Performance *Corvair* Group Newsletter

Fourth Quarter 2008 Volume 2 Issue 4

2009 Performance Workshop

It's almost time for the sixth annual Corvair Performance Workshop. There are some significant changes for the Workshop this year. The biggest one is location. After hosting the first 5 Workshop, Gary Funkhouser sold his shop. (Thanks a million for your hospitality, Funky!) Circle City Corvairs of Indianapolis has stepped up to make arrangements. Tom Miller and Andy Sego are leading the planning efforts in Indy. Ned Madsen is helping with the agenda. The date has moved back a little too, hopefully for better weather, March 6th and 7th.

We are defiantly taking advantage of the auto racing heritage of Indianapolis, starting with the hotel. The host hotel is The Sleep Inn Airport West. The event room rate is $75 per night, single or double. You'll need to call the hotel directly to get that rate, tell them you're with the Performance Corvair Group. The hotel has limo service to the airport.

Sleep Inn Airport West
5845 Rockville Rd , Indianapolis, IN, US, 46224 Phone: (317) 247-4100

NECC Summit Point Time Trial

Rick Norris

We, meaning my wife Janet and I arrived at the host hotel a little after noon on Sunday, the day before the last NECC track event for this year. It was a great day for a drive through the mountains and the Big Horn Hemi truck rumbled happily along. It's so nice to have a reliable tow vehicle!

PCG Patch – The latest in stylist Corvair apparel is here!!! Kevin Clark has designed a special patch for the PCG. You can contact Kevin at: kevin@kcvairbrush.com

Performance Workshop (con't)

Early arrivers will have the opportunity to eat at a racing themed restraint, Union Jacks Pub (http://unionjackspeedway.com/). They feature over 60 Beers and Lagers, a full menu and our signature Chicago Style Pizza's, flat screen TVs, Ron Burtons art gallery, and an extensive display of Race Memorabilia.

Our meeting will take place in at the Freelance Lettering shop. It is very large and can accommodate more than one car inside. The address is 4A Gasoline Alley, Indianapolis, Indiana, so you know it's a great location.

The agenda is still coming together; we're still looking for speakers. We're also looking for the featured Corvair. Your car will be on the t-shirt and you'll get to show it off to all the attendees. Plus you get to park it inside the meeting location. Please contact Tom, Andy or Ned if you can help. We will be going on a 'field trip' across the street to a chassis dyno shop. We may even get a pull or two with Corvairs.

Of course there will be tours that are auto racing related. We're working on the details, but one of the most interesting could be a behind the scenes tour of the Speedway Museum. Some other museums include The Stutz Museum, and Ray Skillman's Muscle Car Museum.

Some other things to see are Automotive Hammer Art and VanCraft on Gasoline Alley. Automotive Hammer Art builds hot rods as well as restores high end cars and vintage race cars. You can see some of their work here http://autohammerart.com/id3.html.

VanCraft holds the original blueprints and rights to building and restoring old Kurtis-Kraft midgets. The owner is one of the guys that built the original GT40s. He's an "old school" guy for sure, so no website, but you can see some of his work and shop here http://www.midgetmadness.com/forums/index.php?showtopic=16391. Both of these shops will be available for informal tours Friday and Saturday.

All of this fun will cost the same as last year, $25 pre-registration, $30 at the door ($10 for kids 10 and under). You can pre-register anytime though Ned's PayPal (aeroned@aol.com). You get a continental breakfast and catered lunch with registration. The official PCG annual meeting will also take place. We will discuss upcoming events in 2009 and the all important officer elections. If you're interested in running for one of the very powerful positions in the PCG, please contact a current officer.

NECC Summit Point Time Trial (con't)

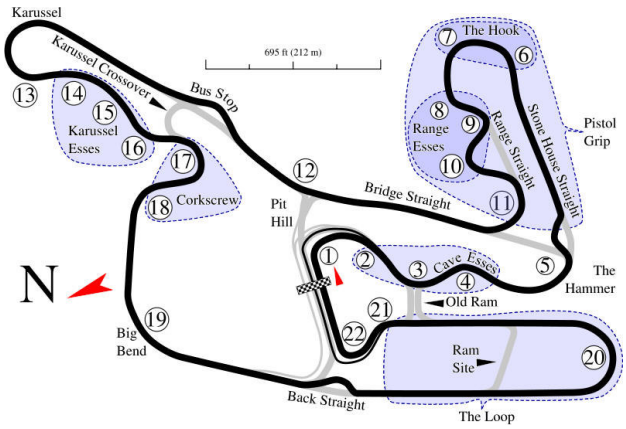
As we turned in to into the Holiday Inn parking lot I began looking for signs of other Corvair people. The first thing I saw in the back of the lot was the BBRT or Bohunk Brothers Racing Team HQ trailer set up with the HMFIC head Bohunk Col. Chuck Hisself holding court along with his trusty second in command the HCIC or head curmudgeon in charge Smitty Smith. I announced my arrival with a blast from the Hammer 3 train horns on my truck. After parking I dragged out the lawn chairs and took my place under the awning loyal card carrying paid up member of the BBRT. We had a great time sitting around the asphalt and watching the other folks arrive. I did my best as the TLH in not letting any straight line go untouched!

NECC Summit Point Time Trial (con't)

Monday morning after an ill fated attempt to get breakfast in the new and unprepared hotel we mounted up and headed out to the track. As has been stated before, there is no one way to get to the Summit Point track. The Shenandoah circuit is the newest of the three circuits and kind of on the back side of the track proper so it has its own entrance. Momma programmed the TomTom and we went chugging along wagon train style through the back country of Wild Wonderful West "By Gawd" Virginia. Just when it seemed we were hopelessly lost the track entrance appeared. We picked a spot in the paddock and unloaded the car. After the obligatory drivers meeting the various groups lined up for several yellow flag laps to "learn" the course. Yeah, right! Finally it was time to let the horses out and stomp the loud pedal. Did I say learn the track? I am not a fast study. Heck, I was 28 before I could tie my own shoes!

I don't know how many laps I ran around that 2.2 mile twisty, tricky, treacherous track more suited to bikes, go carts and mountain goats but, I was beat! It is a very physical track!

Someone described it as being a "technical" course. Damned if it ain't! It demanded respect and bit those who stepped over the line...or got off line as it were!



