

Meetings (4th Thursdays) Next meeting:

- Thursday, Apr 25, 2024
- > 6:00pm Social / 6:45pm Meeting
- Dad's Kitchen
 8928 Sunset Avenue
 Fair Oaks, CA 95628
 916-241-9365

Membership Dues 2024:

Membership Dues are due by the last day of February annually. The price per year is \$20.00. Please send checks or cash to Dean James, CCRC Membership. Make checks payable to: "CCRC". Please contact CCRC Treasurer Jim Kindley for additional questions.

Features

- 1. Message From the President
- 2. Latest CCRC News-Meeting Minutes
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Board Members

President Jim Brown Vice President John Heiser Activities John Heiser Secretary Open Membership / Web Dean James Jim Kindley Treasurer Sales & Acquisition Wes Nicholas Editor Kari Emery-Cotner Historian Michael Nyberg

Finding Us

www.northern-california-corvairs.com Facebook; Classic Corvairs of River City Instagram; classiccorvairs_rivercity (Maintained by: Dean James)



President's Ramblings

Hello Classic Corvairs of River City Members:

Welcome to spring! Days are getting longer and fewer rainy days, so things are looking up. The Member Appreciation Picnic has been scheduled for June 8th at Mather Regional Park. More information will follow.

There was a great turnout for the first club meeting at Dad's Kitchen. We kind of filled up the place, which was nice. Wes drove the club Greenbrier for all to see, and it has since been sold, with the buyer joining the club. Good job, Wes, and thank you for all your work.

The officers are continuing to work on getting club hats and shirts to be available for members. We are waiting on pricing and what kind of a lead time we will need. Hopefully will have the products available shortly.

Thanks to all who participated in the California Auto Museum's Club Cavalcade. My little ranch Rampside started up and drove to the trailer like the champ it is.

The next officers meeting will be May 8th at the home of Jim and Theresa Kindley.

Til next newsletter,

Drive Life Safely Jim Brown



Latest CCRC News

Meeting Minutes: March 28, 2024

Meeting was called to order by President, Jim Brown, at 6:50pm. Members were welcomed to the new venue at Dad's Kitchen in Fair Oaks, CA. 18 members were in attendance. Approval of the February meeting minutes, with the change that the position of President is not open, was motioned and seconded for approval and the vote was unanimous. Motion carried.

Jim Brown presented the President's report. Members are encouraged to assist with making the club more attractive to younger people-retaining those members, and reinvigorating longer term members. Ideas are welcome! Next Board meeting is May 8th at Jim and Theresa Kindley's home.

Jim Kindley presented the treasurer's report of positive balances, expenses and income, and it was unanimously approved.

The sales and acquisitions report was presented by Wes Nicholas - it was unanimously approved. Wes drove the 1964 Greenbrier to the meeting to show club members. It will be sold on Facebook.

John Heiser presented the Vice-President/activities report: Upcoming events: Casa Robles Car Show on April 27, 2024; Auburn Cruise nights starting on May 10. 2024 (2nd Fridays of the Month); Club BBQ Picnic date is June 8th; Cal Expo Autorama May 3-5, 2024; and Ironstone Concours d' Elegance September 28, 2024. John sent out a Club email blast regarding these events with more details. So Please check your email.

Reminders of reoccurring gatherings at varied Cars N Coffee locations; Sacramento Hollywood Park Auto Club Classic Cars meets every 3rd Sunday at 10am at Leonardo DaVinci School, Carmichael Bel Air Sunday Cars and Coffee at 4005 Manzanita Avenue at the intersection of Fair Oaks Blvd and Manzanita Avenue near the corner of Cypress from 7-10am, Folsom Cars n' Coffee at Town Center El Dorado Hills from 7-9:30am and the air-cooled drive in gatherings at the Red Bus Brewery on Reading Street in Folsom the second Thursday of each month at 6pm.

Kari & Danita Emery-Cotner gave the newsletter report and welcome your articles and ideas.

