The President's Page - Bob Helt, "Behind The Scenes At Chevrolet Engineering" - November Meeting Minutes - "2200 Miles," From the Editor
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Vegas Vairs
Chapter 891 of CORSA

Vegas Vairs meets monthly at 6:30PM on the second Wednesday of the month at Denny's near Charleston and Fremont.

Annual membership dues are $20 and are due by February of each year. Dues may be paid at the monthly meeting or mailed to the address below:

Vegas Vairs
PO Box 621925
Las Vegas, NV 89162-1925

President, Vic Howard
Vice President, Arlon Sibert
Secretary, Sallie Wentworth
Treasurer, Ingrid Howard
Board Member, Bob Helt

Vegas Vairs Vision Editor
Pamela Castiglione

Contributions to Vegas Vairs Vision are ALWAYS WELCOME! If you wish to submit articles, ads, photos, etc., email me at dimene80@msn.com or mail your contribution to the address below:

Pamela Castiglione
Editor Vegas Vairs Vision
617 Falcon Lane
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I hope all of you had a very happy and filling Thanksgiving! We took a trip to Phoenix to see our family and friends there and ended up staying two weeks. It was a happy and fun two week but we are glad we are home and are looking forward to a peaceful December. BUT WAIT! I forgot! This month is possibly even more active and exciting with the Christmas season on us. Shopping, packaging and shipping all the "goodies" to the grandkids and other family members. I bet all of you are going through this as well. Then right behind that comes the NEW YEAR and those celebrations. We don't celebrate as vigorously as we have in years past but we are happy to see that we all made it to the new year and even though we are in some difficult times, we do appreciate that we did make it.

Corvair wise, it has been a bit quiet this month and I even had to put the battery charger on the ole' 66 Monza to wake it up. Guess that little clock used a lot of energy to keep time while we were away.

Last month, we gained a new member. We welcome Kelly Magowan who, along with his friend Paula, brought his beautiful 64 convertible in the parking lot. Kelly is a pilot and enjoys his hobbies of Corvairs and flying. WELCOME TO VEGAS VAIRS, KELLY!

Don't forget, if you have some unwrapped new toys, bring them to our December 10th meeting so we can get them to the "Christmas Toy Run" on December 20th. I'm not sure who will take them but we will make sure they arrive so Santa can deliver them to the children.

Those of you who volunteered to bring door prizes, and you know who you are, please don't forget! We did get some new drawing tickets so we will be around, at the meeting, to sell you your 50/50 and door prize tickets.

We will see you at the meeting, hope ALL of you can make it
A fuel injection system for the Corvair engine was considered one route to increased performance by Chevrolet Engineering. In 1957, an optional mechanical fuel injection (FI) system was offered by Chevrolet to boost their 283 CID V8 engine output to one horsepower per cubic inch—an industry first. This high-performance option was not without its problems. It was rather expensive, selling for nearly $500 on a $2500 car. Also it was a very complex unit, prone to clogging, and not easily serviced. Since the FI units had to be calibrated on a flow bench to get the proper settings, most problems could only be fixed by installing a rebuilt unit, which was a very expensive way to go. But the FI did produce the desired power along with some excellent fuel economy due to its precise metering.

Could these obstacles be overcome for the Corvair engine while still delivering the anticipated high performance and economy? Chevrolet Engineering thought it could be done and launched the Corvair FI development program.

The FI program started on 11 August 1962 with a series of pre-tests to evaluate feasibility. The fuel injection unit initially used was a mechanical injection system commercially produced by Marvel Schebler, a division of Borg Warner Corp. At the start, six individual ram pipes with no plenum were used. The test engine was already mildly modified for performance increases.

Displacement of this test engine was 164 CID (two years before a release to production!). Highly modified Bill Thomas 4X1 cylinder heads with 1.70 inch intake and 1.38 inch exhaust valves were purchased and converted to accept the FI ram tubes. These same heads were also the inspiration for the 4X1 heads later released to production on the 140 hp engine. High-lift and long duration camshafts were purchased from Iskenderian and used in nearly all subsequent FI tests.

