



Quick Facts

NEXT MEETING: July 28, 2021.
6:00 p.m. Denny's Restaurant.
Meeting starts 7:00 p.m.

8841 Greenback Lane, Orangevale, CA 95662 (Corner of Greenback & Hazel) If you have a Corvair, come on out to the meeting!

Membership Dues: Please pay your membership dues! \$20.00 for the year. Please send checks or cash to Wes Nicholas. Checks made out to: "CCRC." For PayPal options, contact Wes Nicholas, CCRC Treasurer.

Features

1. Message From the Club
2. Latest CCRC News
3. Meeting Minutes
4. Upcoming Events
5. Classified Section
6. CCRC Stories and Club Member Corner

Firing Order

President	John Heiser
Vice President	Carl Funk
Activities	Position Open
Secretary	Position Open
Membership	Joseph Howard
Treasurer	Wes Nicholas
Editor	Position Open
Historian	Christy Barden

Finding Us

Website;

www.northern-california-corvairs.com

Facebook; [Classic Corvairs of River City](#)

Corvair Chatter

Message From the President:

Hello fellow Club Members: Happy Belated 4th of July! I hope everyone had a wonderful celebration! Changing subjects, update on Jan Scopesi's funeral service and reception in West Sacramento. The funeral service will be held at the Lady of Grace Catholic Church on Monday July 26th starting at 11:00 a.m. Address: 911 Park Blvd off of Jefferson Blvd and Highway 80 interchange. The reception will be at Our Lady of Grace School, 1990 Linden Road, located off Jefferson Blvd., behind the Target shopping center. Lunch and refreshments will be provided.

Now, really changing subjects. Welcome New Club Members! Thank you all for being members, volunteering on Club projects and hanging in their during the past year. Greatly appreciated! The Club's 63' Spyder is ready for auction on Bring A Trailer (B A T). The application to list the Club's Spyder on B A T was submitted recently and accepted. I'm hoping at the next club meeting will be able to inquire on the status and let's start Officer elections for the open positions.

The weekend Cars and Coffee events seem to be pretty popular with lots of folks asking questions about our Corvairs, the club and even joining our club. Club members are also posting car shows and events which is great and club members should start participating these shows in support of club activities.

Reminder: The Club's Membership Appreciation BBQ picnic is on July 24th, 2021. Location, Ancil Hoffman County Park. 6341 Tarshes Drive, Carmichael, CA 95608. Time, 10:00 a.m till 4:00 p.m. Hope you can bring your Corvair out. For those that would like to park their Corvair near the reserved picnic area, we are suggesting to arrive around 10:30 am. We will try to hold parking spaces.

Remember, the next major Corvair event will be the 43rd Annual Great Western Fan Belt Toss and swap meet is on! October 22-24, 2021.



Latest CCRC News

Ongoing Events:

Bel Air Second Saturday Cars and Coffee. 4320 Arden Way near the corner of Eastern. Time: 8 a.m. to 11 a.m. On hold until further notice.

Carmichael Bel Air Sunday Cars and Coffee. 4005 Manzanita Avenue at the intersection of Fair Oaks Blvd and Manzanita Avenue near the corner of Cypress. Time: 7:30 a.m. to 10:00 a.m.

Folsom Cars and Coffee: Town Center, El Dorado Hills, every Saturday morning 7 am to 9:30 am.

Car Shows:

Auburn Cruise Nights: July 9th, August 13th, September 10th. The club meets at In/Out Burgers off Hwy 80, Sierra College Blvd around 3:30 pm then caravan to Auburn.

July 14 – Citrus Heights: [The California Burgers Cruise-In](#) is Wednesday from 4pm to 8pm at California Burgers, 8537 Auburn Blvd.

August 20-22, 2021: 22nd Annual American Graffiti Festival - Modesto: The Kiwanis Club of North Modesto Foundation is hosting this event. **For more info:** <https://americangraffiti.com/nmk/>

Italian Hot Rod Association Car Show: Saturday August 21, 2021, 5900 Newman Center, Sacramento. 8:00 am-2pm. Benefitting Sacramento Police K-9 Association.

