

THE FOUR WHEEL INDEPENDENT

CHAPTER 170 EST. 1976

Our next meeting *October 10, 2023*



Our September meeting is canceled for Corvair Day. The next meeting will be held at Hoss's Restaurant in West York, PA. Come join us for dinner at 5:30pm. The meeting will begin at 6:30pm.

October 21, 2021



CPCC Club Cruise to Kings Gap and Mr. Ed's Candy Store, with lunch at a nearby restaurant. Time and departure location will be finalized at next club meeting.

TABLE OF CONTENTS

- VP RAMBLINGS
- CLUB MINUTES FROM AUGUST 8, 2023 MEETING
- CPCC "AFTER CHRISTMAS PARTY"
- NEW MEMBERS
- CORVAIR OPTION EXTRAVAGANZA AND OTHER MUSINGS!EADING
- BIRTHDAY'S AND ANNIVERSARIES
- MASONIC & ELIZABETH TOWN MODEL RAILROAD TOUR
- CONGRATULATIONS PAUL!
- UPCOMING EVENTS
- ANTIQUE & CLASSIC MOTORHOME SHOW
- CORVAIR TECH TIP
- DIDN'T PORSCHE DESIGN THE CORVAIR?

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Join Our Facebook Page



In Facebook, search for **Central Pa. Corvair Club** and request to join the group. Any questions, please contact Joe Darinsig at (717) 668-4414.

Corvair Ranch



Located at:
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Website: <https://corvairranch.com>

The Ranch Provides...

New & Used Parts
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Remanufactured Engines
Body & Interior Restoration

UPCOMING EVENTS

October	
10	CPCC Club Meeting at West York Hoss's in York, PA. Dinner: 5:30pm, Meeting: 6:30pm.
21	CPCC Club Cruise to Kings Gap and Mr. Ed's Candy Store, with lunch at. Time and departure location is TBD. Watch for additional details in future newsletters.
November	
4	Masonic Village & Elizabethtown Model Railroad Club Tour. Everyone will meet at the Mountville Exit off Route 30 at Rutter's at 1:30pm. After tour, the club will caravan to a nearby restaurant for an early dinner. It is suggested that everyone eat lunch before you meet the group. Additional details will follow in future newsletters.
14	CPCC Club Meeting at West York Hoss's in York, PA. Dinner: 5:30pm, Meeting: 6:30pm.
December	
	No Club Meeting This Month
2024	
January	
6	CPCC "AFTER CHRISTMAS PARTY". See additional information below.

**CPCC "AFTER"
CHRISTMAS PARTY**
JANUARY 6, 2024
2PM - 5PM
Perkins Restaurant
300 Eisenhower Drive
Hanover, PA 17331



Our party this year will once again be held at Perkins Restaurant in Hanover, PA. We will gather at 2PM to celebrate the past holiday season together. We do this because we are all so busy between Thanksgiving and New Year's Day. At the party we will be ordering off the menu. Those who wish to participate (voluntary only) in the gift exchange, please bring a wrapped gift costing no more than \$20.00. Male to male and female to female gifts only. Please let JOHN Berkheimer know (717-632-5617, 717-479-2595, or jhbmail1@comcast.net) by December 26, 2023, if you plan to attend. The restaurant requests a count of how many people to expect. In case of inclement weather, please call JOHN on the status of the party. A notice will also be sent out via email and on our website. Contact a CPCC Officer for additional information.



NEW MEMBERS

Curtis and Jane Bonser

WELCOME BACK Curt and Jane! Curt no longer has his Corvair. He and his wife, Jane, live in the Mechanicsburg area. He stopped by at our Corvair Day event and rejoined. We are so excited that they decided to rejoin.

