca.org

SIR Board Meeting March 3, 2020

- Call to Order Dave Lehrschall
- All Board members are in attendance, Jr. and MacKenzi via phone
 - Presentation by Track Rabbit
 - o On-line registration
 - Will not directly communicate with our Accucros system
 - 3.25% plus \$0.45 per transaction
- Officer reports
 - Treasurer, Bob Sonntag, \$8242.87 balance on hand
 - Activities Chair, Carrie Moore still needs:
 - 1 autocross chairman
 - 3 rally event chairmen
 - April and May need ASAP
- Pit Stop, Paul Dornburg, deadline for submissions is Wednesday,3/25
- · Region Exec., Dave Lehrschall, shared info from SCCA
- All others, no report

Old Business

- Paul Dornburg
 - Storage container still in the works
 - o Tech signs back of card for annual tech
 - Members could get their own cards and take to registration for annual tech
 - Lightning change to Comp Regs
 - Dave's detailed version to Policy and Procedures
 - Bob's shorter version that addresses number of runs to Comp Regs
 - Motion by Carrie to add information to corresponding documents, seconded by Barry, motion passed
 - To be presented at member meeting
- Fun Autocross Sun. 3/8 Roberts Park
 - Prelim set up Sat. 3/7 at noon
 - o Set up Sun. at 7am
 - o Tech and registration 8 to 9:30
 - Limit number to 60
- Website calendar, flyers, cards
 - ERnie reported that the cards are coming soon per Richard Grav
 - SIR-SCCA Member Meeting March 10th, 2020
- Opening, Dave Lehrschall at 7:21pm.
- Officer Reports
 - Secretary ERnie Roales, I have minutes
 - Treasurer, Bob Sonntag, \$9235.63 in account
 - Pit Stop, Paul Dornburg
 - Deadline is Wednesday March 25th
 - Snow Buster results posted
 - Assistant Activities Chair, Barry Beaman, thanked all those that helped with tech Sunday
 - o Regional Executive, Dave Lehrschall
 - Sunday went well
 - Discussion of problem of walkers
- Recent Events
 - Results of "Strive to be Average" Rally
 - "Westside Something" Rally
 - March 15th, Penny Lane Coffeehouse, 600 SE 2nd 12 noon
 - New version of Richta Competitor App 1.14C to be used
 - Snow Buster results are posted on web site and on Facebook
 - Discussed using new classes XSa, XSb and EV
- Lightning Policy and Comp. Reg.
 - New Policy and Comp Reg discussion
 - My Lightning Tracker app to be used by SSS

- On-line event registration—tabled
- Trailer work (THANKS DAVE)
 - Finished, Lights work
 - Door reinforced
 - Some work on 2 smaller doors
 - Still need change oil in small engines (Yancy)
 - Need new tires on trailer (cracks/dry rot)
 - o Floor needs to be painted
 - Perhaps replace back door with 2 smaller doors in the future

New Business

- Patch Parties
 - o 34 cut/dig/fill and 145 quick patch areas
 - Need more workers on cut day to start quick patch
 - No change in Berry points or Bonus Program
- Rally Weekend Members
 - Guest entries: the driver has to have a Weekend Membership, Navigator has to have a Trial Membership
 - Motion by Carrie, seconded by Bob to charge at cost for Weekend membership with no charge for Trial membership, Passed.

Upcoming Events

- Need May rally chair
- · Need July autocross chair
- · Central Division meeting ignored
- Weekend / Trial Memberships—See above
- Midwest MuscleCar Challenge, we are doing the timing and scoring
 - To be held on May 15th & 16th at the Terre Haute airport
 - We need 10 + workers
 - Set up is Friday the 15th at 2 pm eastern time
 - Subsidies hotel costs? Check on hotels
- A suggestion was made to award a jacket to each champion at the awards banquet. Cost is approximately \$70 including embroidery.
- Terry will be taking orders for SIR shirts at membership meeting
- Dave showed "My Lightning" Tracker App
- Adjourned 8:35 pm
- Upcoming Events
 - Patch Parties
 - 3/21 Cut Day need 10-12 workers
 - 3/28 Dig Day need 15-20 workers
 - Areas marked, 34 cut/fill and 145 quick patch areas
 - 4/4 Fill Day need 15-20 workers
 - Get up to 2 extra runs and a paid entry
 - Contact RE Dave Lehrschall at re@sirscca.org if you can help
 - Midwest MuscleCar Challenge
 - Being held at the Terre Haute Airport
 - Set up is Friday, 5/15 at 2 pm Eastern time
 - Event start is Saturday, 5/16 at 8 am Eastern time, be there earlier
 - Possible help with hotel rooms
 - Need about 15 workers, let Paul Dornburg knowpitstop@sirscca.org
 - Motion was made by Dave Lehrschall and seconded by Terry Davis to allow free entry for Cut Day workers, motion was passed.
- Door Prize winner, Bob Sonntag. (With protests!)
- Motion by Jeff Jackson to adjourn, seconded by all, then passed
- Adjournment
- Next meeting 4/14 at Smitty's