Dean James reported that we currently have 44 current paid members. With the sale of the Club's Greenbrier, the Club has a new member, Patrick North. Welcome Patrick!

New member, Russ Magee was in attendance and he has 3 late model Corvairs. Welcome!

New business was discussed:

- Reimbursement for Autorama participants will be \$50.
- Annual club picnic: The club voted and approved the picnic to be held at Mather Regional Park on June 8th at 11:00am. Mexican food will be provided and members are asked to bring 1 desert to share per family. Motion to approve a budget of \$2,500. Motion carried.
- Reimbursement for Ironstone Concours de Elegance will be between \$25 and \$75 depending upon registration fees.
- The club voted and approved Leo Scopesi in as a Lifetime honorary member. Congratulations!

Old business was discussed:

- The Club needs a volunteer to take the position of Secretary.
- Providing scholarships to auto shop and automotive technology students through the school system is not going to be feasible. The club is open to other ideas.

Meeting adjourned at 7:41pm

<u>Information</u>

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

Welcome New Members

- Michael & Shelly Brassil
- Robert & Gina Dominguez-Gadson
- Patrick North

Birthdays (Current & Upcoming)

Apr 01 – John Heiser

Apr 10 – Nora Meadows

Apr 16 - Casey Cockrell

Apr 17 - Chris Myers

Apr 20 – Robert Miller

Apr 27 – John Hafkenschiel

Apr 28 – Nancy McCormick

May 08 - Carolyn Wong

May 11 - Cyndi James

May 13 - Rafael Arroyo

May 30 - Kari Emery-Cotner

CCRC CLUB MEMBER ASSISTANCE:

In order to get more cars on the road, the club leadership is offering assistance to <u>members</u> that have Corvairs that need help to get them running. This help will be in the form of technical expertise, mechanic labor, and possible financial assistance. If you have a Corvair that needs work, **contact John Heiser at <u>JohnHeiser6@gmail.com</u>** and give him the details on what you require in the way of assistance.

*A committee will review the requests and select 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.

Let Us Hear From You:

<u>CORVAIR CHATTER Newsletter</u> - Let us know if there is something that you'd like to see in our monthly newsletter. Members can write articles to review events (event photos, etc.) and submit for consideration to be included in the newsletter. Email your thoughts, articles, and photos to Kari Emery-Cotner at <u>4484.business@gmail.com</u>.

<u>Club Activities</u> - 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 John Heiser at JohnHeiser6@gmail.com.

Classified Section



FOR SALE: Wes Nicholas at (916) 989-8929

<u>Item</u> :	<u>Amount</u>
LM nitrited polished crankshaft	250.00
LM 891 Camshaft 110 and 140 engines	75.00
LM dash with instruments	50.00
LM automatic transaxle	400.00
EM Four speed transmissions	200.00
EM wheels (4) lug	35.00
EM differential 3.55	200.00
LM rear windows in good condition.	125.00
LM rear bumper in good condition.	100.00
LM wheels (5 lug)	35.00
62-63 Simulated wire wheel covers-good condition set of 4	175.00
Front Bucket seats (3) for LM price each.	125.00
LM Ball bearings, wheel front and rear	10.00 ea.
Tires 13" and 14" in good condition.	Price varies
FC chrome bumpers F/R	200 ea.
Corsa dash complete with gauges	150.00
LM and EM Bumper guards PR	75.00
Started motor	75.00
LM 65 mid telescopic steering w/ wood grain steering whee	l 800.00
65 Corsa bright rear grill inserts	40.00
Cylinder Heads 80, 95, 110, 140 HP	Ask
Alternator adapter	35.00
Rebuilt alternator	150.00
Oil Filters	10.00
EM Air Filters (2)	18.00
Engines: 110, 140 HP	Ask

WANTED:

#1:
1966 Corsa
Convertible
turbo, 4 speed
car, either a #2
or a #3 if its
original,
straight,
complete and
running.
Contact
Chester
Keeton: (832)

#2: Corvair engines in any condition. Contact: Wes Nicholas at (916) 989-8929.