During the approximate 30-month development period, standard items on most FI test engines included 164 CID, Isky camshaft and Thomas heads.

Following a successful feasibility study, considerable development was undertaken on the FI program starting 12 February 1963. The goals of the next phase were “to obtain the minimum information necessary to select a manifold configuration required to obtain maximum performance with minimum detriment to idle [quality].” Various combinations of ram tube lengths and diameters were tried, both with and without a central plenum. Tees in the ram pipes were also tried, as well as various exhaust header systems. The following initial combinations were tried:

1) Ram tubes with no plenum. Lengths of 16", 20", and 24", with each of the following ID diameters: 1-5/8", 1-3/8", and 1-1/4".
2) Ram pipes with a small volume, centrally mounted plenum using the best tube combination from above. Warren LeVeque’s six-runner setup is quite similar in physical appearance to this combination (but without the Quadrajet carburetor of course).
3) Ram pipes with Tees connecting opposite cylinders.

Thru this evaluation, a combination of 25" long ram tubes with a 1-3/4" ID and a centrally mounted plenum were selected for comparative performance testing. This FI engine performance was compared against the four following engines:

1) 6X1 bbl carburetors,
2) Dual 2X3 Weber carburetors,
3) A 1963 Turbo engine, and
4) A 1964 Turbo engine.

The FI engine produced 133 hp net at 4800 rpm. This output was more than either turbo engine, but was less than both carbureted engines. Apparently FI development progress was encouraging enough to allow this engine to be installed in a vehicle on 19 April 1963 for further testing.
Back at the lab, more tests of ram pipe lengths and sizes were performed. Various combinations of Tees were tried. In May of 1963 a Rochester-designed mechanical fuel injection system was installed and tested. This unit had almost identical performance characteristics to the Marvel-Schebler system.

On 5 November 1963, the then current version FI engine was evaluated for performance in the lab and compared to the 4X1 140 hp engine, also in development. If the FI engine had not produced some 14 more horsepower (using an Isky cam and Thomas heads) than the 140 hp engine, it’s easy to see that this might have been the end of the FI program.

As the FI development continued in the lab, a comprehensive road test was being concluded on 15 November 1963. In the development engineer's report of a 847 mile road trip of three Corvairs: one turbo, one with Marvel-Schebler FI, and one with the Rochester FI system, he termed both FI cars “responsive and gutsy”. The engineer however stated that “much polishing of both engine and injection unit is needed prior to future road tests and serious release [to production] considerations.” Indications were that a release was planned for the 1965 Corvair.

It's of interest to note that two of the three Corvairs partaking in the November 1963 road test were modified to include the 1965 suspension. The development engineer described his impressions as follows:

General flatness and softness of the 1965 suspension was very noticeable marking a pleasant change from the cork-like ride of the 1964 suspension. Wind wander also appears to be greatly improved. Cornering ability of the 1965 suspension gives a feeling of confidence on control whereas the 1964 suspension, while very good, gives one the feeling of edginess on control.

Further development work continued in the lab. Different versions, and number and placement, of exhaust stacks, exhaust log-manifolds, and throttle size, were tried. Also Chevrolet 140 hp heads, replacing the Thomas heads, were modified and tried.

By July 1964, both the 140 hp and 180 hp turbo engine development programs had made stronger progress than the FI engine, and were released to production. One significant test causing the FI engine to be kept in development and not released was run on 21 July 1964. In laboratory performance tests comparing the 1965 turbo engine to the latest FI engine, the turbo engine had a much broader torque and horsepower range. Although the FI engine did exceed the turbo engine output at speeds in excess of 5000 rpm, the turbo engine was the overall winner.

During October and November 1964, four more FI engines were built to continue the development program. Three of these engines used modified Chevrolet-designed 140 hp heads, Chevrolet experimental camshafts, and ram tubes with Tees. Special cylinder head hold-down studs were specified for these engines indicating either a new length or greater strength was required. One of these engines was installed in a vehicle for testing. The others were run on engine dynamometers in the lab. The 5 January 1965 report stated that FI engine cold starts were satisfactory.