NECC Summit Point Time Trial (con't)

However, that didn't stop us wannabe Corvair race car drivers! It was a physical workout. My shoulders are sore from sawing on the wheel!

I only had two really anxious moments. One was at turn 2 or the Hammer as it's called. I was working on doing the Cave Esses leading up to it and was carrying too much speed, braked late and turned in early. The corner drops off a crown and negative camber. I did not go off the pavement but, I certainly used the entire road available to keep from it and ended up pointed in the right direction with no flags. The second anxious moment was at the down hill S leading on to pit road and a large concrete wall. It seems from all the comments I got that everyone was standing right there watching me about to mess up! I really thought I was going to bunt the barrier. Somebody remarked later, your eyes were this big! Huh, you should have been in my seat! I did manage to miss the wall and continue on but, I changed my approach to that turn! Later on someone complimented me on my car control...that was pure outhouse luck! I am of Irish extraction ya know.

When it was time for the clocked runs I did my best to just get a clean run. I felt it was okay. As is my habit I do not look at lap times during the event. I only did one timed lap as I felt it would be my best. Looking at the results on the NECC site I didn't do too badly with an 8th over all. I'm happy

with that but, I asked David Clemens to take some evaluation laps in my car and he showed me it is faster than I am. That's good in my case.

At the end of the day I was relieved and felt a sense of accomplishment that I survived with car and ego intact. Although not an easy track I think in hindsight I would definitely run this track again. There are several other organizations like Track Daze that run events here.

After returning to the hotel and getting some grub in me I hit the sack and slept very well. Aleve is a wonder drug for us severely experienced individuals!

We hit the road for home early the next morning. We arrived home a little after noon on Tuesday and it was another beautiful sunny fall day to travel through the mountains. We took the Southern route down I-81 to I-64 West across the hills of Virginia/West Virginia. I chose this route because it would provide an opportunity to see how well the new Big Red Dodge would pull a hill known as Sandstone Mountain which is a long steep grade near Hinton WV.

NECC Summit Point Time Trial (con't)

The new Hemi bellowed out its 4500 RPM song in low gear all the way up with nary a hitch. The temp gauge never even moved off normal! I love my truck!

The NECC deserves a big thank you for another good event that almost didn't happen. Let's hear it for next year's opener at Beaverun!

The Rookie at Summit Point

Tom Hughes

For years I've been reading about the fun our Corvair racers have been having at North East Corvair Council (NECC) events. Thanks to my wife's generous anniversary present to me, I was finally able to experience that fun myself. She paid my entry fee to NECC's Fall 2008 event.

Kudos to the NECC folks for putting on a wonderful track day at Summit Point Raceway's Shenandoah Circuit. I'm very thankful for the words of wisdom I received from all those I talked with. John Egerton, Terry Stafford, Bob Marley, Brian O'Neill, and Jonathan Kendig were especially helpful. Since this was my first time on a race-track and I was the only stock Corvair, I appreciated everyone's patience when they got stuck behind me. There was only one passing zone, so some hot drivers had to cool down through quite a few turns.

Before I get to the story of my day at the track, I'll briefly relate how I got to this point. Since 1985, when we bought a '62 Model 700 two-door, there's pretty much been at least one Corvair in our fleet. Currently, we have four: my eldest daughter's '64 Monza convertible which we restored together; daughter number two's `61 Monza two-door which she and I put on the road three years ago; my '63 Monza two-door which was made road-ready by Jeff and the guys at the Corvair Ranch two years ago; and the newest addition, a '66 Model 500 two-door.

I've wanted to go road racing for as long as I can remember, but I never considered driving any of my Corvairs until I finally got one with a manual transmission (the '63). Then, a little over a year ago, for our 25th wedding anniversary, my wife gave me a coupon for a weekend of racing with Car Guys and the purchase of a helmet. I downloaded their inspection list, and quickly

The Rookie at Summit Point (con't)

discovered that a stock 1963 Corvair would not suffice. As a minimum to get on the track, I needed front seats with headrests and five-point harnesses installed for both driver and passenger. I would also need a higher-priced helmet than the one I'd been planning to buy.

The Summer 2008 Car Guys event at Summit Point was my goal. I started collecting parts, but with two kids in college and two in private Christian school, my car budget is almost non-existent. All parts have to be obtained as frugally as possible. I bought two used harnesses off Ebay. A donated, rusty '64 4-door provided finned rear brake drums and the improved front and

rear suspensions, before I hauled the carcass up to the Corvair Ranch. For Christmas, my wife gave me four 14" inch wheels that I pulled from a '83 280ZX at the local pick-a-part. Clark's gift certificates from my parents and in-laws provided the gas-adjust shocks for the front (the shocks on the rear appeared to be fairly new).

Other projects, both car and home, kept me from spending much time on my '63, so all of a sudden it was the middle of the summer and none of my parts had been installed and I still didn't have the seats. Now I was shooting for the Car Guys event in the Fall. After some helpful correspondence with Andy Kinzelmen (another stock EM racer), I installed the harnesses. I disassembled the replacement suspension and sandblasted, primed, and painted the parts. Yeah, progress, but I still had a ways to go. Then, at a CORSA of Baltimore meeting, Jonathan mentioned the Summit Point NECC event. He told me I wouldn't find a more affordable track opportunity, and then he offered me the use of his spare helmet. I went home that night and downloaded the NECC's inspection list. In addition to saving on the purchase of a new helmet, I didn't need to get new seats. Another plus was I'd be able to spend the day with a bunch of Corvair racers I felt I already knew through their postings on Fastvair. I now had a new goal October 13.

The Rookie at Summit Point (con't)

I was all ready to install the '64 suspension, when it occurred to me the alignment required after the suspension swap was going to be pretty expensive. So that swap was shelved for the time being since it wasn't necessary. I did, however, install my version of camber-limiting by running cables between new holes in the shock towers and the existing holes the trailing arms. This, I felt, would prevent excessive wheel-drop under hard turning. The 102 HP engine ran well during my daily commutes, so I decided to leave it alone. Three of the 195/70-14 tires that came with the 280ZX wheels still had tread, so they were kept. The fourth wheel was shod with a good, used tire, and now I was ready to go.