This schedule is very tentative. We will be following government directives and will alter the schedule as necessary.

			SIR/SCCA 2020 Calend	dar
			April	
4.01	Wed	6:00 PM	Board Meeting (guests welcome)	Online
4.05	Sun		Palm Sunday	
4.10	Fri		Good Friday	
4.12	Sun		Easter Sunday	
4.14	Tue	6:30 PM	Membership Meeting online with Zoom	Online
			May	
5.02	Sat	9:00 AM	Test and Tune Autocross - Dave Lehrschall	Mid-American Air Center, Lawrenceville
5.03	Sun	9:00 AM	Pt Autocross #1 - Dave Lehrschall	Mid-American Air Center, Lawrenceville
5.06	Wed	6:00 PM	Board Meeting (guests welcome)	Aldersgate UMC, southwest door, room 102
5.10	Sun		Mother's Day	
5.12	Tue	6:30 PM	Membership Meeting (dinner at 6:30, meeting at 7:30)	Smitty's Italian Steakhouse
5.15	Fri	2:00 PM*	Midwest Musclecar Challenge (NOTE: 2:00 Eastern Time)	Terre Haute International Airport
5.16	Sat	8:00 AM*	Midwest Musclecar Challenge (NOTE: 8:00 Eastern Time)	Terre Haute International Airport
5.25	Mon		Memorial Day Weekend	
5.31	Sun	12:30 PM	Pt Rally #2	TBD
		*	June	
6.03	Wed	6:00 PM	Board Meeting (guests welcome)	Aldersgate UMC, southwest door, room 102
6.09	Tue	6:30 PM	Membership Meeting (dinner at 6:30, meeting at 7:30)	Smitty's Italian Steakhouse
6.13	Sat	9:00 AM	Ladies Autocross - MacKenzi Crowe	Mid-American Air Center, Lawrenceville
6.14	Sun	9:00 AM	Pt Autocross #2 - MacKenzi Crowe	Mid-American Air Center, Lawrenceville
6.21	Sun		Father's Day	, , , , , , , , , , , , , , , , , , , ,
6.28	Sun	9:30 AM	Pt Autocross #3	Mid-American Air Center, Lawrenceville
0.20		0.007	July	
7.04	Sat		Independence Day	
7.08		6:00 PM	Board Meeting (guests welcome)	Aldersgate UMC, southwest door, room 102
7.12	Sun		Pt Autocross #4	Mid-American Air Center, Lawrenceville
7.14	Tue	6:30 PM	Membership Meeting (dinner at 6:30, meeting at 7:30)	Smitty's Italian Steakhouse
7.26	Sun	12:30 PM	Pt Rally #3 "Ice Cream Rally" - Paul Dornburg	Dairy Queen, 3022 E 4th St, Owensboro, KY 42303
1.20	Journ	12.00 1 111	August	Dully Queen, 6022 2 4th et, 6 honobore, 1th 42000
8.05	Wed	6:00 PM	Board Meeting (guests welcome)	Aldersgate UMC, southwest door, room 102
8.09		12:30 PM	Pt Rally #4 "Tour de Crawford County" Ernie Roales	Hardees, 502 E Main St., Robinson, IL
8.11	Tue	6:30 PM	Membership Meeting (dinner at 6:30, meeting at 7:30)	Log Inn, 12491 County Rd 200 E, Haubstadt, IN 47639
8.23	Sun	9:30 AM	Pt Autocross #5 - Tri-Something - Paul Dornburg	Mid-American Air Center, Lawrenceville
8.30	Sun	12:30 PM	Pt Rally #5	TBD
0.30	Journ	12.00 1 111	September	100
9.02	Wed	6:00 PM	September Board Meeting (guests welcome)	Aldersgate UMC, southwest door, room 102
9.02	Mon	0.00 F W	Labor Day	Aldersgate OMO, Southwest door, footh 102
9.07	Tue	6:30 PM	Membership Meeting (dinner at 6:30, meeting at 7:30)	Smitty's Italian Steakhouse
9.10	Sun	9:30 AM	Pt Autocross #6	Mid-American Air Center, Lawrenceville
5.20	Juil	J.00 AIN	October	inia / antitiouri /air ottitor, Euriteritoriiie
10.04	Sun	9:30 AM	Pt Autocross #7	Mid-American Air Center, Lawrenceville
10.04	Wed		Board Meeting (guests welcome)	Aldersgate UMC, southwest door, room 102
10.07		6:30 PM	Membership Meeting (dinner at 6:30, meeting at 7:30)	Smitty's Italian Steakhouse
10.13		12:30 PM	Pt Rally #6	TBD
10.20	Jun	.2.001111	November	
11.04	Wed	6:00 PM	Board Meeting (guests welcome)	Aldersgate UMC, southwest door, room 102
11.04		12:30 PM	Pt Rally #7	TBD
11.10	Tue	6:30 PM	Membership Meeting (dinner at 6:30, meeting at 7:30)	Smittv's Italian Steakhouse
11.10	Thu	U.JU FIVI	Thanksgiving	Office & Italian Oteanhouse
11.28		End of Day	Awards Banquet Reservations Are Due!	Respond to treasurer@sirscca.org
		7:00 AM		Respond to treasurer@sirscca.org Roberts Park location, EVV
11.29	Sun	7.00 AIVI	Fun Autocross - Dornburg/Davis	NODELIS PAIK IOCALIOII, EVV
40.04	F	C-20 DM	December	Delling Lille County Club Newborn to IN
12.04	Fri	6:30 PM	Awards Banquet & Holiday Party	Rolling Hills County Club, Newburgh, IN
12.08	Tue	TBD	Christmas Board Meeting (guests welcome)	TBD
12.25	Fri		Christmas	
12.31	Thu	j	New Year's Eve	