281-8009

Much more...give us a call.

Additional Corvair parts are available for purchase. Please contact us to see if we have what you have been looking for to complete your project. Contact **Wes Nicholas at (916) 989-8929.**

FOR SALE: Joshua Kirk 916-250-8086 1965 4-door - Automatic w/AC. 110 Engine.

1964 Corvair Greenbrier Nine Passenger Val



Events & Activities

Full Calendar of Events available on http://northern-california-corvairs.com

Current Events:

<u>Casa Robles Car Show</u>: April 27, 2024. \$20 entry fee per car. Contact John Heiser at John Heiser 6@gmail.com.

<u>Cal Expo Autorama</u>: May 3-5, Butch Gardner Clubhouse, Sacramento, CA. Those who wish to display their vehicle(s) still have time to send in their entry form to John Heiser at <u>JohnHeiser6@gmail.com</u>, but there is now a \$50 late fee. May 1st is move in day! Meet at 2:30 pm at the Cinemark Century Arden parking lot across from Cal Expo – Ethan Way.

Upcoming Events:

<u>Kaiser Employee Event</u>: Update: NO Corvairs! April 19 (11:30-1:30), Kaiser Roseville Roseville Parking Lot. There will be classic cars, but the have the limit and no longer request our Corvairs.

2024 Club Picnic: June 8, Mather Regional Park at 11:00am. We need volunteers to assist with set up and clean up. Please contact Kari Emery-Cotner if interested in helping out 4484.business@gmail.com.

<u>2024 International Corvair Convention</u>: July 21-26, Marriott at the University of Dayton – OH. More information: www.daytoncorvairclub.com

<u>Ironstone Concours de Elegance</u>: September 27-28. Deadline to register is August 30th.

<u>Central Coast Corsa Convention</u>: May 19-23, 2025. Santa Maria, CA. More info to follow.

Ongoing Events:

<u>Sacramento Hollywood Park Auto Club -Classic Cars</u>: Meets every 3rd Sunday 10:00 am at Leonardo DaVinci School. CCRC Club Member started this gathering, so let's join in.

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

<u>Folsom Cars and Coffee</u>: Saturdays -Town Center Theatre parking lot, El Dorado Hills, 7:00 am – 9:30 am.

Red Bus Brewery: Air-cooled drive-in gathering at Red Bus Brewery on Reading Street in Folsom – 2nd Thursday of each month at 6pm. There will be specials on beverages and pizza.

<u>California Auto Museum</u>: See Jim Kindley-*FREE* tickets for members (1st come/1st serve-until gone).

California Auto Museum Monthly Car Cavalcade – Photos from March Exhibit



Photos Courtesy of Dee Smirlis



CCRC Annual Picnic

June 8th / 11:00am – 5:00pm Save the Date

Mather Regional Park

4111 Old Eagle's Nest Road, Mather, CA 95655

\$5 per person / RSVP by May 15th

JKindley@gmail.com



Those who wish to fish: Fishing License Required (age 16 +)

Article of the Month

Didn't Porsche Design the Corvair?

Just how did the Corvair come to be? Of course, said many, it was designed by Porsche. Numerous influences, including a powerful tank engine, shaped Chevy's rear-engined compact. And Porsche was involved in an unusual way.



Story by Karl Ludvigsen-Photos from the files of Karl Ludvigsen-December 10, 2015 It's an idea that refused to die. When Chevrolet introduced its Corvair in the autumn of 1959, rumors were rife. Porsche designed the Volkswagen, didn't it? And wasn't the Corvair a grown-up Volkswagen? And what did Chevrolet know about designing air-cooled rear-engined cars anyway? Thus it was obvious: Porsche must have designed the Corvair!

The idea had some legs because it would not have been the first time that Porsche designed an American car. Between 1952 and 1954 it engineered and built prototypes of its Type 542, a four-door sedan for Studebaker with 120-degree V6 engines, air- or water-cooled to choose. This was a front-engined car in the conventional style, albeit with unibody construction and independent suspension at all four wheels.