October 10, 2021: Sutter Creek's Annual Chili Cook-Off and Car Show. For more information contact: Christi Hahn (209) 304-6426. Hahn.christi@yahoo.com or visit www.suttercreek.org

From SSC Club: The Great Western Fan Belt Toss and Swap Meet - OCTOBER 22-24, 2021. Sunrise Park, Palm Springs. For more information: simcrestorations@sbcglobal.net

Hot Chili & Cool Cars 28th Annual: September 18, 2021, 10 am-3pm. Quarry Park and Rocklin Road in downtown Rocklin.

River City Brewing Company: Corvair Club showing in Carmichael – Milagro Center, Corner of Marconi and Fair Oaks Blvd. Date: Time:

Meeting Minutes

By John Heiser

June 23, 2021 – Club Meeting Minutes:

John opened up Club meeting at 6:58 p.m. Adjourned 8:10 p.m.

The club President provided a brief update on current activities, Membership Appreciation BBQ Picnic with budget and approved location including an update provided by Rich Eastburn on meal costs with or without sides. The Club approved the caterer to provide two sides, backed beans and coleslaw. Other members are bringing potato salads, pasta salad, deviled eggs etc.. Their will be a small charcoal bbq and hibachi for those that want to grill up other options as well as for veggie burgers. An update on the Club's Spyder Convertible was provided by Wes Nicholas. The Convertible top was installed and last remaining items are being carried out to prepare the Spyder for sale. At the next Club meeting, a discussion will be held to determine which venue to sell the car at auction or perhaps a club member will want to purchase.

For the membership appreciation BBQ picnic will be at Ancil Hoffman County Park in Carmichael. Date: July 24, 2021. Time: 10:00 am to 4:00 pm. I'm sure folks will need to leave earlier.

Mike Stone in Stockton has a 1963 Corvair that he would like to donate to a Club Member. Once we have more details and pictures, I will send out an email.

Corvair Resources (Online)

Q&A - www.corvaircenter.com
www.corvairforum.com
Parts - www.corvair.com (Clark's)
www.californiacorvairparts.com
www.mikescorvairparts.com
www.rockauto.com
Sale - www.jaxed.com
www.corvairtrader.com (Parts & Sales)
Resources –
<https://www.corvair.org/chapters/corvanatics>
Car Building – <http://autoexer.skiblack.com>
Fun - www.youtube.com/user/davemotohead1
www.deansgarage.com



X-1000 Corvair SuperGT at LeMans by Roy Lonberger

Birthdays

July 10: Dee Smirlis
July 14: Carol Rohde
July 23: Mike Blanchard
July 24: Mike Hess

CCRC Club Member Assistance:

CLASSIC CORVAIRS of RIVER CITY CLUB MEMBERS

In the last year, our club has lost at least six members with cars that participated in club outings. It is getting more difficult to get a respectable number of cars at club-sanctioned events. Car shows, concours, the Autorama and State Fair participation require strong showings. We may not be invited back to the State Fair this year due to our poor showing last year.

In order to get more cars on the road, the club leadership is offering assistance to members that have Corvairs that need help to get them running. This help will be in the form of technical expertise, mechanic labor and financial assistance.

If you have a Corvair that is in need of work, contact John Heiser and give him the details on what you require in the way of help. A committee will review the requests and select those we think are the best candidates. Remember the goal is to get more Corvairs at our club events. Those chosen will be expected to participate and help the club increase the number of cars that we put on display.

Your Comments

CORVAIR CHATTER Newsletter - Let us know if there is something that you'd like to see in our monthly newsletter. Email your thoughts to John, Johnh1@thegrid.net

Club Activities - You may have some great ideas for club activities. We want to hear them! Better yet, we'd like you to participate in the planning of your activity idea. Email your ideas to Carl Funk at: edieboopboop@yahoo.com

Classified Section

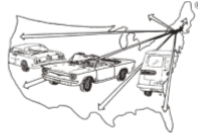


Mike's Corvair Parts



Clark's Corvair Parts®

Our catalog lists over 15,000 parts for your Corvair. We carry engine parts, body panels, upholstery and much more! There are 1,000's of reproduced items available, pages of technical information and lots of other helpful hints.