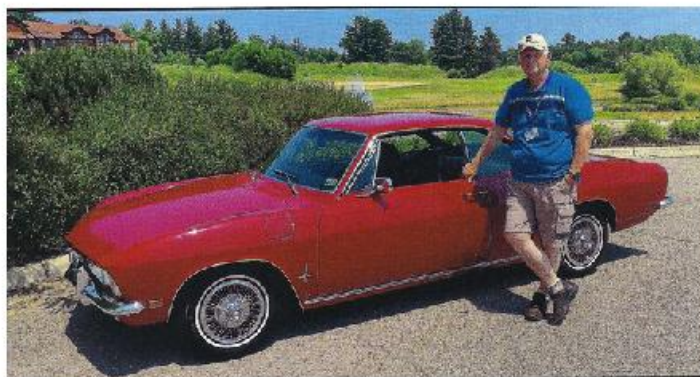
William Kurtz

William joined the club on Corvair Day. He lives in the Dover, PA area. He owns a white 1964 Monza convertible. We look forward to getting to know William. See you at our next meeting.



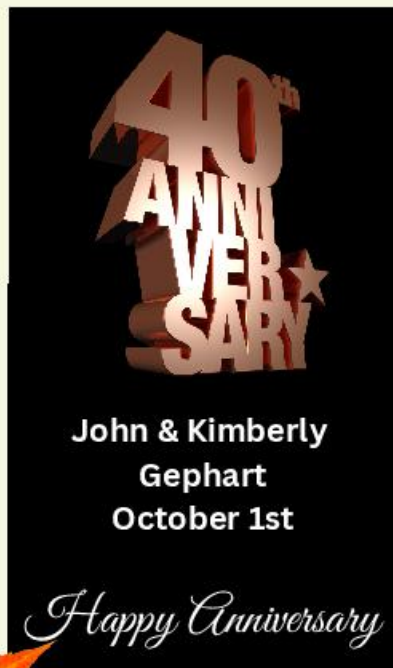
Congratulations Paul!

2023 CORSA Convention - Concours



Paul Miller- 1969 Monza 2-dr. Coupe
90.44 Points: Bronze

October Celebrations



<i>Anniversaries</i>	
Tom & Becky Zinn	9th
Ron & Barb Nagle	10th
Robert & Carletta Moats	24th
Tim Schwear & Melissa Landis	31st

<i>Birthday's</i>	
Jeff Ostroff	10th
Francis Lovett	15th
Bill Cameron	30th
Joyce Berkheimer	31st
Katherine Canapp	31st



Masonic Village & Elizabethtown Model Railroad Club Tour.

November 4, 2023
1:30 PM

Everyone will meet at the Mountville Exit off Route 30 at Rutter's at 1:30pm. After tour, the club will caravan to a nearby restaurant for an early dinner. It is suggested that everyone eat lunch before you meet the group. Additional details will follow in future newsletters.



A sincere "Thank You" goes out to everyone who helped at Corvair Day this year. The day went off without a hitch and made for a great success. Everyone loved our trophies this year with a photo of their car on the award.

Thank's everyone who donated items for gift and auction tables. Comments were made at what great items we had for them to choose from.

Another shout-out to EMMR. The breakfast, lunch, and snacks were delicious. Many of our attendees took the liberty of visiting the museum.

Great job everyone!

Antique & Classic Motorhome Show

Submitted by MiLana Wright



Jeff and I attended **The Antique & Classic Motorhome Show** in Columbia, PA on Saturday, September 9, 2023.

Eight motorhomes were in attendance on this hot day. There was only one Ultravan. It was #20, the last one produced in California. This year it drove onto the show field under its own power! Once again, the Ultravan received lots of attention. It was called "Cool" many times throughout the day. It was the winner of the Barney's Automotive Choice Award. We had a great time!

VP RAMBLINGS

Submitted by John Johnson

Another Corvair Day is over and if we used a single word to describe the event, it would have to be **FANTASTIC!!!** Every year this event seems to get better. The Museum was pleased with the free will donations, and they appreciated the Club's donation. The ladies in the kitchen were pleased with the food sales and everyone had a great day. The weather couldn't have been nicer. If we would have "special ordered" it, I am sure it would have been just like Saturday's.

