

CORVETTE NEWS

SPECIAL ISSUE



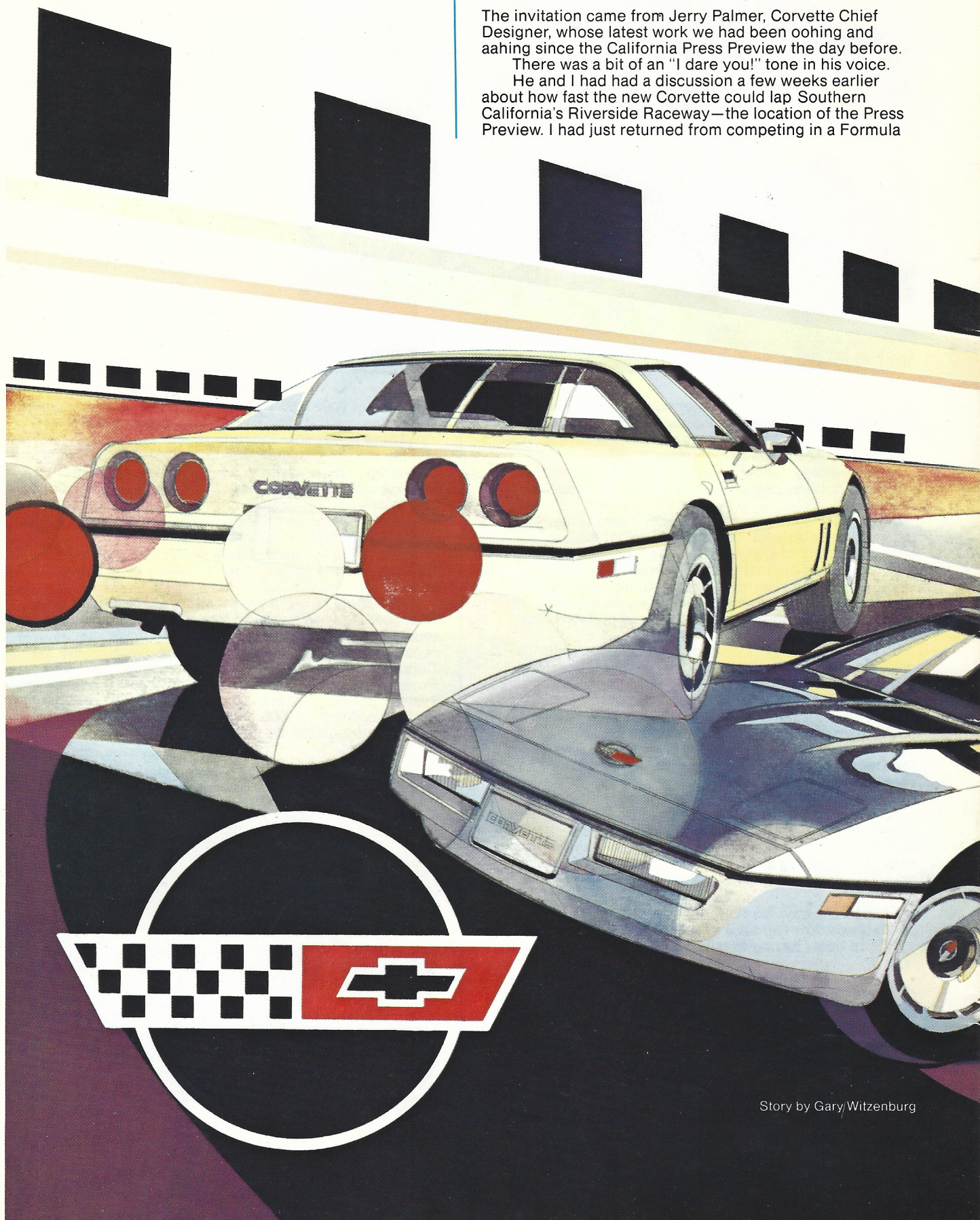
SPRING ISSUE-1983

Lapping up Riverside

"How about a ride?"

The invitation came from Jerry Palmer, Corvette Chief Designer, whose latest work we had been oohing and aahing since the California Press Preview the day before. There was a bit of an "I dare you!" tone in his voice.

He and I had had a discussion a few weeks earlier about how fast the new Corvette could lap Southern California's Riverside Raceway—the location of the Press Preview. I had just returned from competing in a Formula



Story by Gary Witzenburg

Ford event there and he was willing to bet that the '84 'Vette could turn faster times than the little Ford-powered, open-wheeled, single-seat racers could.

"No way!" I had said. The 1.6 Liter FF's only have a bit over 100 horsepower to play with, but they weigh just 1,100 pounds, soaking wet yet—hero driver included! The 5.7 Liter, dual fuel injected '84 'Vette motor cranks out twice the power (205 @ 4300 RPM), but has to haul three times the weight (3,117 lbs. plus passengers). Even if it could blow off the FF in straight-line performance, the much heavier Corvette couldn't possibly brake and corner with it.

"We'll see!" Jerry said with a grin.