I was the second person to arrive at the paddock after passing through the front gate at 7 AM sharp (think I was excited?). I parked near Dave Potter and his VERY fast Subaru. We chatted for a while as the rest of the crowd trickled in. When he heard it was going to be my first time on a track, his response was, "You picked a heck of a track to start on." The first hurdle of the day was passing tech inspection. Before that commenced, I had to empty the car of all loose articles. Then, after really cranking down on the wing-nuts of the battery hold-down and removing my homemade camera mount, I got my sticker.

Next I attended my first driver's meeting. We all signed in, found out which group we'd been assigned to, and paid our entry fee.

The Rookie at Summit Point (con't)

Then Ray Zabinski, the NECC's Director of Track Operations, showed us, using a map of the course, the track layout for the day and pointed out the one passing zone and the pit entry and exit. Ray shared the day's agenda and described the conditions under which a driver would be black-flagged. Finally, he explained how they would run that afternoon's time trials.

Then it was time get ready to go on the track. The driving portion of the day started with group A running the track for 20 minutes to get a feel for the layout. Groups B then C each got their 20 minutes on the track before the first open track session when all the cars could go out as they pleased. A thirty minute lunch break started around noon, and then there was more open track time until 1:30. Next, two cars at a time (matched by speed) ran a warm-up lap and two timed hot laps. When that finished it was open track again until 4:30. Parade laps came at the end of the day during which anyone could drive around and take passengers.

How did I do? I had spent time during the previous week memorizing the course using in-car videos from YouTube.com and turn instructions from Trackpedia.com. That was a huge help. I thought I would be real nervous, but already knowing the each turn's optimum turn-in and apex allowed me to focus on braking and accelerating. I didn't have the luxury of towing my car home, so the second, yet most-important, hurdle I passed was my staying on-track the entire day. Maybe I wasn't driving hard enough, but I did have a few "puckering" moments where I had to do some extra steering. At least two times I used the entire track at the end of the main straightaway (suffice it to say I missed my turn-in point). I did drive hard enough to uncover a lot of new rubber on my old tires and in the early afternoon, after a fairly long stint on the track, I measured 40 psi air pressure in my rear tires (an increase of 8 psi from my starting point).

For my timed laps I got fast time of the day for my class. It helped that I was the only car in Street Stock-1. At the end of the day Brian O'Neill (a NECC member) came up to me jokingly demanding more money. He said I got more track time than anyone else. I went through at least 10 gallons of gas (more than 50 laps).

The Rookie at Summit Point (con't)

How did my car run? Out of the nineteen turns per lap, three were hairpins. After each hairpin the car had a fuel starvation issue I'd floor it and she'd bog down for a moment before coming up to full strength. That was annoying. By the afternoon (right before the timed laps), there were more issues that also felt like fuel starvation she was now bogging down on the two longer straightaways. I know my two timed laps suffered because of that, but I'm taking pride in the fact that there was only a half-second difference between the two times. I went back out on the track during the last open session and the "miss" was a little worse. Since I still had an hour-and-a-half drive home, I decided (very sadly) to call it a day.

That brings me to my last hurdle of the day - making it home. After helping Jonathan load his car on the trailer, I hit the road. I did make it back to Baltimore without incident, but it wasn't pleasant having to floor it at every hill to keep up to speed. Since I have my daughter's Monza available for daily driving, I haven't taken the time to investigate the fuel problem, but the signs are pointing to a clogged carburetor passage. It appears that grime from the gas tank got sloshed around and ended up creating a clog somewhere.

All that turning did have a positive effect. It shook loose a couple of items I'd been missing. Early in the afternoon, I heard the sound of sliding metal-on-metal coming from the backseat area. I came into the pits and a quick search of the package tray area uncovered a 9/16 combination wrench I'd been missing since installing the harness mounts. Then, at the end of the day while putting stuff back in the car, I discovered a camera memory card that had also gone missing.

During my day at the track I learned a lot more than just what improvements I need to make to my car. Memorizing the track beforehand is priceless, as is meeting as many of the Corvair racers as possible. They are such an open and helpful group of guys. Bring gas to the track (the track charged $5.25/gallon). The price of one new five gallon gas can will be paid for after a couple of track days. Wearing a hat with a full brim while spectating is essential since a baseball cap didn't keep the sun off my ears and neck. Keeping a record of tire pressures, gas burned, and laps run for each event is an excellent habit to get into. Finally, investing in a neck brace will prevent a sore neck the next week.

Racing Report - 2008

Marty Scarr

I have been autocrossing my Corvairs in club events in Oregon in the last 9 years, and have had a lot of fun and done pretty well in the classes that I have participated. When I first started racing I was in H Stock class, running my white 1965 Monza coupe that has a 110 and 4 speed. I have owned this car since 1976, when I purchase it for $200 from an acquaintance. It is truly a stock Corvair, with a non-stock exhaust as it's only modification. The first year I competed, I finished 2nd in class, and the next year I finished 1st in class. In 2002 I prepared another car, a 1967 500 coupe to compete in E Street Prepared class, which allows quite a bit more modification.

Racing Report - 2008 (con't)

Street Prepared allows modifications to suspension, different sized tires and wheels, headers and carb mods, but no internal engine mods. My car is built to Stage III Yenko Stinger specs, and has quick steering, poly bushings, cut HD springs, headers and fat sticky tires.

I have continued to improve my car over the years, along with my driving abilities. The car is pretty well sorted out now, and only needs to have the carb turn cutout cured, which will come next year with the addition of fuel injection.

This year started with a weekend event on Saturday, April 19th in Eugene, and the course was favorable to Corvairs. On Saturday I beat my competition, a '95 GT Mustang by 1.5 seconds. Sunday's course favored the V8 cars, and the Mustang beat me by 1.2 seconds.

I had been planning on adding a larger tire to the rear of the car, so I ordered new 10 inch wide by 15 inch diameter wheels and 275/35-15 Hoosier A6 tires for the next event. To compensate for the larger diameter tire, I built and installed a 3.89 differential in the car. Time being in short supply, I didn't get the diff swap done until the Friday before the next event. When I got in the car to take it for a test drive I could not disengage the clutch. So I missed the 3rd event on Saturday, and pulled the engine and installed the *correct* throw out bearing for the clutch/flywheel combo I was using. I did make it to the Sunday event on June 1, and beat a turbo Eclipse (and Mr. Mustang) but only by .229 on a fast course.