Check us out at www.corvair.com or call today to order a copy of our printed catalog. You will quickly see why we are the world's largest supplier of parts and all your other Corvair needs. Clark's - More than Parts!

Clark's Corvair Parts® 400 Mohawk Trail, Shelburne Falls, MA 01370
(413)625-9776 www.corvair.com email: clarks@corvair.com

PROTECT YOUR SPECIAL CAR WITH OYLER INSURANCE AND HAGERTY

Classic car insurance offers some key benefits compared to daily driver or "regular" insurance



#1 LOWER PREMIUMS

Up to 39% lower on premiums, with an average savings of \$276 less than standard auto insurance!*

#2 GUARANTEED VALUE! AGREED MEANS GUARANTEED!

Regular insurance companies offer depreciated coverage called Actual Cash Value or Stated Value. These are not the same. Fix the value now on your car with Oyler and Hagerty Agreed Value Coverage.

#3 NO FIXED MILEAGE

Our policy allows you flexible use and no fixed mileage limit.



License #0777239

CALL US TODAY!

2933 Gold Pan Court, Suite E
Rancho Cordova, CA 95670
916.635.0444 or 800.490.9744

For Sale: Rampside. Contact Anthony Martinez at (209) 507-2544



Jim Messick in Stockton has a '64 Spyder convertible for sale. May need engine parts, has a ding near left tail light, and upholstery needs replacement. Asking \$1500. Contact Jim at 209-969-2069.

For Sale: Rampside, Greenbrier, corvair engines, transaxles, parts etc. Contact Larry Forman at (916) 216-9801

For Sale: 1964 Corvair Convertible located in Elk Grove. Contact. James Koch: edselhusband@aol.com

Steve McGee: Looking for a late model convertible or coupe, but will consider just about anything. I'm looking for something that's a solid running, driving project all the way up to a completely finished car. Not really into show queens. Email: Steven McGee: minor_1000@hotmail.com

If you would like to submit a Corvair or Corvair's including related items to the classified section of the newsletter. Please send me electronic pictures of the item, pictures of the Corvair(s), including engine, interior, description, such as the year, mileage, manual or automatic transmission, if possible, asking price and contact information. If you are placing a classified regarding "In Search Of" related to Corvairs, please email the information to me. Please provide these items prior to the next months publication. Which is about the first week of the month. If the car or item has sold, please let me know. My email: Johnh1@thegrid.net. Thank you.

A Speech by Robert P. Benzinger at the Corsa National Convention Seattle, Washington, July 26, 1975

Robert P. Benzinger is a Professor of Industrial Design at Arizona State University. He was Senior Project Engineer at Chevrolet during the development of the Corvair engine, Design Engineer for the Corvair Engine between 1959 and 1962, and later Staff Engineer and Chief Engineer at Chevrolet until 1970 when he became associated with Arizona State University. The following is the speech he made at the CORSA National Convention in Seattle in 1975 which held us all spellbound until late that night.

We are indebted to Bob Helt for the transcript of this speech.

Good evening fellow Nader Haters! Do you love your Corvair? (applause) Now I know I'm in the right place. This must be the place. I'm really pleased and glad to be here; I know every speaker says this - it's like a rubber stamp. But believe me this one comes from the heart. It's my real pleasure to be here. It brings back very pleasant, very welcome happy memories; (it) recalls happy times to me. I was very much delighted and flattered when I was called and asked to appear this evening. I was a bit apprehensive about it. But as your response indicated I knew that I was going to be among friends and there had to be a way for me to do it.

We've been traveling all over the West ---- Air Streaming it. (We've) Been traveling since about the first of June. And for those of you that have done it, you know that this is the circuit where happiness is a full water tank and an empty holding tank. You know that these "Happiness Is" jokes were (popular) along about the time of the Corvair and there was one that I always enjoyed and want to recall for you now. It's the one that goes "Happiness is seeing your daughter's boyfriend jump into his convertible and land right in the middle of his guitar." Perhaps it was one of the Corvair ragtops that inspired that one. But each summer we go out and prove again that there are three fine reasons - three excellent reasons for teaching school. They are June, July and August.