A special thank you has to go to Dave Steigauf. Without him, I am not sure how things would have turned out. Dave did all the planning and was there to respond to any problems, but because of his pre-planning there were no problems. Again, **THANK YOU DAVE.**

It has been an eventful time for the Club recently. In August we took a boat ride on the Susquehanna River and September brought us Corvair Day. There are three more upcoming activities, a pizza party at Duane and Jacquie's, a cruise to King's Gap and a visit to the Masonic Village in E-town to see their train display. The Club remains ever active until the end of the year.

The last thing I would like to mention is an article I saw in the Hagerty Newsletter. I receive the Hagerty Insurance Newsletter periodically. This summer an article comparing new cars with similar classics. Two cars on the list were the Porsche Cayman and the Yenka Stinger. In the article the following traits were mentioned. Both cars have flat 6-cylinder rear engines, quick steering, stiff suspension and road noise. They are built for speed on the track. Unfortunately, Don Yenka turned his attention to the Camaro and Chevy II. However, before these two, there was the Stinger. To paraphrase the article 'you'll love every minute of the driving experience'. I remember the Corvair being called the "poor man's Porsche". After all these years, this phrase still holds true.

See you down the road.

OIL ON THE GARAGE FLOOR

by Lou Trimper

If you have a Corvair that likes to mark it's territory, here is an easy fix. You will need:

- 1 Drip pan (24" x 36")
- 1 pack of cheap absorbent underpads (23" x 36")
- 6 medium size magnets

Put the underpad on the drip pan with the magnets and slip it under the vehicle.

The magnets will keep the pad from blowing off. The pad will absorb the oil drip and keep it off the floor.

When the pad absorbed enough oil, remove and replace it with a fresh one.

The oil will stay in the pad. Quick and easy clean up!

*Corvair
Tech Tips*



THE PREVENTATIVE MAINTENANCE SERIES

“WINTER MAINTENANCE”

Author: Mike Dawson, Taken from the internet: Tech Tips from Central Oklahoma Corvair Association

It's time to review winter maintenance issues that might affect our Corvairs.

Keep in mind that heater efficiency can diminish slowly over time and not be noticed. Compare your car with another and whoever has the lesser heater has to get to work. Every part necessary to bring your car up to peak efficiency is available.

The following are some of the common and uncommon winter related items:

Early model and F.C. owners should know that the “Air” control is for defrost in warm weather. It actually collects fresh air off of the cooling fan before it is heated (at the 3” hose at the back of the engine). For maximum heat, leave that lever up.

Check the cable travel at the heater box to see that the cable actually opens the door completely. Late models are adjustable at that point; check the shop manual.

Early model cars have a diverter door at the front floor outlet that closes to make the defroster work. With the defroster lever down, check for leaks at the floor and replace the foam door material if it is leaking.

The lower outside air vent doors have rubber seals that are easily replaced if they leak. Vendors have all the parts. Also check the speedometer and brake line grommets for leaks. You can remove the front grill on F.C. models and seal the back with tape – it will stop most of the air leaks on your feet without doing anything else.

Install a new high speed blower motor with a new plastic fan in lieu of the metal fan (the center comes loose). Check for rodent nests in the heater box while the motor is out. Many Corvairs have slow blower speeds due to a voltage drop at the motor box. Run a voltage drop test or simply connect a jumper from a known good ground to the motor while it is running – if the motor speeds up, make the jumper permanent. You can add a high speed relay that raises available voltage and blower RPM. Instructions are on a separate tech sheet.

No matter how good your blower system is, if you have holes in your lower engine shrouds or the carpets are a swamp, you will get fogged up windows. Patch or replace bad shrouds and fix the interior leaks.

Disassemble, clean and lube your blower switches and they will last another 40 years. The early model cars have the blower speed resistor in the passenger side defroster duct, so do not stick a wire down there. If you have foam bits coming out of your defrosters, you may get smoke from the glowing resistor wire on low and medium speed.