Next event was a shakedown run at the State Fairgrounds on June 15th, for a final sorting out of the car before the Time Trials at Willow Springs and the CORSA Convention in Ventura. Had some good runs, would have been fastest in the run group except for a pesky cone that got in my way. Overall a good day, I'm ready for the trip South.

No problems towing the car to Southern California, but it's hot there. It's June 22nd, Willow Springs is out in the desert, there is no shade anywhere and it is 109 degrees. It's a thrill for me to be at an event with Corvair legends such as Warren LeVeque, Seth Emerson and Mark Wright. The heat is wearing me out fast, but I manage to finish 2nd in class to Mark, and 4th overall (second fastest street Corvair), just barely finishing ahead of Mark Aksamit in his well prepared LM coupe. The heat is oppressive though, and for the first time I'm glad an event is over. Change tires, pack up and down to the coast to cool off.

Ventura is a lovely coastal town, and the host hotel is very nice. Joyce and I enjoyed a relaxing time, ate good food and saw some sights. Friday was the autocross, and the course was good for Corvairs: Lots of curves and short straights. Again I finish 4th fastest overall, and again I have the 2nd fastest street Corvair. Mark Wright and co-driver Jeff Ballard are ahead of me in class, and Warren LeVeque also is quicker in his E/Modified roadster. It was great to compete against these folks and I was very pleased with my results. Mark's car is very well built, very fast, and it even looks good! After the competition, the course is opened to fun runs. I give rides to Natalie and Suzanne Johnson , which they seemed to enjoy. That's me in action at the top of page 24 of the July Communique.

Racing Report - 2008 (con't)

Back to Oregon, and up to Willamette Pass for events 5 & 6 on August 9 & 10. I am always down on power at the high 5000 foot elevation, and Saturday's course is for V8 cars. I finish second almost 3 seconds (yikes!) behind Mr Mustang, but I manage to finish in front of the turbo Eclipse and a TransAm. Sunday's course is more to my liking, and I take first by over 2 seconds, beating 2 Mustangs and the TransAm.

I head for McKay High School in Salem for an event on August 24th. The parking lot at the high school is small but pretty good for Corvairs. I have fun and meet up with Jim Johnson (Rex's nephew) and give him a ride; he was impressed with the way the car handles. I take first in class over a local Mustang by almost 3 seconds.

Last local event is September 6 & 7 in Eugene. I need to come in 1st at least one day to finish 1st in class. Saturday is near perfect for me, the car is running great, I'm feeling good and after my 3rd run I have Top Time of Day. That honor is gone after a few more cars have run, but I have never had TTOD well into the session. I beat Mr Mustang and a TransAm to lock up 1st place in E/SP for the year. Sunday it is hot and I'm feeling sluggish, but still manage another 1st place finish, beating Mr Mustang, the TransAm and 2 other Mustangs.

What's next? A special annual event called the Oregon Shootout Invitational, on October 11 & 12. This event, sponsored by the Autocross Club of Central Oregon, is open only to the class winners and 1st runners up of the 6 autocross clubs in Oregon. There are 4 different courses over the weekend, and your times are added together for your final standing. I'm ready to go, except the former location of the event is not available, and the new location has yet to be announced.

Last month I recapped my racing season for the year, with anticipation as to attending the Oregon Shootout Invitational. A few weeks before the OSI's date of October 11 and 12, a new location was announced: Hoodoo Ski Bowl Parking Lot, at the summit of Highway 20 in the Cascade Mountains. This is a pretty big lot, and the host club, Autocross Club of Central Oregon has had a few weekend events there in recent years. But I was not real happy about the location; at 5000 feet elevation I'm down on power quite a bit. I wish I had a built up turbo motor to swap out and run for the weekend, but I don't so I'll go with what I have.

Turns out the elevation was not a factor, but the weather sure was! An early snowstorm cancelled the event for this year, so no chance of vying for the title of "fastest ESP car in Oregon". I'll have to wait until next year to win that honor.

I plan on working on my car this winter. It needs more weight on the right side of the car for better balance, maybe it would help if the driver lost a few pounds. My new fuel injection setup is almost done, that should cure that little turn cutout I still get on a really tight turn. Hey, maybe I'll even paint the car a fast color, that should help, right?

Whatever happens, I'm having lots of fun.

SECC Autocross

Tim Mahler

For the past few years, I considered attending the SECC autocross in St Augustine Florida. It is a long drive from central Illinois, just over 1,000 miles. The distance kept the thought a distant one. Until this year.

Chuck Armer and Scott Trunkhill of the Where's The Beef Racing Team have traveled to Iowa a time or two. It was time for a return visit to their stomping grounds. Hearing that Warren LeVeque was going, his excuse was to visit relatives, sealed the deal. Besides, the Iowa Corvair Club's annual autocross was cancelled due to the death of the manager which led to the subsequent loss of the track. This left a void in my schedule.

The Marshalltown track was a lot of fun, but I really missed the camaraderie with the Iowa group. I found that camaraderie again with the Florida, Georgia, SC group. Running with other Corvair enthusiasts at a laid back track is pure fun.

The location of the SECC track is the First Coast Technical Institute's test area.The area is set up like a series of streets, for training. There are plenty of options for various course layouts. This is also the proposed site for the 2009 CORSA Convention. Ah, a little practice time.

"Fast Eddie" Meadows laid out 3 courses for this weekend. The first was a simple course to be used as a test and turn. A few corners, before the back stretch which had two off set gates to navigate. This was followed by a fast, third gear section into a hard left. A couple more corners and finish with a 3 cone slalom. Easy, fast, and fun. Passengers were the norm. Simple as it was, I managed to do something wrong 3 times out of 4. I was not off to a good start.

SECC Autocross (con't)

The time runs started right after a good lunch, supplied by the Florida Corvair Clubs. The track was redone, starting in the opposite direction, and used the esses in the middle of the training area. The esses reminded me of the Iowa track inner part, short straights and 180s to the next short straight. After the esses, it was onto the skid pad, which is surprisingly slick, for a pair of gates that proved painfully slow, then the back stretch which had a 4 cone slalom and two offset gates leading into 3 street corners to the finish.