Of course my wife was introduced here earlier this evening. She's one of the first and one of the firmest Corvair fans. When I was finally able to tell her what I was doing, her first reaction was to say "They are finally building my car." Of course she came along with me this evening to perform some pretty important functions. First off, she kept me from getting smashed during the cocktail hour. And she may correct my English usage from time to time. And she said also that she was going to count the number of times I said "you know." And I think after it's all over she'll probably be telling me what I should have said. I guess it takes a real sense of humor to endure that one.

Well on with the Holden project. The Holden project started in 1957. As I think you know, Holden is GM's Australian subsidiary. And the project began in Chevrolet's R & D department to design a 2400 pound car for Holden - or at least that was what everybody was supposed to believe. We got Holden drafting paper, Holden stationery, Holden Purchase Orders - the whole shot. Now this really wasn't unusual or uncommon. Because Chevrolet had - well at least at that time Chevrolet had designed the vehicle, complete, that was in production in GM of Australia. And they did, from time to time, some cars for Opel. So this was not unusual, and was supposed to be taken in stride. By the way, particularly those of you who have '60 automobiles know the number of part numbers that start with the number 625-well these are in the Holden series of part numbers assigned by GM. And are legacies from this sham if you will of making it a Holden, Australia project. Well the entire thing was begun, and we continued well along in the greatest amount of secrecy. Very little was around Chevrolet or around GM in terms of rumors. It was pretty well kept. All anybody knew was that engineers kept disappearing into R&D for something. They didn't know quite what but something was going on in there. We were at that time refraining from any contact whatsoever with outside vendors - that is outside of GM. No contact really with anyone outside of GM for fear of letting the cat out of the bag.

The engine requirements, which of course will be what I concentrate on this evening, were pretty well defined rather early in the game. The car was styled if you will, or the image of the car was to be one of a very low profile. Flat floor. This of course meant the tunnel had to go. There was just no place for a tunnel in this sort of a concept. This very rapidly ruled out any consideration of front engine and rear drive - the conventional arrangement. There was some time spent rather briefly, looking at, or investigating, front engine and front drive. This of course was pretty discouraging. This turns into a fairly heavy automobile, turns into a fairly expensive automobile and it still leaves you to solve the problem of what the devil to do with that exhaust system in trying to keep the flat floor and low profile on the vehicle. Well light weight, rear engine, rear drive was the only reasonable solution to fit the image that the car had to meet.

The four cylinder engine was considered rather briefly and rejected because it simply didn't have the smoothness that was requisite for the American marketplace. The four just didn't have it. Water cooling of course was out. Weight, size and bulk of the engine just didn't fit either. So we rather rapidly came around to the concept; six cylinder, air cooled, rear engine but with hydraulic valve lifters. And by management decision at that time it was intended to be automatic transmission only! At that point, I think we probably had the blankest piece of paper that engine designers ever faced.

You know, I'm often asked how much help we got from VW and Porsche. And sometimes asked this by people who firmly believe that Herr Doctor himself designed the vehicle, the engine, the whole shot.

Actually, the truth is that zero help came from Porsche or VW. Nothing from advice and council - really the secrecy of the project forbid it. And anything like that, the cat would have been out of the bag in a hurry, with this kind of advice or council or engineering consultation, if you will. And really very little help from copying hardware. These two vehicles of course were useful to a degree by showing several things: first from Porsche, that a reasonable performance could be achieved out of this kind of an arrangement. And the confidence out of VW that it could be done in volume. Now if we get Porsche's performance and VW's volume, then we've got it. And of course these engines were also useful -the whole vehicles in fact were useful - as a baseline or reference. In the case of the engine, things like the temperature, the performance level, (and) some of the manufacturing techniques were useful for reference purposes.