April SCCA Anniversaries

Darlene Cannon 04/20/1995 Carolyn Dornburg 04/09/1996 Paul Dornburg 04/09/1996 Alice Goebel 04/12/2004 Julia Young 04/10/2006 Michael Buente 04/22/2008 James Nichols 04/25/2010 Dave Hostetter 04/07/2016 Dave Hostetter 04/07/2016 Carrie Moore 04/09/2018 Lee Lingo 04/24/2019



April Birthdays Jacob Campbell 4/4 Larry Pearsall 4/6 Richard Grav 4/18 Jason Meyer 4/20 Gabriel Fehribach 4/21 Bob Sonntag 4/22 Peter Lodico 4/26 Carrie Moore 4/28 Tim Green 4/30

Fehribach Racing

Gabe Fehribach kicked off his 2020 club racing the weekend of March 13-15 at the 3.27 mile, 17 turn VIRginia International Raceway with the "March Into Spring" divisional event.

The Friday test day was spent in four separate free practice (FP) sessions to test and shakedown the upgraded car. The weather did not cooperate much for FP1 and FP2 as rain and drizzle dominated both of those morning sessions. Near the end of FP2, however, a drying track presented him with the opportunity to pit for slicks, but black flag was shown for a car off course. He would end FP2 in the pits waiting for the green that never came.

After lunch, a dry track was present for FP3 and off he went but gremlins soon appeared. The two biggies were the car would refuse to downshift and a high engine rev would persist when he lifted; both of these made fast entry into slow corners like the Turn 1 "Horse Shoe", the famed Oak Tree corner, and the Roller Coaster a bit of a challenge. After some shift cable adjustments and a replacement throttle body (to rule out that component) during the next break, he was sent out for FP4 for a go at getting some more seat time and speed. At the end of the day, the team made further adjustments to the shift cable but were still baffled by the high revs when lifting.