More camshaft and compression ratio tests were run resulting in a 2 February 1965 summary report by the development engineer. The engineer stated that they had, “achieved 180 hp advertised gross [146 hp net at 100 degrees F] with an engine that will idle at 500 rpm.” This was using a .468” lift camshaft similar to the Isky Magnum (compared to .390” lift of the stock 140 hp engine), modified 140 hp heads, and six 1- 9/16” ram tubes flared at the top and connected by brass Tee fittings. His report went on to say, “that further testing was continuing on, with camshaft indexing to select optimum camshaft and timing, exhaust system evaluation, and determining an optimum compression ratio for ‘as installed' performance’.”

Although this last report was very positive, and it might be thought that release to production was imminent, the end was very near. That same month, on 24 February 1965 a final lab test comparison was run which heralded the termination of the 30-month FI development program. After performance tests were run using the latest FI engine with Rochester fuel injection, the FI unit and ram tubes were removed and four one-barrel, 1"-venturi carburetors were mounted to the heads using adapters, and the tests were rerun. In comparison, the torque and horsepower outputs of the FI engine were just not that much greater than the carbureted version. Certainly not enough greater to justify the additional production costs and higher selling price of the FI unit.
November 2008 MEETING MINUTES
11.12.08

Recorded by Sallie Wentworth


Treasurer's Report: Ingrid announced that we have a current balance of $376.56.

Vic told us about the Ultra Van Show in Avi. Vic also told us about several Corvairs that he knows of that are for sale.

Christmas Toy Run! Bring your new, unwrapped toy to the December meeting on December 10. Someone from Vegas Vairs will make sure the toys get to the kids! If any members are interested in participating, the Christmas Toy Run is Saturday, December 20.

Marty told us about a 65 Corsa coupe that is for sale. It has belonged to Marty's friend since 1972 and has always been garaged. It is extremely tight! It has BMW seats, AM/FM stereo, all gauges. The engine was the grand prize two years ago at Palm Springs...with stainless steel brake hoses! It handles beautifully, has nice mag wheels and is for sale for only $8500! There has been no rust EVER! The underside is as nice as the topside!

Marty also needs a good transmission and alternator cores.

There were also discussions about weekly car events here locally. There is one on Sunday mornings with 50-100 cars near the Lowes at Craig/Jones in the Dunkin Donuts shopping center from 8:00-10:00
There is another on Saturdays from 7:00-8:30ish at the Winchells at Tropicana and Mountain Vista.

Raffle Prize Winners: Paul Green, Don Holt, Suzan Sibert and Nora Zale.
The 50/50 was split between Ingrid (with a yellow ticket) and Marcia (with a blue ticket).

Volunteers to bring door prizes for December were Kelly McGowan, Ernie McKinney and Paul & Vickie Bernardo.
Thank you all!
Upcoming Events:

December 10  Club Meeting at Denny's

December 20  “Christmas Toy Run” with Santa to the Children's Christmas Get-Together (702) 643-0000

Drive your Classics with Santa & Bring a Toy or Gifts for the Kids * Open to Everyone !!!

2009 LVCAI “Cruise Nights”, “Special Events” & “Car Show Schedule”

January 16  “Friday Cruise Night” 6pm-9pm (702) 643-0000

For Sale:

1965 Monza
110 4-speed with AC. Custom Interior, Corsa Dash, Pontiac Hood Tach. Needs Paint and minor, minor body work. $2500
Contact Marty Katz. 303-7829

1961 COUPE / 1967 COUPE
Timmy Bishop has two Corvairs for sale...a 1961 Corvair coupe automatic 90hp (with a huge pile of paperwork tracing its history) and a 1967 coupe 4-speed that was a one-owner until Timmy's dad, Matt, bought it a year or two ago. They're asking for $2000 for both, but are leaving town and NEED to sell them! Steve has their number. Call Steve at Car City at 702-459-5700.

