



Take a Giant Step Forward...

Twenty-two years is a long time to keep running on the same chassis. Body styles changed a bunch, but under the glass was pretty much the same running gear as the C2 Stingray, designed in '61. By '83, Corvette enthusiasts were more than ready for something new. New they got. This was the first Corvette to be born with no direction from Billy Mitchell, Ed Cole and Zora Arkus-Duntov. They were all gone. The C4 became the work of Duntov assistant, Dave McClellan as chief Engineer and Mitchell's successor, Jerry Palmer as chief designer. Palmer had designed prototype Corvettes under Mitchell, as well as the second generation Camaros.

As January 1, 1983 dawned, inflation was still out-stripping wages at over 10%/yr. and 9.7% of Americans were unemployed. Car loans were typically 18 to 20% and GM was in its 4th year in the red. Political pressures put additional costs on car manufacturers with increased safety and fuel efficiency mandates. Within GM's top floors, pressure was intense on cost-control and down-sizing to meet the razor-edged demands facing the industry. Now, let's use our time-travel secret rings and code in 1977. And there stands Palmer and McClellan making their case for walking away from the most profitable run of Corvettes ever and incurring the enormous costs of design, testing and production of an entirely new car. But the C3 was long in the tooth and by Corvette standards, pretty boring. It had become a boulevard car, appealing to folks wanting to look good pulling up to the night club. Without something new, it was doomed.

Their appeal to look at the future benefits ran across the accountants focus on the present, but Irwin Rybicki, who replaced Mitchell as GM VP of Design, gave them much needed backing and the dynamic duo got permission to get on with it. Six years later brings us to the year that didn't exist. Faced with new government mandates in mileage and safety, corporate execs decided to take a little more time and



produce a new Corvette which meet the '84 standards and skip the '83 model year altogether, going directly from the last of the '82 C3s to the new C4 as an '84 model. There are stories about some of the development C4s with serial numbers branding them as '83s which managed to get out of GM's hands into the market, but no dealers ever saw an '83 Corvette. They hit the showrooms in February of '83 as the first of the '84 cars instead of the last '83s, and already beat the new mandates. There was unexpected help from Porsche with the 1977 release of their new front-engine, air-cooled 924 and more importantly, the V-8 powered 928 (which was designed by ex-Corvette guy Tony Lapine) which hit the US shores to compete with, and dominate Corvette in their own country. Well, by God, GM would have none of that! The '84 rolled out fully developed with many new features and technology that no one in Europe could match.

There are lots of stories of Ferrari and Porsche drivers in Sports Car Club of America (SCCA) showroom stock races sliding around in the rain, tip-toeing into corners trying to keep the headlights in front of them, watching Corvette drivers adjusting their heaters and finding their favorite station on the radio blast by them, confident in their Anti-lock Braking Systems. Porsche and Ferrari bought several C4s to take them apart and find out how American engineers put them together. Nissan engineers had the C4s as screen savers as they worked on their legendary Z-cars (every wonder why they looked so much like a Vette?), and Honda had a C4 in the middle of its design studio for the Acura NSX, which they openly touted as an example of how well they could learn from Corvette engineers. Mitsubishi bought several to "help" with their development of the 3000 GT. Again, every wonder why they looked like C4s? Yes, the C4 truly was what their ads proclaimed – a world class car. I remember seeing those ads on TV which showed a black dot on a dry lake bed leaving a very fast roster-tail of dust touting 150+ mph at ¼ the cost of a comparable Ferrari. That car got my attention.



Perhaps the best styling statement of the C4 isn't what you see as they drive by, but rather under the clam-shell hood. A new kid in the design staff penciled in a styling idea which incorporated a lateral line going all the way around the car which could be used to cover the largest fiberglass body panels ever built by Corvette and save a lot of money while creating the highest quality control for fit of the panels. While that was a great stroke, it was what happened under the hood

that opened up a strong collaboration between Palmer and McClellan as they both realized the possibilities of having the engine as a part of the design statement. While the engine was a carry-over from the C3, it was re-designed so the parts looked bitchin', even down to the color of the spark plug leads.