So here we are at Riverside and the new 'Vette's talented Design Chief wanted to see what I could do with his pride and joy on the track.

Unfortunately, the lap-time comparison had to wait a bit. For one thing, you really can't drive 100% flat-out at a crowded press preview with other traffic on the track and dozens of nervous Chevy people biting their fingernails and sweating over how many of their precious prototypes will make it through the day. For another, Southern California's worst wind and rain storm in years had charged through Riverside the day before, blowing away a tent and half the technical displays, and covering parts

of the tract with desert dirt. So bad was Riverside's tricky, off-camber Turn-7, in fact, that our test course had been altered to avoid it. A new series of tight hairpins slowed our progress considerably and made direct comparisons (with the normal track configurations) impossible.

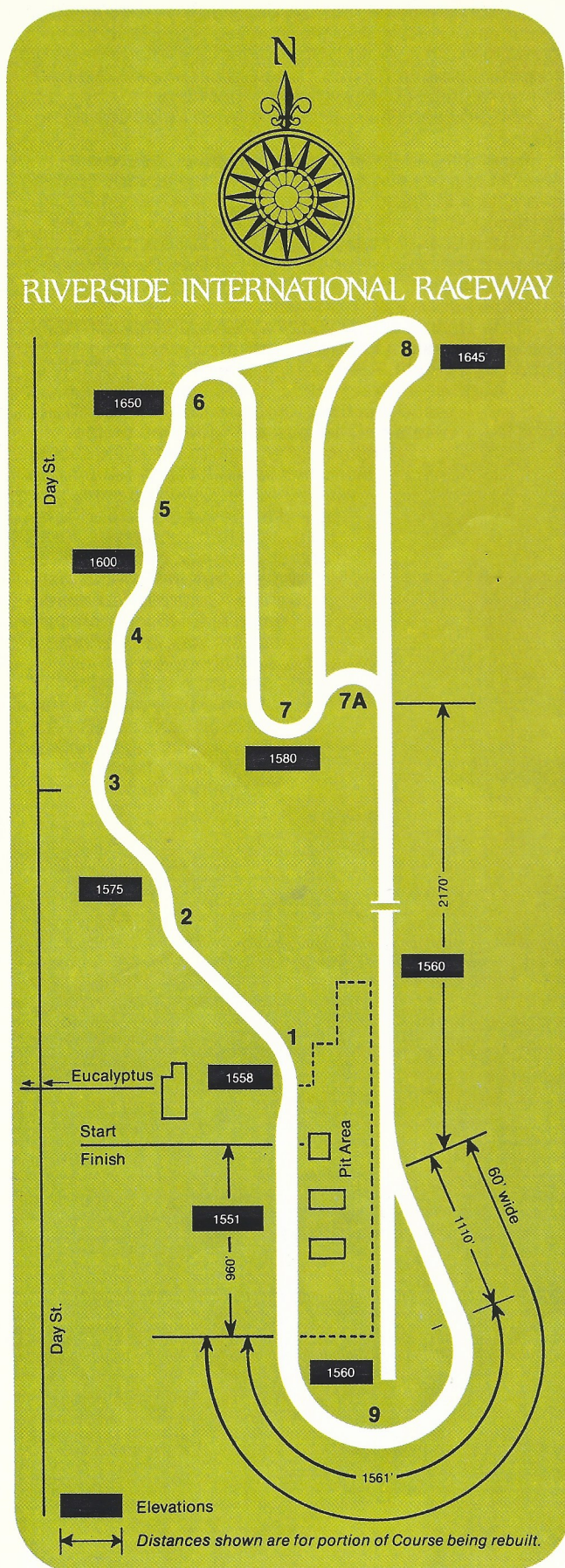
Still, you don't have to ask me twice for a track demo ride.

We commandeered a 4-speed manual, belted ourselves in and headed out of the pits. I had already enjoyed several laps in the same car and had come away suitably impressed. Even in street trim the '84 'Vette took to the track like a bear to honey. It was fast, stable and amazingly agile for its size and weight. Chief Engineer, Dave McLellan, and Development Engineer, Fred Schaafsma, and their people had done their work well.

Once clear of the pit wall, Palmer and I rocketed full-bore up the straight toward Riverside's Turn-2, a high-speed dogleg right. Approaching at well over 100 MPH in fourth gear (exact speed is unknown since the digital readout in the prototypes only went to 85), I came off the gas and squeezed on the brakes just enough to settle the suspension, then sailed through full-throttle with ease. We picked up some more speed to the faster, trickier Turn-4: right...jog-left...squeeze...turn... and that too was behind us with hardly a protest from the marvelous "Gatorback" Unidirectional tires. Most impressive was the way the Corvette's new fiberglass sprung aluminum suspension handled the rough surface through parts of this very fast section, nearly unfazed even under heavy cornering load.