Anticipating that such a full-sized auto might not be the answer to Studebaker's prayers, Ferry Porsche, the head of Porsche AG, also suggested a smaller car, his Type 633. His proposal showed a notchback two-door sedan with a Porsche-like front deck and a 2.0-liter flat-four engine behind the rear wheels. Air-cooled, it had hemispherical cylinder heads. Torsion-bar springs and 13-inch wheels were suggested for an admirably practical 14-footlong car.

Ferry Porsche later pointed out with a knowing smile that many of the Type 633's features and dimensions foreshadowed those of the Corvair. Its wheelbase was shorter at 102.4 versus 108.0 inches, but its track and width were similar. Although it was shorter, its seating would have been adequate with a height of 55.1 inches against the Corvair's 51.5. At just over 80 horsepower its engine output was to be similar with a top speed much the same at 90 mph. Porsche posited a weight of 2,112 pounds against the Corvair's 2,420.



Similarities notwithstanding, the Type 633 was not a Corvair precursor. Edward N. Cole, who headed Chevrolet Engineering when the project got under way, confirmed this. "I didn't talk to anyone at Porsche," said Cole, "but I did speak to some of the people at Volkswagen. I had known (VW's managing director from 1948-1968) Heinz Nordhoff quite well when he was at GM." A senior executive at Opel in Germany in the 1930s, Nordhoff had liaised frequently with his American counterparts. He had

no reason to withhold information from Cole, who would be competing in an altogether different segment.

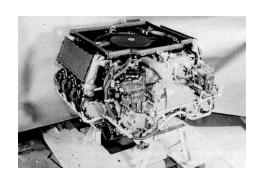
Planes, Tanks & Cars

With Porsche locked into a consulting contract with Volkswagen after the war, Nordhoff may well have told Ferry Porsche about his conversations with Cole. Although its agreement with VW prohibited Porsche from working for any rivals in the Beetle's engine-size category, this wouldn't have barred it from designing a larger-engined car for GM, just as it had for Studebaker. But it didn't. A comprehensive list of Porsche project numbers shows none that could even remotely have been attributable to the Corvair project.

Porsche, however, did ultimately figure in the Corvair's gestation. Here were Ed Cole's thoughts on its engine: "Because of its placement the Corvair engine required a low profile, although it was not necessary that it be opposed. Then the question was: should it be a four or a six?" At that time the flat six was more typically an aircraft engine with Franklins, Continentals and Lycoming's common in this style.

"In 1950 I logged about 300 hours in a Continental powered C Bonanza," Cole recalled for L. Scott Bailey, "flying many times on instruments under unpleasant conditions, and I certainly got to know the great reliability this engine had and still has for that matter."

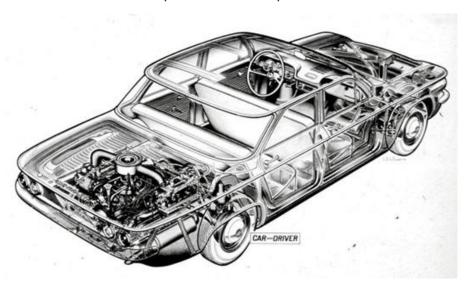
Another influence was a military project undertaken by the Cadillac Division of General Motors. "In 1950 we were asked by the government to develop a facility to produce another light tank," Cole explained. At the time he was a senior Cadillac engineer clearly destined for great things. "This was the T41EI, later the M 42, and for this we used an 896-cubic-inch Continental horizontally opposed flat six.



So once more we had exposure to an air-cooled engine—a configuration that was straightforward and simple. Naturally all our engineers working on the project became very familiar with this engine."

Although Cadillac's own V8 engines had successfully powered tanks in World War II, Cadillac couldn't challenge the Army Ordnance Department on the choice of Continental as the supplier because the Muskegon, Michigan-based engine specialist had been developing a new engine expressly for tank use. And it was quite an engine. Its 14.7 liters were deployed in six flat-opposed cylinders powering a four-main-bearing crankshaft.