1965 CORSA TURBO
Crocus Yellow Turbo. Much work done over the years.
$6000 negotiable. Contact Michael Cassera. 480-4404 or michael@cassera.net
Listed on the CORSA list of Corvair parts and Repair Specialists

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Contact Pamela Cadiglione to find out how
My friend invited me up to Portland, Oregon for Thanksgiving. I could not afford a plane ticket. So, what was my next option? Drive! Here were my options: there was my 1991 Silverado, currently leaking antifreeze; my 68 Bug—currently not running; or my baby, the 1964 Corvair with no heat. Well, you guessed it, the Corvair is the most road worthy vehicle I currently own. It was definitely time to beef up my AAA package. I upgraded from Classic which only provides five miles free towing to Plus which increases free towing to one-hundred miles, not that I didn’t trust my baby, I just figured, (or, I should say my friends and family just figured) it was better to be safe than sorry.

The next obstacle became the weather. It rained the last two days leading up to Thanksgiving and rain was also predicated for Thanksgiving Day. Every friend and family member of mine tried to talk me out of making the drive. All were convinced I would get stuck somewhere and freeze. “And who knows how long you would be stuck before they found you.” Scared by so many paranoids, I bought an emergency blanket, flares, pepper spray, beef jerky, and bottled water. I had never done this for any other road trip. I also had my 9/16 and 3/8 wrench, extra fan belt, spare tire, and fix-a-flat. I also knew I would be cold with no heat especially with the rubber missing on the back quarter window on my side of the car. So, I had part C8204 express shipped by Clark’s. I spent thirty minutes struggling to install the weather stripping on my quarter window, but at least it would keep the cold air off my left ear and neck.

54133, 7 am Thanksgiving

It was time to hit the road. I loaded my car, fog-x ed the inside cab and rain-x ed the front windshield. It was already raining and wet from the previous night of rain fall. I gassed up and hopped on the 95 north bound. Not even ten minutes into my trip, water started dripping on my left thigh and in between my legs. What I had thought would aid my visibility (rain-x) was only assisting in making me cold and wet. The water was flying up the windshield and through the gap between the chrome and the convertible top. Definitely a BAD START. I’m an hour into my trip and driving through constant rain when my windshield wipers stop working. At the next turn around in the highway, I flipped a u-turn—defeated. Everyone was right. It’s not smart to take a 44 year-old vehicle with no heat 1,000 miles to Portland, Oregon in the winter! I figured I would call my parents and tell them I would make it to one o’clock dinner after all. I would also have to call my family in Reno and tell them I was not going to make it to four pm dinner. Then, all of a sudden, the wipers came back on. Should I turn around again? Shouldn’t I just take this water dripping on me and stopped windshield wipers as a very strong foreshadowing, a glimpse into the kind of trouble that could call for my emergency kit? Maybe it was stubbornness, but I did not want to tell anyone that my car couldn’t do it. I changed direction again at the next turn-around, and then drove another hour in the rain before the sun light started to peak through the grey clouds.

54634, 3:50 pm

I arrive at my cousin’s house in Reno, Nevada completely frozen. My three jackets, pair of gloves, beanie, and thermals beneath my jeans—did not keep me warm. Ten minutes later I started eating turkey and defrosting from the stomach outward.
54634, 6:45 am Friday

It’s still dark in Reno, and my car is covered with ice. I feel bad for my baby, having left her outside all night (she’s used to a garage). It was like putting an indoor dog out over night. It just wasn’t right. Instead of sad puppy-eyes, I got an ice covered car. My punishment: freezing to death from Reno to Portland for the next eleven hours straight.

55253, 5:45 pm

One-thousand one-hundred and twenty miles from my start, I had arrived in Beaverton, Oregon a suburb of Portland. I was cold and my right foot was full of pain from constantly pressing on the gas pedal.