Check your exhaust system! A rich gaseous smell that seems to go away when the engine is warm could be deadly. Use a stethoscope to check exhaust packing and head gaskets. Exhaust pipes need to exit out from under the body or the exhaust can get pulled in to the heater. Check thermostats and operation: Remember they fail in the open position.

Key elements of cold weather starting: 1. Battery, Starter and Cables, 2. Engine tune, 3. Clean dry fuel, 4. Clean Oil.

Many people think a slow cranking car in cold weather is due to the oil – not so unless it is dirty. Clean 30wt will allow faster cranking than dirty 10wt.

A battery will have only 30% of its cranking capacity at zero degrees. Also check cranking with a voltmeter; the minimum allowable voltage is 9.6. Corvairs should always be above 10. Try taking your battery inside overnight and notice the wonderful difference. You could also leave a drop light on beside it all night.

Battery cables need to be removed from the battery with the inside of the cable and the outside of the post cleaned until shiny. Many jumper cable sets are almost worthless since the wire gauge is too small – look for 4 gage or smaller. You get what you pay for.

There is a difference in fuel blends between winter and summer and you should use the grade that your car works best with. You should add some gas antifreeze just to be safe, but only the brand that uses isopropyl alcohol. Read the label, the yellow bottle of HEET is worthless, the red bottle works great. Rubbing alcohol will not work because it already has 30% water in.

All tune up items are important, but plugs, plug wires and the cap top the list of culprits in cold wet weather no-starts. A simple check of the wire boots that fit over the plug may show brittle rubber with cracks - guaranteed to misfire, particularly if the plug gaps are excessive.

Avoid starting fluids, the knocking noise that accompanies the starting is attempting to pop out valve seats and break top piston rings.

Tire pressure always drops in cold weather, and although radial tires try to keep their footprint, proper pressure and alignment are critical when it is slick. Check tread depth and tires must be matched to be effective on slick roads. Radials work good, an “all weather” radial is better and an actual radial snow tire is best. If you compare a snow tire with an all-weather tire, you will see a “chunkier” appearance at the outer edges of the tread pattern. They will be a little noisier on the highway.

Sixty to eighty pounds of weight in the trunk seems to help front stability (GM suggested 60). Shift automatics to neutral when braking at a slick stop – it makes a difference, a BIG difference when the chokes are on.

If you park in the garage, check the gas tank bottom.



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 fear-engined compact. And Porsche was involved—in an unusual way.

STORY BY KARL LUDVIGSEN, PHOTOS FROM THE FILES OF KARL LUDVIGSEN, DATED 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 choice. 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-foot-long 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 Lycomings common in this style.

*Didn't Porsche Design the Corvair?
(Continued on Page 9)*

CORVAIR OPTION EXTRAVAGANZA AND OTHER MUSINGS!EADING

Submitted by Paul Miller

Just this morning, in reviewing the availability of GM COPO (Central Office Production Order) options, I reminisced over the sheer fun it would have been to order YOUR Corvair EXACTLY how you wanted it- factory fresh.

First, of course, is your pleasure of style- but, for this exercise, let us stick to the car side- 2dr, 4dr, convertible. We'll leave the forward control and wagons for another day.

Option, options, options. Just for giggles how about everyone's favorite – U15- Speed Warning Indicator- a bizarre and very low penetration option at a list of \$11.60- seen one but never one installed. Too obscure? How does \$133.80 AM/FM Radio (U69) grab you? Hey, you can enjoy this non-stereo system going down the road. Want stereo? A rear speaker is \$13.20- but alas it isn't true stereo.

More common is the Appearance Guard Package ZP5-w/frt/rr bumper guards, mats, mirrors & other shiny bits for \$38.05. A bigger ticket item is the 140HP (L63) engine at only \$79.00 (yep, \$79.00 green backs). But in 2023 dollars it would be \$660.90- not so cheap 'eh.

Telescopic Steering Wheel (N35) paired with Special Steering (N44) at a total of \$57.95 gets the good stuff in your car. You might as well get F41 the Special Purpose Suspension at just \$10.55. All in for less than \$100 bucks and with this set up you are positioned to win a local Gymkhana or the Hershey Hill Climb.