McClellan leaned on his long-time relationship with Goodyear (who at that time was the leading tire manufacturer in the world, supplying most of the F1 racing tires and dominating everyone with their amazingly fast R&D department), and got them to develop a new line of street tires based on their F1 rain tires – the famous directional Gaterbacks. They were wider and lower than anything approved for the public anywhere on the planet. McClellan then put four of them at the corners of where the car would be and then built the suspension around them. He shelved the C3/C2 suspension and created a five-link IRS which was superior in keeping the rear tires straight under hard braking. He also changed the front end to keep the tires more vertical under hard cornering. Maybe it was a stroke of engineering genius, but he took a spring system from the back of the Triumph Spitfire, a single transverse spring supporting both rear tires. But he put the spring under the suspension mounts and made the spring from fiberglass which would not sag or lose any strength after millions of flexes. Every Corvette built after that still has those springs. By putting the springs under the suspension, he also was able to use them as anti-sway bars, allowing for much smaller sway bars to control body roll. That suspension made the C4 the first mass production car ever to achieve a 1.0 g cornering load. But best of all was his lifting of Collin Chapman's Lotus design which used a back-bone frame design. It was so successful on the lightweight Elan and Europa cars that McClellan found he could save weight and increase stiffness of the frame at the same time. And with that design he was able to fit most of the stuff which previously went under the seats, between them. Even though the ground clearance of the C4 was more than the C3, the seats are 2 inches lower, the head room greater and the roof an inch lower. The car was 3 inches wider, but lower and much more streamlined which allowed a higher top speed and lowered wind resistance. Shoulder room increased by 6 inches and occupant space was better in all respects. The lowered wind resistance helped with the fuel economy, as did the lighter weight. One of the '84 mandates initiated the now-familiar gas-guzzler tax. With an innovative transmission the Corvette was one of the fastest cars on the planet, unbeatable on the tracks, and didn't pay a penny in guzzler tax! In every way, this was a fantastic car!



The C4 so dominated the most popular class of SCCA racing, showroom-stock that in 1987, faced with the withdrawal of virtually every other competitor because they couldn't beat the Vettes, the Corvettes were outlawed from showroom stock racing! So in '88, they started what was first known as the Million Dollar Corvette Challenge which morphed into the Escort Series for the C4s. Whaddya know? That series became more hotly contested and popular than the showroom stock class! Without a factory racing team, Corvette provided a lot of support to racers and in return learned where the weak spots of the car were and set about fixing them.

The car evolved into the mighty Lotus-developed twin-overhead cam, 4 valve/cylinder engine known as the LT-5 which came to put out 405 hp while still evading the gas-guzzler tax! Power to the people!! Calloway got interested in this car enough to develop ties with Chevy which allowed buyers to order their cars with the Calloway option and have it shipped directly from the factory to the Calloway shop before delivery – and hold the warranty. This car was dependable! In 1990 a ZR-1 (the original ZR-1) ran for 24 hours at an average speed of 173.791 mph and covered 4,221.3 miles. That was supposed to be the end of the run, but instead they kept flogging it for another 4 hours and 46 minutes to reach 5,000 miles at that insane speed.

By the end of its run in '96, you could buy a Corvette which could go from 0 to 60 in less than 4.5 seconds, do 175 mph and comfortably pick up the groceries after work. Pretenders to the throne from Europe came and went – Ferrari 308s, Porsche 924/928/944 Turbos. From Japan the Nissan Z cars were solid competitors and are still around today, but they dropped to a lower class to find racing success. Mitsubishi and Honda just plain gave up trying to compete with the C4. The average Vette was back in the hands of drivers and kids stopped to look at them when they drove by. Kids of both sexes and all ages... Including me. It was the second-longest run for a Corvette model, the most profitable to date and left car magazine editors asking, "What could Corvette possibly do to improve this car?"

This, the C4, was the car which brought technology from the track to the street like no other before it, and did it reliably. It brought Corvette into America's center ring like no Vette before it and set the stage for the future in design, quality, durability, performance and not the least of these, fun! You'll keep seeing them, even on the streets of Pueblo, for a long time to come.



C4 Story by Richard Campbell

My wife Kathleen and I were returning from our annual color run in our 1986 Corvette. We were north of Trinidad on I25 heading back to Pueblo. Kathleen was asleep and I was racing with other members of the Club.

She woke up and looked at the dash board. The car had a digital dash and she was looking at the tachometer and it was reading 19. (Really it was 1900 rpm).