Qualifying came during a beautiful, partly sunny Saturday morning and the transaxle was operating perfectly. High revs at lift still persisted, making shifting in a sequential, non-synchronized transaxle a little less than stellar. Other folks out on track made so many errors bringing out local yellows that he never really got in a good flying lap. His last lap was clear but near the end of it the black flag was shown for an off by a fellow competitor. So, without a good flyer, he qualified 10th overall of 12 cars. Without the black flag, however, his onboard computer showed he might have qualified 7th or 8th with his last lap, but that's racin'. Upon return to the pits, the team found that his radiator cap had failed, shooting coolant into the engine bay during the session.

By the time Race 1 rolled around Saturday afternoon, the team had made more improvements and provided Gabe with a solid race car. During the race Gabe went out and earned the hard charger designation, moving up five places in the race to finish 5th overall and earning a podium in his FE2 class. The class winner was so happy for Gabe that he wanted to share a photo op with Gabe standing on the same podium step together. (SCCA folks are the best, aren't they?) Race 2 on Sunday saw the grid lineup based on Race 1 finishing position. Starting fifth, the 9-car showed she was ready and raring to go. With a 20-degree cooler day on hand, he would set his personal best lap of the weekend and would finish even better with a 2nd in class and 3rd overall--a double podium for a 20-yr-old kid who'd never raced there before that weekend.

The engine rev problem was never solved. In the FE2 class (just like the Spec Racer Ford class) the ECU program and engine mapping are sealed by SCCA Enterprises. As we found out later Sunday, another competitor who also had upgraded his engine was having the exact same problem and had also changed out the throttle body without resolution. The team will report the issue to the SCCA and hope for a resolution before his next race at the SCCA MAJORS event in Pittsburgh.





"Westside Something" Rally Rallymaster: Carrie Moore

3/15/2020

	Driver / Navigator	Class	Total	
1	Terry Davis / Bob Sonntag	Α	2691	Т
		•	•	-
1	Ernie Roales / Sue Roales	В	4021	Т
2	Jim Cannon / Larry Pearsall	В	4668	
3	David Link / Nicole Buttrum	В	6241	

2020 Points	Berry	Meeting	Work/Fun	Rally
Bob Sonntag	15	3	7	5
Terry Davis	13	1	7	5
ERnie Roales	12	3	4	5
Carrie Moore	9	2	2	5
Paul Dornburg	7	2	5	0
Susan Roales	7	0	2	5
Barry Beaman	5	3	2	0
Jr. Crowe	5	3	2	0
Jeff Jackson	5	3	2	0
Nicole Buttrum	4	0	2	2
Carolyn Dornburg	4	2	2	0
Don Kelley	4	2	2	0
David Link	4	0	2	2
Steven Backer	3	1	2	0
Don Beaman	3	1	2	0
Dave Lehrschall	3	1	2	0
Larry Pearsall	3	1	0	2
Bob Rothermel II	3	3	0	0
James Shade	3	1	2	0
Jacob Campbell	2	0	2	0
Scott Campbell	2	0	2	0
Jim Cannon	2	0	0	2
	2	0	2	0
Kenneth Dilger	2	2	0	
Courtney Fehribach		1		0
Dean Fehribach	2	2	0 2	0
Drew Gerth		0		0
Darwin Graham	2	0	2	0
Richard Grav	2	0	2	0
Shawn Lansdale		0	2	0
Peter Lodico	2	0	2	0
Russell Luckett	2	0	2	0
Mike Mounlio	2	0	2	0
Stuart Nathan	2	0	2	0
Kristin Parker	2	0	2	0
Chase Reising	2	0	2	0
Jeff Reising	2	0	2	0
Jamsheed Reshad	2	0	2	0
Alekza Roth	2	0	2	0
Jon Schwartze	2	0	2	0
Dawn Sturgeon	2	0	2	0
John Whitaker	2	0	2	0
Derek Wissel	2	0	2	0
Danny Woodard	2	0	2	0
April Arnold	1	1	0	0
Dawn Boerner	1	1	0	0
Marc Boerner	1	1	0	0
Mike Buente	1	1	0	0
MacKenzi Crowe	1	1	0	0
Gabe Fehribach	1	1	0	0
John McCarthy	1	1	0	0

Snow Buster Autocross Report

Let me preface this report by saying Carolyn and I have been SCCA members for 24 years and I have been autocrossing for most of those. Carolyn has been an interested observer for all those years most likely because the Porsche I had was a handful to drive and she had zero experience with a stick shift car. After buying a new Porsche with an automatic she told me that perhaps one day she'd give it a try at an autocross. Now the story.