Continental's Type AOS-895-3 six was shot full of high-tech features. Each finely finned cylinder had two vee-inclined overhead valves, closed by triple springs and operated by rockers from a single overhead camshaft. Rotating the cams and all the main organs were spur gears and shaft drives that would look familiar to any connoisseur of Porsche's racing engines. At the six's front end, twin-throat downdraft carburetors on left and right fed the inlet of a centrifugal supercharger—highly exotic equipment that bolstered the top end of the torque curve.

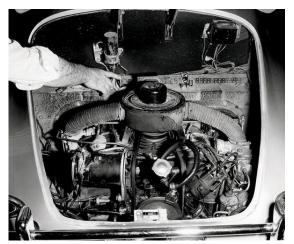


Also driven by the shafts was another racing-Porsche-like feature: a fine-bladed flat cooling fan above the cylinders. It drove air down through the cylinders and out to the sides through a pair of oil coolers. It would reappear, belt-driven, on the Corvair. A pair of Bendix-Scintilla magnetos fired a dual ignition. The result at 2,800 rpm was 500 hp gross, which delivered 380 hp at the same speed as installed. The vital element, torque, was 975 lb.-ft gross at 2,250 rpm, falling to a still-strong 825 lb.-ft at 2,000 rpm when installed.

This advanced engine made an impact on Cole, with whom the buck stopped when it was time to recommend a power unit for the compact Corvair, nurtured in its early days as "Project Holden." This was convincing because Chevrolet often did design work for Holden, its Australian cousin.

"From talks we'd had with engineers at Continental and elsewhere where fours had been built and our experience with the tank operation," said Cole, "the conclusion came quickly. From the point of view of smoothness and carburetion the six was easier to handle. And, all things considered, it didn't offer too much of an economic barrier. Everybody voted that the Corvair engine ought to be a six."

The choice of a flat-six engine was unusual at the time with few having been designed specifically for cars. One was an experimental Mercedes-Benz engine of the mid-1930s for a front-wheel-drive prototype, designed by the team of Hans-Gustav Röhr. Another was the Tucker 48's flat six that, in its final design, was a liquid-cooled conversion of a Franklin airplane engine.



Around that time, in 1948, Porsche schemed a flat six for a client in Argentina. Air-cooled, its 2.0-liter Type 372 had pushrod overhead valves and four main bearings. Never actually built, the project remained a secret.

Zuffenhausen's own six-cylinder 911 was almost a decade in the future when Chevrolet had to decide on the configuration of the Corvair's powerplant.

The First Flat Six-Powered Porsche. In the early

summer of 1957, Chevrolet Engineering bought a Porsche 356 1600 coupe. We can date it fairly precisely because it had the new teardrop-shaped tail lamps introduced that spring but not yet the exhaust outlets in the bumper overriders of the 1958 models. Its engine was dropped out and put on a dynamometer to be subjected to instrumented tests of temperatures and clearances. Information thus gained helped the Corvair engine's designers, who were having special problems cooling the center cylinders. This was, of course, new ground where the Porsche example couldn't help.

The Corvair design that evolved could hardly avoid looking like a cross section of a Volkswagen or Porsche engine with its pushrod valve gear and camshaft below the crankshaft. In this it was unlike the flat-sixes produced for aircraft that usually had the camshaft above the crank. The Corvair's rectilinear split crankcase with its flared bottom had

more of an aircraft flavor, however. Like aircraft sixes and the Continental tank engine, the Corvair had four main bearings.

The engine's overall configuration in detail was the work of Chevrolet's Adelbert "Al" Kolbe, who applied for a patent on its layout on December 31, 1958. Distinctive features were Chevy's stamped-steel rocker arms, introduced in 1955 on the small-block V8, and hydraulic zero-lash tappets to overcome the problem of differential expansion caused by heat in an engine with finned iron cylinders and aluminum heads. Unlike the Porsche and VW engines, the gear drive to the camshaft was at the engine's flywheel end.