My first run saw the return of "slow Tim", that driver that seems to do a Sunday drive around the course. It may have been the ftd at the time, but it felt tentative. The next two runs were much better, but I still did not feel like I ran the esses well. 3 runs, 3 so-so times, seems just like my practice runs. I tightened my belts, grabbed my helmet and gave myself a talking to. I then ran a good, clean, quick run. It felt good. The g forces felt good. I didn't spin on the skid pad, and I stayed close to the slalom cones. I even finished strong for a nice time of 77.7 seconds. Ftd for the first group. But Warren was waiting in the wings with his early roadster.

Warren first run came after 4 laps in street tired Corvairs, the club cars. Warren was asked to drive the Corvairs to provide a base mark for a club vs club competition. Warrens times became the index for the two cars. Cool. At first I thought the extra practice would give Warren an advantage. A quick glance at Warren working the steering wheel in these mostly stock Corvairs had me cheering for Warren to take more runs in the Club cars. He looked exhausted after the 4th run.

The street tires also seemed to have better traction on the skid pad than racing tires. The discussion amongst the racers varied as to why. One opinion thought it may be because the street tired cars were slower, thus did not lose grip as fast. An opposing thought was that the edges of the groves actually provided some grip on the pad.

Warren seemed to remember those street tires when he got on the skid pad with his wide racing slicks. Rain or no rain, spin Warren did. The crowd cheered, for Warren really, because the spin was spectacular. Warren next run was better, but I do not know what his time was, I was working the slalom and could not readily hear the announcer.

SECC Autocross (con't)

Then came some sprinkles. Now the skid pad was really slick. The Corvairs could not tip toe enough to get through the skip pad. A halt in the action was necessary. After a short span, the rain stopped and a few cars went to the skip pad to dry it out. A test run was made. Then it rained some more. After another break, workers went out to sweep the puddles on the skip pad and the racing was ready to resume. Only the skip pad had become slick during this time, the rest of the course did not get wet enough to impact anyone that I noticed.

Now Warren had time to reflect, adjust, rest and forget those street tire runs. He still had to tip toe through the skid pad, but so did other R compound tired car. His third run was a quick 76.1 for a new ftd. But Warren was not satisfied with just beating the #3 car, he wanted to bury his competition. So on his fourth run, Warren did just that, with a 74.9 run. Using SCCA PAX, that last run bested the #3 car by 6 tenths of a second. OK, there is always day 2.

Day 2 reversed the running order, first heat, second heat, and also reversed the direction of the course. The course was different, using all of the back stretch and requiring bravery to make the left hand turn towards the skip pad. Before the long back stretch was another straight that ended with a set of offset gates then a sweeper of a 180. The long straight started with a slalom and then another set of offset gates, but the second half was wide open. The skip pad had a single cone requiring a left turn before pointing yourself toward the finish which included a 3 cone slalom to slow you down a bit before the finish lights. Simple and fast.

Warren ran first, taking passengers twice and running solo at least once. I again took a work station near the slalom, I wanted to see how everyone was running that part of the course. Warren was fearless running a blistering 57.7 on one of his runs. I think they were all below 60 seconds, but again, I was too far away from the announcer to hear all of his times. I did enjoy watching Warren maneuver through the slalom and offset gates. I was close enough to see how he was steering the roadster.

Unfortunately, I was less brave, always slowing too much going into that left turn at the end of the stretch. That turn reminded me of the left at Gateway's road course. At gateway, you are at top speed in 4th before turning into the infield barely lifting if at all, then braking before turn two. This course required a slight lift, turn and go. I failed to perform bravely, and my times showed it

SECC Autocross (con't)

with a meager 62.2 best run. Even with the PAX index, I was 2.5 seconds behind Warren. I was a bit disappointed in myself, but I still had fun as did everyone in attendance.

Fun runs were allowed after the timed runs using the same course we just finished. After everyone had enough fun runs, the awards presentation was held. Warren earned FTD and first in his class. The #3 car was first in the remaining competition class (CC). I do not have all the other class winners but plenty of certificates were awarded for all the good run times that were run over the two days. I do not think a water pumper ran a timed run either day.

I look forward to running the course again. I do wish it was closer so I could visit more often. If you are close, I encourage you to join the fun, street car or competition car. The camaraderie was great which made the trip worthwhile.

Results of CFC Autocross

1-2 November 2008

SS-3	Sat.	Sun.	Total
Buddy Mangold	97.697		

SS-4	Sat.	Sun.	Total
Terry Davis	96.658		

IS-1	Sat.	Sun.	Total
Mark Langdon	93.117	74.677	167.794
Dave Langdon	100.038	80.996	181.034
Larry Vaught	109.351	81.305	190.656
John Zezuski	107.310	86.402	193.712
Jon Langdon	111.406	86.111	197.517

IS-2	Sat.	Sun.	Total
Robert Oliver	88.925	70.878	159.803
Dan Kidder	91.166	71.936	163.102
Norm Wright	91.068	73.163	164.231

IS-2(L)	Sat.	Sun.	Total
Leslie Every	93.937	73.640	167.577
Gail Policella		76.080	

IS-3	Sat.	Sun.	Total
Tony Ellison	81.158	64.222	145.380
Gene Jacobs	81.477	64.847	146.324
Billy Bruce	86.704	72.388	159.092
Jeff Kent	91.294	71.6--	162.894
Donnie Bird	82.674		

SM-1	Sat.	Sun.	Total
Kevin Poe	79.410	64.481	143.891
Chuck Armer	84.853	68.269	153.122
Scott Trunkhill	85.082		

CC	Sat.	Sun.	Total
Tim Mahler	77.701	62.165	139.866
Raymond Paul	84.585	68.893	153.470

SC-1	Sat.	Sun.	Total
Rick Beltrami	101.323	76.527	145.420

SC-2	Sat.	Sun.	Total
Warren LeVeque	74.999	57.767	132.760

Poe Challenge*	Total
CFC Club Car	90.386
NCC Club Car	100.155

* Poe Challenge is in honor of Steve Poe and results are fastest 3 drivers for the club cars from Nature Coast Corvair and Central Florida Corvair

FTD

Warren LeVeque 132.760

My Car (Part 1)

Duane Cartwright

History

The need for fuel injection on my Corvair became evident too me when my cars engine quit running when I made a hard turn and when my former girl friend could identify which car I had driven to university by the smell of my clothes, gasoline. These two things and my desire to improve my cars performance also known as make more horsepower pushed me into designing a made for Corvair fuel injection system.

As I stated my desire was to make a system from scratch not using parts from the salvage yard and getting just okay results I wanted great results.