She said “We are going 19 miles per hour.” She turned back toward her window and went back to sleep.

I looked out the side window and thought that’s a fast 19 mpg. Then I looked at the dash and we were going 90 miles per hour.

What she did not know would not hurt her...

Our 1985 Greenwood Corvette –

The year is 1990 and after more than a few years (22 to be exact) of Vettes in the Rockies, the Black Hills Classic and countless other Corvette shows in our ’63, the opportunity to buy a newer Corvette presented itself.

There was an advertisement in the paper for a 1985 Corvette. There was no mention of it being a Greenwood car. I called the number and made an appointment to go see the car.

As it turned out, I knew the owners of the company that had leased the car and had turned it back over to the Chevy dealer after having spent over \$7,000 of company monies taking to John Greenwood’s company in Florida to have all the extras added. It had the full ground effects kit, BBS wheels, burl wood interior accents, sound proofing and a few other minor details.

The owner was a Mr. Dwayne Thomas who was an accountant for the pizza chain that had done all this, so he had bought out the lease. As a side note, the pizza chain’s name is Valentino’s Pizza and they are – as they say – a Nebraska institution. And, as fate would have it, the brothers who owned the chain and their wives were clients of our salon.

Mr. Thomas had only owned the car for 3 months and had a 16 year old daughter who was constantly on him to let her have the car. So, to relieve himself of the constant problem, he sold the car to us. And, for a very reasonable price, I might add.

It was and still is a beautiful C4 coupe. We drove it for 12 years before we sold it to one of my clients. Dan still has it along with a 2004 Z06 and if you ask him, he’ll readily admit that the ’85 Greenwood gets more looks than his Z06.

If you are ever at our home, you will see a big picture of it along with a few awards we won with it, many of them from VOTR.

So, you see, even though we have had a few Corvettes in our 40plus years of Corvetting, we have an appreciation for each and every generation, probably because we have owned at least one of each of them.

Save the Wave! Lucky & Jannett

From Linda Hill – a truly hilarious car video which has the power to encourage some of us to think of ways we might try this.... I recommend you take a look and be ready to laugh loudly!

<http://www.wimp.com/disappearingprank/>

Sky Sox Game & Car Show – Aug. 28th





Friday, 9/16, 5:30 PM – *Cruise Night at Millberger's on the Mesa*: Encourage one another so as many Vettes as possible will show up for this. We're getting close to the end of the season!

Saturday, 9/17, 8:00 AM – *Florence Parade*: Some of our members will be making their cars available to chauffeur the children's court for this local parade. Thanks to those making the effort.

Tuesday, 9/20, 6:00 PM – *Street Clean-up*: Our normal Wed AM clean-up has been moved up to Tuesday early evening to accommodate those scheduled to clean. If you can help, please do. Probably will be a decision to find a place nearby for dinner afterwards.

Sat. & Sun., 9/24 & 25 – *Track Day at LaJunta*: Our NCCC sanctions will be used for both a low-speed autocross and high-speed event at the LaJunta track. Contact Rik Noring for info.

Tuesday, September 27, 7:00 PM – *Club Meeting*: Our monthly club meeting at the Main Library followed by food, desserts, drinks and laughing at a place to be chosen.

Sunday, October 2nd – *Club Photo in Westcliffe*: While final plans are not yet set, we'll caravan up for our annual club photo. Jill also advises that a color run hosted by Mac & Babs McKnight may be in the works as well.

Sat, December 3rd – *Christmas Party*: This year's party will be at the Dog Track. Bill Kenney is putting that together for us. If you have door prizes or suggestions, please contact him.

Sunday, December 11th – *Broncos/Bears Party*: At Dennis & Patty's. More details later.

In closing – Thought I'd share that Vicki & I took a four-day weekend to Pagosa Springs and Chama last weekend. Took the Chama-Antonito narrow gauge and are thinking that's something we could do as a club. We'll test the waters on that. Coming back, I reset the mileage read-out while leaving Pagosa (at 35 mpg then), went over Wolf Creek, Silver Thread, Slumgullion and Monarch Passes which took us over the Continental Divide three times. We didn't lay back on having fun with the twisty roads – honestly. When we hit Pueblo some 150 miles later, our mileage was 38.4! What an amazing car!



Save the Wave!