If I had only kept the old Corvair- it would worth so much today- right? A reasonably equipped '69 Corvair Monza ran about \$2600. Today, it is more like ≈\$22000. Best look to the used car market where really great Corvairs go for less- unless it is a Rampside with strong price winds at its back. There are at least four cars with list prices currently available today under \$22,000- Nissan Sentra- \$21,000, Kia Soul \$20,500, Subaru Impreza \$19,800 (AND has a boxer engine-shades of Corvair), and at the low rung is the Mitsubishi Mirage at \$16,100. It, however, is leaving the market in 2024- hurry to get this automotive gem before they're all gone.

So, you can option out your favorite Corvair vehicle style w/options and relive the glory days of the Corvair decade. Or you can go truly rogue and get that electric car you have secretly desired. A Telsa Model 3 is around \$40,000 – BUT you get \$7500 back from Uncle Sam come tax time. AND with average fuel costing \$650/year (via electricity) it is a bargain compared to gas at \$2400. This is a good subject to entertain your friends & relatives with- maybe a debate at Pizza Night?

So, get out a blank piece of paper and some of the literature from you Corvair stack and have at it- go high, go low- or go fast or slow- it going to be a lot of fun. Or you can hang around the charge station and talk the +/- of going electric.



MINUTES FROM AUGUST 8, 2023 CLUB MEETING

Submitted by Carol Trimper



The meeting was called to order by our President, JOHN Berkheimer. He mentioned that the club won 3rd Place for the Tony Fiore Newsletter Award at this year's convention. Unfortunately, it was not announced at the convention banquet.

Carol Trimper read the minutes from the last meeting. Lou Trimper won the "Caption This" for the month August.

The Treasurer gave his report. Bank account is in a positive balance. Two have registered for Corvair Day.

Old Business:

- John and Sandy Johnson gave the members an update on the cruise Chief Uncas Boat Excursion. Carol will email members Wednesday evening as to if the cruise is still on. It was decided that members will meet at the Rivertown Restaurant after the cruise for lunch. Everyone was instructed to meet at the Rivertown Restaurant at 9am. See photos of event on pages 3-4.
- JOHN Berkheimer informed members that Dave Steigauf and Bruce Culp will be joining him at the 33rd Annual First State Corvair Club, Inc. All Corvair Car Show on August 12, 2023. If anyone is interested, please contact JOHN. See photo of event on page 6.
- Samples of Corvair Day award plaques were shown to members by Duane Aldrich. He explained that he will be taking photos of cars with their driver and printed out on site. These photos will be inserted onto the plaques before awarding them to participants. A vote was taken as to if the plaques will be dark or lighter wood. It was decided on the darker wood. There will be 20 People's Choice Awards, 1 for longest distance, and 1 for Best of Show.
- Dave Steigauf stressed to members that we are in need of volunteers to help with setting up on Corvair Day. If you can help, please arrive between 7am - 7:30am at EMMR. We need people to help with registration, parking cars, setting up and tearing down, Silent Auction help, door prizes help, and much more!
- Dave Steigauf requested members to bring items early so that they can be determined if it will be used for Silent Auction or door prizes. They must arrive by 8am at the latest. If you cannot make it this early, please try to get your donations to someone who will be arriving early. Silent Auction items will be ten prizes all of which will be car related.
- Dave Steigauf gave members the breakdown of last year's Corvair Day. The club had a profit of \$231.70.
- Dave also talked to Joe Darinsig about the dash plaques. Sixty was ordered and Joe will be giving them to Dave once completed.
- There will be no goodie bags this year for Corvair Day.

New Business:

- John Johnson reminded everyone of the Kings Gap Trip coming up on October 21, 2023. A brief discussion was discussed as to where everyone will meet that morning. Final determination will be decided at the October meeting.
- JOHN Berkheimer reminded everyone of the Pizza Party at the Aldrich's home on September 30th.