The Porsche, I think that you would suspect, was the more useful of the two. The VW was just plain too conservative; and forgive the expression, a bit crude. I think in those years VW's compression ratio for instance was on the order of 6.5:1 and that was pretty modest for what we had in mind, and what we felt that the American marketplace demanded. I think, rather importantly, we faced some problems that VW and Porsche just never had to grapple with by other decisions that they made. For instance with the cooling fan, placing it (vertically) over the engine where it fits the concept of the vehicle, (and) fits the room available. Rather a convenient solution to the problem. But this was totally out for us. We had to find another way - the result you of course know. The third cylinder in the head: this may not sound like it is particularly difficult, but it's all the difference in the world. With a two cylinder head, it's rather simple to dump, if you will, the exhaust immediately out with a very short fork, out the front and rear of the head and keep the center area of the cylinder head nice and cool with the incoming inlet mixture. But as soon as you put the third cylinder in that head you've wiped out all these neat ideas. Then you face the problem of dealing with heat: dissipating it, keeping the hardware cool - in a central area in the cylinder head. Another reason that rather stands out is that we were committed to hydraulic lifters. They fit the marketplace and we didn't feel that the target the car was aimed at would tolerate five thousand or less mile adjustments on mechanical lifters. That just wouldn't go! Now that too may sound like a fairly simple thing to do - stick in hydraulic lifters. With the exception that the convenient place to put the camshaft is above the crank. But with hydraulic lifters, you get them high and dry, out of the oil. To keep the lifters solid and full, and not clickity-clack on start ups, the cam really had to go below the crank.

This gets you into immediate design problems with road clearance, keeping the timing gears away from the road, and so on. In the design phase, this problem turned out to be a fairly difficult one to deal with. So these problems loomed rather large and were problems that we had no guidance at all on - from VW and Porsche.

I think that this is a good place to pay tribute to Al Kolbe. Al passed away about two years ago, I believe. Al, I think was the finest engine designer I ever knew. To the extent that in any organization as large as Chevrolet, you can say that any one person was responsible for, or did anything. This is difficult in a big organization simply because of the magnitude of the operation. But to that extent, Al designed the Corvair engine as he had the small block Chevrolet V-8. The small block V-8 is probably the most successful automotive engine of all time. It started out as a 265 cubic inch. It's appeared as 283, 302, 307, 327, 350 and 400 cubic inches. And if any of you have followed through the years, Ford's efforts to chase that engine - those people in Dearborn spent a fortune trying to outdo that small block V8. Finally they threw in the sponge and just plain copied the thing with the 289. You know, sometimes I get looking at Ford 289 parts and I think I'm looking at Chevrolet parts.

It was late in 1957 that we had the first engines running. We used to figure that the gestation period for an engine was just about what we're used to from Homo Sapiens. It took about nine months from when you told the designers and drafting room to go until you had the design completed, experimental hardware built and the first engine running. So late in 1957 the first engine was running. Shortly after that, early in 1958, the first of the cars was on the road. These were made by converting Porsches. They really didn't look a whole lot like a Porsche when you looked close. The wheels were the wrong size and the treads were different. The whole rear end was really not Porsche, except it looked like it. We did this for the reason that they looked fairly harmless on the streets. You could drive anywhere. Nobody raised any eyebrows, except the Porsche owners who wanted to stop and talk and compare notes; ask you how you liked your Porsche or how great theirs was. About the point where they wanted to look under the deck lid, that was the time you had to go somewhere else in a big hurry. But the important thing was that we could run them on the streets and not attract any undue amount of attention.

The development problems during this time were centered, as you might expect, on cooling, carburetion, and blower drive and belt; and not surprisingly at that time in just plain learning to live with aluminum. What we had to do with threaded parts. What we had to do with expansions. What we had to do to keep the bearings from falling out as the aluminum expanded. And so on down the line. I think most of these are fairly well covered in the Society of Automotive Engineers, (SAE) paper on the Corvair, (140c). I understand that this paper has enjoyed a fair amount of exposure in this group. Kind of an aside to that, that paper for many years after - and maybe to this day for all I know - was an all time record holder in terms of number of sales for SAE. I don't say that because I think it's any literary masterpiece, but it's the sort of thing that's of technical interest to practically anyone associated in the industry. And you all know what your level of interest is in it at this point.