Paul said, "Do you want to be my tire warmer on Sunday?"

I said, "Sure."

It wasn't until Sunday morning, in the trailer, while registration was going on, that I asked Paul, "Were you serious about me being your tire warmer?" He said, "Yeah, I was serious!"

Now keep in mind, I'd never run an autocross. I'd never driven Grace. And I can get lost in an elevator! I didn't know a person's heart rate could go up that quickly.

I saw Bob getting ready to take a group of guests out to walk the course, so I said "Carolyn, get your head straight and get out there and do this! You can do this!"

My biggest fear was, please Dear God don't let me hit anyone! My second biggest fear was don't embarrass Paul. The goal I set for myself was just go around the course. Don't worry about speed. Just get around the course without getting lost and without hitting a cone.

My first run was surreal. It was an out of body experience. "You're doing this Carolyn! You're actually doing this!" I made my first run at a of 50.5. I think I could see one of the corner workers out of the corner of my eye taking a nap as I passed by, but hey, I didn't get lost and I didn't hit a cone! Goal accomplished.

Several people came up to the car and offered to ride with me. I thought that was pretty brave of them! Others offered advice and encouragement which helped bring my heart rate closer to normal. I know some of the elevated heart rate was due to fear, but I must admit a lot of it was due to the sheer excitement!

By the time I made my last run I was like, "Holy Crap! I think I might like this!" My times improved every run. My first run was 50.5 and my last run was 37.8. Woo Hoo!!! Okay, okay so I hit two cones on my last run, but by that time I just wanted to see what I could do and what Grace could do for me! She Was AMAZING!

I don't know if I'll ever run another autocross or if that was my one and only. Either way, what a great experience. I was able to let go of two fears. I didn't hit anyone, and I didn't embarrass Paul. At least he said I didn't. Everything else about the day was icing on the cake!

SPORTS CAR CLUB OF AMERICA

SCCA: A club with many interests

Many faceted in its endeavors, the Sports Car Club of America (SCCA) might best be described as a service organization. It serves over 50,000 members throughout the United States by sanctioning and administering a variety of automotive related activities through more than 115 independently chartered regions. No other single motor sports organization in the world conducts more events than the SCCA. These events range from amateur and professional road racing to road rallies, autocrosses, rally crosses, hill climbs and auto shows. The SCCA is an ever-growing organization for the automotive enthusiast. Because the SCCA is member oriented, the club stresses participation on a broad basis. Regardless of your experience or background, if you are an automotive enthusiast there is a place for you in the SCCA. The avenues available range from amateur or professional road race driver to weekend rally or autocross driver to race worker or official. In order to successfully sanction and conduct a comprehensive autocross/rally/road racing program many experts in timing and scoring, communications, safety inspection, medical, flagging, course/race control and other skills are needed. Schools are held to train the drivers and workers and various degrees of licenses are awarded based on knowledge, ability and experience.

Pit Stop is the official publication of the Southern Indiana Region of the Sports Car Club of America, Inc. and is published monthly at PO Box 1112, Evansville, IN 47706. Opinions expressed herein are those of the authors or editor and are not necessarily those of the Southern Indiana Region, its officials, members or advertisers. Permission to reprint material from *Pit Stop* is granted to all SCCA regional publications and its national publication, *Sports Car*, with regards for full credit to the author and *Pit Stop*.

Two final things.

- 1. If you want to stop getting this newsletter by snail mail, please tell me and I'll make sure you get it by email, or you can download off the sirscca.org website.
- 2. If you want to get something in this newsletter you must tell me, pointedly, like, "I'd like you to put this in the newsletter." Or "I have something of interest for the newsletter." I'm all ears.

Upcoming Events – All Times Central

Tuesday, April 7th, Club Membership Meeting online, 6:30pm Wednesday, May 6th, Board meeting