Paul Miller shared about his experience at Mecum Auctions when it was in Harrisburg. He shared that everyone should go at least once. It was very interesting. It cost \$40 to attend.

Dave Steigauf made a motion to adjourn the meeting and seconded by Paul Miller and the meeting was adjourned. The next meeting will be held August 8th at Hoss's Restaurant in West York, PA.

Attendees

Lou & Carol Trimper	Dave Steigauf	Steve Sabaka	Francis Lovett
JOHN Berkheimer	Linda Enfield	Paul & Sue Miller	Tom Zinn
Ronnie & Genevieve Wimer	Neal Lutz	MiLana Wright	Bruce Culp
John & Sandy Johnson	Ron Hash	Duane & Jacquie Aldrich	

Please send your stories, ideas, recipes, photos, and comments directly to Carol at lcl@pa.net. Preferred format for electronic submission of documents is MS Word and format of pictures should be JPEG. Deadline for submitting information is the 20th of the month for the next month's publication.

The Four Wheel Independent is a monthly publication of the Central Pennsylvania Corvair Club (CPCC), Charter Chapter #170 of CORSA. Articles may be reprinted in any CORSA Chapter publication, as a service to CORSA members, provided credit to the author and this newsletter is clearly stated. The Four Wheel Independent newsletter may use material from many sources and may not give appropriate credit. If your material appears without acknowledgement, we thank you for your contribution. It was used in good faith to help preserve, maintain, drive, and enjoy our CORVAIRS!

Newsletters can be found on our website: <http://www.centralpacorvairclub.org/>.

Didn't Porsche Design the Corvair? (Continued from Page 6)

"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 T41E1, 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-angled 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."

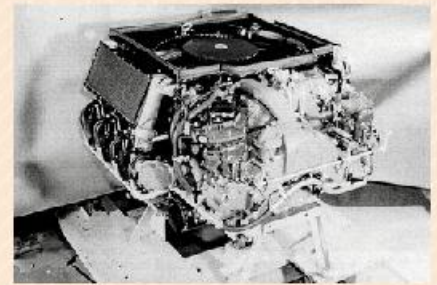
The choice of a flat-six engine was unusual at the time with few having been designed specifically for cars. One was an experimental Mercedes-Benz engine of the mid-1930s for a front-wheel-drive prototype, designed by the team of Hans-Gustav Röhr. Another was the Tucker 48's flat six that, in its final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



Didn't Porsche Design the Corvair?

(Continued on Page 10)

Didn't Porsche Design the Corvair? (Continued from Page 9)

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 Sirocco-type 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 P. 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 Jäntsche'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.

ABOUT C.P.C.C.

The Central Pennsylvania Corvair Club (C.P.C.C.) is a non-profit organization dedicated to the preservation of the Corvair and Corvair powered vehicles. We provide knowledge about the Corvair to our members and other car enthusiasts, as well as hold monthly meetings, events, and social gatherings for the enjoyment of our members.

C.P.C.C. is Chapter #170 of the Corvair Society of America (CORSA). Dues for C.P.C.C. are \$16.00 per year or two years for \$30.00, which must be sent in the form of a check or money order payable to "C.P.C.C." and mailed to C.P.C.C. Treasurer, c/o Dave Steigauf, 599 Westfield Drive, Landisville, PA 17538. Please include C.P.C.C. Membership Application form along with your check.

It is suggested that C.P.C.C. members also become members of CORSA, the national organization. CORSA dues are \$45.00 per year. Dues may be sent to Corvair Society of America, P.O. Box 68, Long Lake, Minnesota USA 55356 or online at <http://members.corvair.org>.

Newsletter submissions should be sent to the Newsletter Editor, Carol Trimper at 30 Wheaton Drive, Littlestown, PA 17340 or email to lcl@pa.net.

All other club inquiries should be directed to the C.P.C.C. Secretary, Earl Holmes, 1511 Hicks Drive, Dauphin, PA 17016.



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