The next cars that we built were full Corvairs, at least mechanically. You've probably seen some pictures of these things. They've been in the magazines. They were rather hideous looking things. All black. Kind of bulbous, bulging, rounded corners. Only a little suggestive of the way the Corvair finally looked. They even had some phony grill work up front so that they didn't attract too much attention on the roads.

This program was full of surprises as you might expect. One of the surprises was incidental to one of the black beauties. It's typical in carburetion work in running octane requirement tests, (and) in running vapor pressure tests, to disconnect the regular fuel tank and run the car from cans of special test fuel that are just carried inside the vehicle. Using quick disconnects, you can plug from one can to another. Well at the Proving Ground at Milford, Michigan, there is a 16% grade.

If you have ever been on a 16% grade, you know it looks like practically straight up. Now with the tank disconnected on a rear tank, front engine car this is no problem up a 16% grade. This carburetor engineer started up the 16% grade and got about 100 feet up the hill when he realized that with the tank high and the engine low, he had a fire in the engine compartment. He was going up the hill; the fuel was just pouring out the open fuel line; and there the poor devil was - stuck halfway up the hill. He knew he didn't dare stop. That would be the worst thing he could do. He had nothing to do but stand on it and hope that it kept running until he crested the hill and then run for the fire extinguisher. Well the car was pretty much of a mess as you can imagine, by the time he crested the hill. We did salvage the thing though. It wasn't a total wipe out. But for weeks he was looking for a hole to crawl in for having tied up this valuable experimental vehicle.

I suppose most of you have looked at the flywheel that goes with the manual transmission, and wondered who on earth designed that crazy nightmare. Guilty as charged! You recall of course that I mentioned that the car was intended originally to be automatic only. Well there was no provision made originally for a manual transmission - and for the flywheel and clutch of course. When reason finally returned to top management under pressure from the Sales Department, they said "You can't put this car on the road with an automatic only policy." So when it was too late to change anything, we got the orders: put in the clutch, put in the flywheel. And you'd think it's pretty easy. Stick in a piece of cast iron for a flywheel and away you go. Well we did worry a lot about whether the hub and the gear would stay pasted onto the crankshaft with all that weight hanging on it. That problem never gave us any trouble at all.

It never arose in fact. But the one that did happen was a frightful noise at 45-55 miles per hour. It sounded just like a freight train was on your back bumper with a full load of cars heading up a rocky mountain grade. Just a frightful racket that would drive you out of the automobile. Well after a lot of detection from black boxes in the laboratory, we finally determined that the flywheel was vibrating about a vertical axis. A tilt vibration that was excited by the firing of the front cylinder, No. 6. A wheel that was flexible so that it would not follow this crankshaft induced vibration, also made the noise go away. So we designed this nightmare of a three piece flywheel with rivets around the periphery, and of course the noise was fixed. But this brought up another problem. In very short mileage, the flexplate in the flywheel began to crack. A neat little ring all around the bolt circle and the disk would drop off the crankshaft. If you made the thing thick enough so that it lived, the noise was back again. Make it thin enough to kill the noise and it breaks. So after running the gamut of what was metallurgically possible (all of the materials - all of which failed), we finally took the compromise. We were able to work out by a hydraulic spinning process a method to take a thick disk that's about half the diameter of the flywheel and roll it out in a tapered pattern.

That's why you can see the rings around them. This gave us the thick center which let the thing live, and also the flexible periphery that made the freight train racket go away. You know in the process of this flywheel, we found we had a lot to learn about riveting. We found out that the people who make rivets don't know much about rivets. They make these funny nail like things to whatever drawings somebody sticks under their noses. But what happens to them or how they function, or even how you set them, they could care less after they disappear off their shipping dock. The riveting machinery manufacturers are a little better. They know a little bit more about it. But they operate strictly on the theory that what works is good and what don't, ain't. When you're looking for help there isn't much of it there. It's live and learn as you go. As you know the riveting operation is pretty critical. It's got to be done right. In production, the holes were line reamed with the three pieces clamped as an assembly, and they had to be clamped tight. After the holes were line reamed they were moved to the riveting operation in the same fixturing and the rivets were set.

Stay Tuned for Part II.