Unusually, for what was seen as an economy-car engine, Chevrolet fitted each cylinder bank with its own carburetor. Designer of its crankcase ventilation Bob Benzinger said that this was done "to place the carburetors as close as possible to the inlet ports, achieving good response and maintaining high volumetric efficiency." This decision showed greater influence by Porsche than by Volkswagen, which made do with a single central carburetor. A penalty



was convoluted induction with a choke fitted to the central air cleaner. From 1962, each carburetor had its own air cleaner.

For engine cooling Chevrolet adopted the Porsche and VW solution by choosing a Siroccotype forward curved centrifugal fan. Instead of mounting it vertically as in those German examples, however, it placed the blower flat above the engine's center, following the Continental's example. This best suited the car's design, which required a low rear deck.

Even if Porsche had practically engineered the internals of the Corvair, there was no doubting the American origins of its shape and style. This was created at the end of the influence of Harley Earl, who left the office of GM Vice President of Styling Staff in December of 1958. It bore the Earl trademark of lowness calculated to emphasize length. But its styling was the work of Ned F. Nickles, working under the direction of William L. Mitchell, Earl's successor as Styling VP. The result was a uniquely elegant and appealing small car.

As the Corvair took shape under its "Holden 25" code name, its engine was ready for road testing before the first prototype cars. Waiting to accept it was none other than the same 1957 Porsche 356 whose engine was used for cooling experiments. At Chevy's freshly minted Engineering Center at Warren, Michigan, the first Corvair drivetrain was installed in the Porsche. Complete with Chevy's manual transmission, effectively creating the first flat-six-powered Porsche ever. The Corvair six fitted it surprisingly well. Eager as a kid, Ed Cole hopped in and belted away.

Cole vividly remembered that first encounter with the Corvair-powered Porsche: "Perhaps the greatest thrill for me personally was the first concrete evidence that the Corvair really came up

to our hopes and expectations," he recalled. "This came when I test-drove a modified Porsche which contained the new Corvair engine while we were waiting for our first pre-test prototypes of the Corvair to be completed. I drove this car at the GM Technical Center and Milford Proving Grounds in late 1957 and at Pikes Peak, Colorado in early 1958. She ran beautifully. I knew that we had a winner."

A Source of Inspiration

Ferry Porsche was, of course, interested in the Corvair. Through Huschke von Hanstein, his director of PR and motorsports, he arranged to buy one of the first ones made. It would be invidious to suggest that Chevrolet's effort influenced Porsche, but it cannot be overlooked that Leonard Jäntschke's first prototype engine for the future 911, the Type 745 of 1961, had a four-bearing crankshaft just like the Corvair's. For its final design, though, Porsche adopted seven main bearings instead. It was a decision that secured the long life of Porsche's flat six.

Ferry Porsche's Corvair wasn't the only one running around the streets of Stuttgart. Dan Gurney, one of Porsche's Formula One drivers in 1961-1962, brought one over to show what the New World could accomplish in car design. Porsche later used some Corvair Lakewoods to test its first flat sixes.

The many travails of the Corvair as released for the 1960 model year are well known. Mistakes were leaving off the front anti-roll bar to save money and allowing the proportion of weight on the rear wheels to rise too high, something that Ferdinand Porsche controlled rigorously in his designs. Steering response was too slow, deliberately so people would not excite it too much—not a good decision. The requirement for sharply differing tire pressures front and rear did not accord with American ideas of car maintenance.

However, a road test in Stuttgart-based magazine, Auto Motor und Sport, declared the Corvair "Europe's lost opportunity." They understood what Chevy had achieved in such a radical departure from the American norm. And when the 1965 model appeared, with its superb styling and Corvette-inspired rear suspension, the Corvair achieved its potential. Disappointingly, however, GM's management decided to let it fade away instead of exploiting one of the most charming and distinctive American cars ever made.