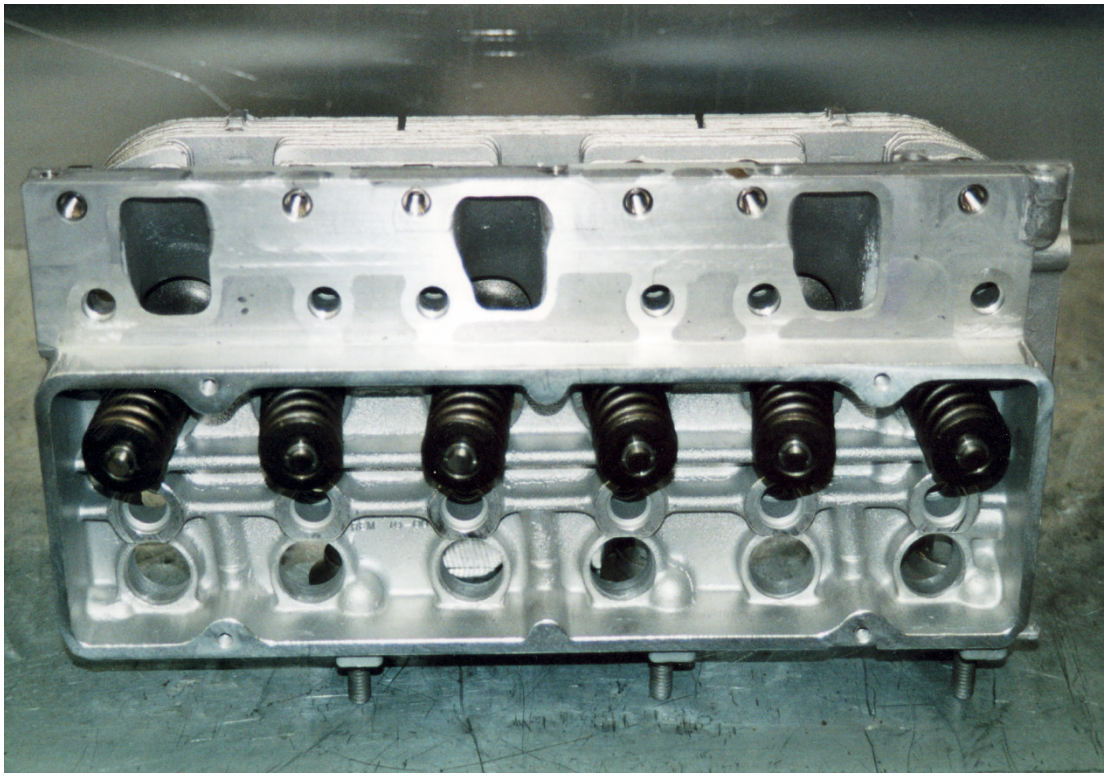
Before any parts were made I read all of the intake manifold research from GM, Honda, Ford and Toyota that I could find. Once the design parameters were established an engine was mocked up with heads that had the intakes milled off. I carved the first injection manifold out of a wood block so that it was a duplicate of the drawing I had made. The drawings and the wooden mock up were taken to a pattern shop patterns were developed and then came rough castings machining etc. The purpose of this little bit of history was only to apprise you of the thought that went into this project.

Car and engine preparation

Car Prep (Fuel System): In order to run fuel injection on your Corvair the following items need to be either added or modified. A fuel pump designed for fuel injection pressures and volumes. There are several manufactures but two of the most noteworthy are Aeromotive and Walbro. My car is running a Walbro pump mounted on the right unibody frame rail just behind the bulkhead separating the fuel tank from the passenger foot well. It is sized to deliver 30% more fuel than is required at full power. The excess fuel has to go somewhere so a return line needs to be installed. It can be made from another Corvair fuel line or fabricated from aluminum line or flexible AN line. There are returnless systems which use bypass pumps but I chose to use the return type to avoid potential hot soak problems. The picture shows the fuel pump mounted position. Please don't use steel line as pictured as it will transmit all of the fuel pump sounds into the passenger space. Use a high pressure hose only. I made the steel line mistake. The fuel tank is not installed in this picture. The lower hanging line, on the pump, is the 3/8" pickup the other rubber line from the tunnel is the fuel return line. Ray Sedman, of American-Pi, produces an in tank conversion that is quite nice and will subdue any noise problems. His kit includes the pump and fuel level float as a unit, just like the new

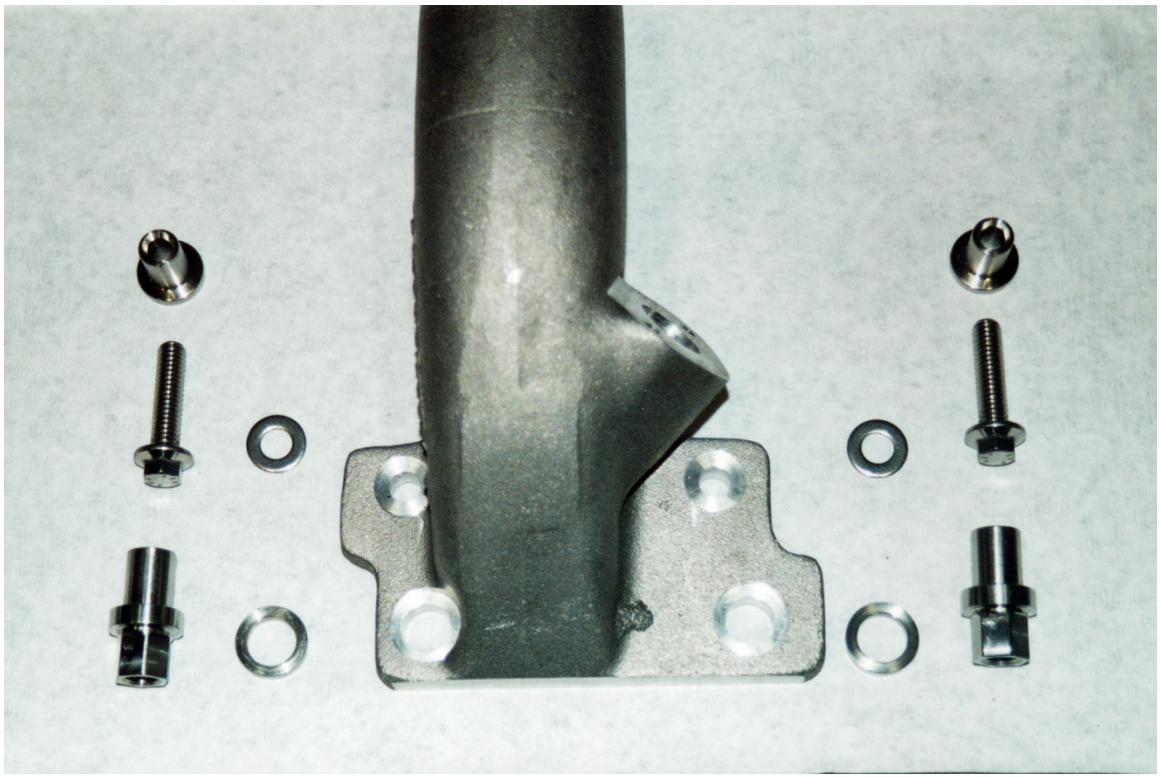
cars. Prior to American-Pi's tank conversion kit I chose to modify the existing fuel line float system to accommodate a larger pickup 3/8" and a 5/16" return line. I desoldered the original line drilled the hole to 3/8" and drilled a new 5/16" hole. I bent a 3/8" line that became the pickup and use the original pickup line for my return. The photo should be explain the end result.