I do not know if it is all corvairs or just mine, but you really feel the road through your gas pedal unlike modern cars. The only warmth I had was the sense of pride and accomplishment I was feeling. I had passed and been passed. I had seen a huge deer frantic, and a group of deer gracefully playing. A wolf had crossed through the beam of my head lights, and a bald eagle stared from a wooden post as I drove past him. I had climbed Mt. Shasta and glided back down it. I saw cactus turn to shrubs and shrubs turn into trees. I had passed through desert and forest and had been lighted by the reflection of at least three lakes. I had even asked, “Can I look at the engine?” I had been told, “I wish I was going with you,” and I had been creeped out by a truck driver who was persistent in wanting me to pull over. I had even cried a bit-provoked by a song that reminded me of my mom. I had spent twenty hours alone in my 1964 Chevrolet Corvair Spyder convertible.

I spent Saturday in Portland and then Sunday morning would begin the reverse of my previous journey. This time I was a little more relaxed because I knew my car could make the trip. SHE WAS STRONG. I, myself, felt both empowered and vulnerable. The two emotions were like oil and water-never mixing or creating a balance. I either felt one or the other. Although I would say, there was more oil than water in this driver.

What road trip would be complete without a ticket? During a particular stretch of road about five hours from home, I was being passed by almost every vehicle. So, when I saw a cop on the side of the road, I was not worried. Even when I saw him behind me getting closer and closer, I still thought my speed was fine. “Maybe I am going slower than I thought.” Red lights. Pullover.

“You know you were going 71mph in a 60mph zone?”

“Well, no. My speedometer is broken, and I figured since everyone had been passing me that I wasn't going very fast. I even saw you guys and figured I was fine.”

“How fast did your speedometer read?”

“It didn’t. It stays stuck between 0 and 120.”

“License, insurance, and registration. (I get it out of glove box.) Well, I have to admit that I like your little car.”
“Thanks.”
“I think my dad had one like this. There was something funny in the back.”
I know what you are thinking: She didn’t get that ticket. No, I did, but it was reduced from 71mph to 65mph which was the equivalent of 117 dollar fine to a 56 dollar fine.
Speeding ticket: check! My trip was complete.
Interestingly enough, the last stretch, about 60 miles from Las Vegas was the hardest climb for my car. It was the stretch right before you get to Indian Springs that was upgrade for miles with no valleys. Ironically, when the road finally plateaued and local radio was being received (I had exhausted every cd in my case) Paul Revere and the Raiders song, Cherokee Reservation came through the speakers. I was in Indian Springs. My car had regained strength. I thought of my car as the Cherokee people—“So proud to live. So proud to die!”

They took the whole Cherokee nation
And put us on this reservation
They took away our ways of life
The tomahawk the bow and knife

As a group of people who are interested in the Corvair, we can relate. Our car was one of the first compact and sporty cars in America yet they still aren’t respected to the degree of the Mustang or the Camaro. Ford and Chevy went on to produce millions of Mustangs and Camaros, whereas the Corvair and their enthusiasts have formed their own little nation. Just as the “white man” in the song kills the Indian nation, Ralph Nader in his book attempted to “kill” the Corvair, in essence putting the Corvair out on the reservation.

Well guys and gals, it’s time to bust out! My trip totaled 2,220 miles exactly (54133 to 56353). I spent 40 hours over four days driving my Corvair. For you retired guys, that’s the same as a whole work week. It was the oldest car I saw on the road for the duration of my trip. Our cars are strong, let’s not keep them in the garage collecting dust. Get them out! Drive them to work, school, the grocery store, to visit the grand kids, to the mall, to pick-up your date, to the doctor’s office, and most of all to the club meeting! Don’t let people forget about the Chevy Corvair.

Where does your car take you?

MY FAVORITE PLACE: BEHIND THE WHEEL

your editor
HELLO FELLOW CORVAIR ENTHUSIAST!
Did you know there is a Corvair club in Las Vegas? It's called "Vegas Vairs". We meet the second Wednesday of each month at the Denny's restaurant at 2545 E. Fremont St. (at Charleston & Fremont) at 7pm. We'd sure enjoy meeting you and your Corvair at one of our meetings!!!
PLEASE COME JOIN US!

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