Engine Prep (Heads): The heads are really the most important part in this system and require machining to remove the integral manifolds. Before this is done the area around the intake ports (area below the integral intake) needs to be built up by either welding or using Devcon Aluminum. This picture illustrates the completed head ready for installation on the engine block.



Note the countersunk areas at each head stud this allows for the head nut, with its extended shoulder, to center the manifold on the port. Note also the upper threaded inserts that attach the manifold at its upper edge. Each port is matched with its respective manifold so they become a non divisible pair.

My Car (con't)



This is the intake manifold (one of 6) and its associated attaching hardware to include upper threaded insert, bolt and washer. The head nuts have a long shoulder which indexes the manifold to its respective port. All of these fasteners are made of stainless steel.

Editor's Note: Duane was buried under a ton of snow and unable to finish his article. I like the engineering he's put into his FI setup and wanted to share what he wrote. The rest of the story will be in the next newsletter.

Mitty Update

Spence Shepard

Several of us are making plans to attend the Walter Mitty Challenge at Road Atlanta in early May next year. This year the event is sponsored by the publisher of Grassroots Motorsports and Classic Motorsports magazines and is being called the Classic Motorsports Mitty. The January 2009 issue of the magazine, which has been out for several weeks, has an article about the event and mentions that the Corvair Performance Group will attend the event as a club.

The event is "wheel to wheel" racing of older cars and requires all of the preparation of both car and driver that would be required by any modern racing organization. A good guideline is the requirements of the Sports Car Club of America.

Car preparation requires safety equipment at least equal to and in many cases better than the requirements when the car competed originally. Roll cages are required and should meet

current specifications. Fuel cells should be installed and meet current specifications. Some classes may require fire suppression systems.

Car performance equipment will determine how cars are classified and grouped with other competitors. The organizers (HSR) would prefer that cars are exactly as they were raced originally but this often isn't practical and many cars have been upgraded. Examples are the substitution of disk brakes, larger wheels and even induction modifications. Many of these modifications are for safety and cost reasons as much as for performance advantage and are a grey area in classifying the cars. I'm sure there will be a lot of questions about particular items on individual cars.

Driver preparation includes having an acceptable license. Current protective clothing is required. The purpose of the license is to demonstrate that the holder is capable of safely driving in competition at high speeds. This requires acceptable evidence of such competition or training for the competition. It is best to have a current competition license with an accepted organization, but there are other ways to get accepted for the event. We all have different racing backgrounds and degrees of experience. There will be questions that will have to be answered on an individual basis.

HSR (hsrrace.com) publishes rules for cars and drivers on their web site. It is best to comply with them exactly but that often isn't possible and the rules can be interpreted to allow some things that may not exactly meet the wording if the intent is met. These things must be cleared with HSR before the event. I think we should do as much as possible take advantage of our interaction as a Club to get these questions answered. Some of us have experience with HSR and other Vintage organizations and can probably answer some questions for us. Other questions will have to be answered by HSR. I think it may be more efficient if we try to answer as many questions as possible "in house" and then go to HSR. It would probably be better to get as many questions as possible answered by HSR at once rather than bothering them a lot.

I hope we can use Fastvairs and the fact that it is a Yahoo Group to facilitate helping as many of us as possible enter the event. I feel that more entries will make the experience better for all of

us, help those of us that will need help at the event and get more publicity for out hobby. I don't know all (or many) of the capabilities of Yahoo Groups but I'm sure some of you know a lot more than I do. I'd like to be able to use it to come up with a listing of all the drivers and cars that intend to or are even thinking of attending the event. They could list any questions, problems or needed parts, help or advice. We could respond to them and gather questions that need to be asked of HSR. It could be a kind of live spread sheet accessible to the members. I don't know if it is possible or even desired, but I think it could be helpful. A compute-whiz friend of mine tells me it is possible. We could even let the rest of us know the progress of projects and our planned attendance at other events so we could get some help or be some help to other members.

Some of the questions I can think of are what groups will we run in and what is really necessary to run in those groups? Can we get away with disk brakes and larger wheels and even slick tires if we aren't competitive with other cars in the group? It would actually be safer and

Mitty Update (con't)

a lot less expensive to us. There has been some conversation about all of running in the same group or even having our own group, but that probably wouldn't work for a number of reasons.

Another question will be getting drivers accepted who have lots of experience but no current license. I'm sure we'd all like to see Warren run and hopefully some others who aren't currently road racing. That is really the intent of the event.

It would be a big help to have a computer savvy member (or friend of a member, etc.) who could give us some advice or even help with managing the information we need to manage to make the event go as smoothly as possible for us.

On another note, the article in Classic Motorsports mentions that there will be plenty of other things to do and see for spectators and entrants. I assume we will be able to have crew with us who will be able to take advantage of some of those events including track parade laps and an autocross sponsored by Mazda in their cars. There will be an opportunity for all of us with Corvairs to do parade laps.

Please let me know if you have any comments about the event or can help with setting up a "page" or other way to help organize our attendance in the event.

Tech Tips

From Steve Gibson: While a stock front cross-member is out and stripped bare, cutting off the spot welded flange and making a continuous weld saves two pounds. I was curious if it would save weight, tried it and it did.

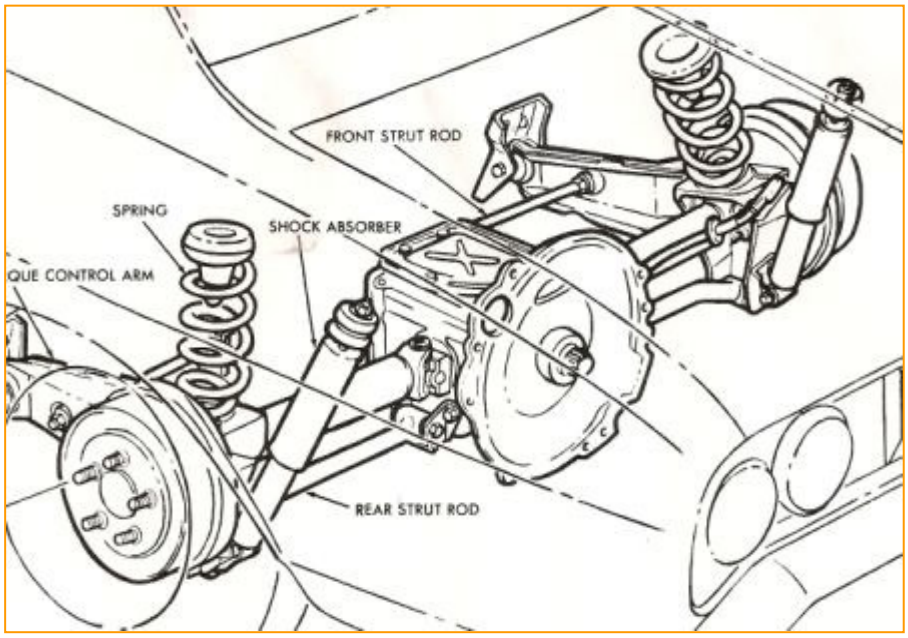
From Bryan Blackwell: I'm doing a set of heads and am taking some photos of the work. Initial step are the tools, I took a photo of what I'm using, here's the caption:

Clockwise from top left: Safety glasses and gloves (the grinder gets hot), Long reach electric die grinder from Harbor Freight, Carbide barrel shaped aluminum burr from Eastwood, Craftsman (Dremel) flex shaft moto-tool, Grinder's Grease also from Eastwood (essential to keep bits from clogging).

Late Model Rear Suspension

Seth Emerson

There are two basic designs of Corvair: early (1960-1964) and late (1965-1969). The early and late models have dramatically different styling. I call the early version the sardine-can body, for its somewhat brick-like shape with protruding lip all around the beltline. I call the later model the Coke-bottle body, for its curvacious fender line. There are also pickup truck and van models, called forward-control vehicles, similar in layout to VW transporter models, which were based on the early platform and were made from 1960 through 1965.



The early platform had swing axle rear suspension, and earned itself a bad reputation for not only having snap oversteer at the limit like a VW or Porsche, but also having an unusually compliant spring and tire combination from the factory that allowed the outside rear wheel rim to actually contact the road in extreme conditions and sometimes hook an irregularity and flip the car. The early models can be improved dramatically with lower ride height, stiffer springing, and good tires. Really, they like a lot of ride stiffness, especially at the rear. The factory attempted to add ride rate at the rear, and roll rate at the front, in 1964. At the rear, they added a transverse leaf spring acting only in ride, similar to the aftermarket EMPI Camber Compensator, and they added an anti-roll bar at the front. Porsche also used a swinging transverse leaf on the last versions of the 356, and Mercedes-Benz had a coil spring version of the same concept on some swing axle rear ends, as early as the 1930's. For 1965, the redesigned rear suspension was similar to the system introduced in 1963 on the new Corvette Sting Ray, and found on all C2 and C3 Vettes. In the transverse plane, it's a short-and-long-arm (SLA) system, using the halfshaft or driveshaft as the upper arm. In side view, it is a trailing arm system. The "torque control arm" is stiff in bending both vertically and horizontally. It does actually react to torque in braking, although not under power. It also locates the wheel longitudinally and for toe.

In the Corvette version, springing is by a non-swinging transverse leaf spring, and the toe-controlling "front strut rod" shown in the Corvair suspension illustration is absent. The Corvette has a fairly serious deflection steer problem under power, due to compliance in the bushing at the front of the torque control arm. This bushing is much stiffer than in the Corvair, but it is

Late Model Rear Suspension (con't)

rubber and it has to accommodate rotation in three axes. Fortunately, the wheels toe in under power rather than out, but the deflection is greater than one would wish, especially when the car is fitted with wide, sticky tires and large-offset wheels. Racers running C2 and C3 Corvettes eliminate the bushing deflection by substituting spherical joints (monoballs) for the bushings. The bump steer properties are not perfect either way, but they aren't horrible and deflection steer is largely eliminated. People racing late-model Corvairs often do the same thing, as the questioner notes. The Yenko Stinger was a mildly modified Corvair, with the back seat removed and fiberglass C-pillar extensions to visibly differentiate it from a stock Corvair, and make it look more like a coupe and less like a sedan. The reason people road raced these and not regular Corvairs had to do with what SCCA was willing to recognize as a sports car. If a car had a back seat, that a small adult could squeeze into at all, it was considered a sedan. Sports cars didn't have back seats. If the owner removed a sedan's back seat, that didn't make it a sports car. However, if the car came from the manufacturer that way, then it was a sports car. Yenko was the manufacturer of record for a Stinger, rather than GM, and they took the back seat out, so that made the car a sports car. Shelby did the same thing with the Mustang when creating the original GT-350. There weren't very many Stingers made, and they have become scarce with the passing years, so now SCCA is allowing people to make reproduction ones out of old Corvairs. That's what a "Ringer" is.

Editor's Notes

A BIG thank you to all the contributors for their articles to this newsletter!
This newsletter is truly yours, I can't put out a newsletter without your contributions!

You may have noticed the new format to the newsletter. I wanted to try something a little different (easier for me!) and it allows the pictures to be bigger. Let me know what you think.

- Ned The Editor