Illustration by Russ Klix



A bit of hard braking and a down shift to third set us up for the slower, left-hand Turn-5. The Corvette settled down on its suspension and shot through under power, then up the hill toward the infamous second gear, right-hand Turn-6 with its boilerplate outside wall. We clipped the early apex, then arced back to mid-track and in toward the next inside apex in a gentle, part-throttle drift. Well before reaching the apex, we were back to full throttle. A quick upshift to third brought us to the outside exit at the track's left edge, pointing slightly back toward the right for a short burst of downhill acceleration before braking hard again for a tight, 180-degree, left-hand hairpin.

It was here that the Corvette's brakes took their toughest beating, but in lap after lap they never faded. It was here also where we got a little out of shape for the only time all day. Powering through in second gear, the rear tires lost traction momentarily—probably on some of the dirt and sand left over from the storm—and the car snapped suddenly sideways. A gentle lightening of the throttle foot, combined with a fast steering correction however, caught the errant rear-end and moved it just as smartly back in line and we were off toward the next turn with only a split-second lost.

This hairpin was followed by another to the right, then a third to the left putting us back on the regular course at the difficult, double apex, right-hand Turn-7A. The Corvette tracked straight and true at part throttle over some washboard bumps at the corner's tightest point, then took full power well before the second apex. This meant upshifting to third while still cornering hard approaching the turn's exit at the far left and the car performed this potentially unsettling maneuver without the slightest hint of instability.

Following 7A is Riverside's long back straight, where the car really gets to stretch its legs. Because of the 85 MPH speedometer, I can't report an indicated top speed, but a good guestimate is we very likely reached the 'Vette's claimed terminal velocity of 140 MPH-plus! Thanks to the extensive wind tunnel work performed by Palmer and his group, the Corvette remained rock-steady, as if glued to the track, with no unsettling lift at either end and very little increase in wind noise. Only the big V8 churning out horsepower under the hood, the VR50 Goodyears singing softly over the asphalt and the guardrail posts flashing by on both sides gave any indication of our speed.

There's a dogleg left near the end of the straight that's flat-out for most race cars and it was an easy, no-lift bend for the Corvette as well. After that, the track gets a little more complicated.

Riverside's famous Turn-9, a courage-testing, slightly banked, 180-degree right-hand sweep that resembles one end of a half-mile oval, has eaten more than its share of cars through the years; we surely did not want to add one to its total. As I'd learned in the FF a few weeks earlier, the trick is to enter high on the left, ease down toward mid-track, then (about halfway around) start bringing it down further toward the inside. Skirting the inside edge, you hold a long, tight apex until the track begins to straighten out and you can let the car out in an increasing arc leading to the exit point just off the wall on the far left.

If you take exactly the right line in the FF racer, you can leave your foot buried in the carburetor all the way through. The street Corvette, with its greater weight and higher engine power, required some braking at the entrance, then a feather-throttle cruise through the turn at the limit of traction before the car would take full power again from apex to exit. This would have been no problem at all, but for the overdrive which is programmed to engage as soon as you lift your foot in fourth gear. It did give us a little trouble, but only in Turn-9 and most drivers of this car aren't going to be cornering that hard and fast on the highway anyway.

Charging full-bore out of 9 put us on the short Start-Finish straight in front of the pits, moving slightly right to set up for the left-hand dogleg Turn-1. The track is bumpy again at this point, but the 'Vette sailed through the corner, flat-out, with little drama! That brought us back to the straightaway leading to another exhilarating lap. Five or six more and we brought it back into the pits with Palmer and me grinning from ear to ear.

Understand, the new Corvette is not a race car—it's a passenger car you can buy off the showroom floor. But, in my view, it's certainly the closest thing to a race car that's mass-produced in America!

In my opinion, the exterior styling is superb—clean and contemporary, yet with a lot of Corvette heritage. The new seats are excellent and the high-tech interior and driver controls are exceptional.

By modern standards, the car's performance is terrific. Chevrolet claims 0 to 60 in 6.8 seconds with the automatic and 6.3 with the 4-speed stick. I didn't get a chance to verify that, but I wouldn't dispute it.

The optional Z51 high performance suspension is very effective and a lot less harsh than any heavy-duty Corvette suspension of the past. Low unsprung weight helps keep the rubber on the road where it belongs on uneven surfaces. The new geometry and fantastic Goodyear tires combine for smooth road-cornering power in the unbelievable .95 G range!

I only wish I could have flogged it around Riverside all day long! And the next day! And the next!

I hope some day to drive a full-tilt racing version—at Riverside, Daytona. You Name It! **That** is going to be a **really** wild ride!

EDITOR'S NOTE:

A native Colorado boy from the mile-high city of Denver, Gary Witzenburg has kept to the fast-track the 39 odd years he's been around.

A young graduate engineer from Duke University, Gary picked up a lot of real-world car experience with Chevrolet and GM Engineering. He then combined his technical knowledge with his considerable writing talent to work as the Engineering Editor of **Autoweek** and Associate Editor/Managing Editor of **Ward's Automotive Reports**.

He's been on his own now for seven years, a freelance writer and regular contributor to several magazines as well as automotive columnist for **The Detroit News**. He's also authored three **Automobile Quarterly** marque history books on Mustang, Camaro and Firebird.

Gary has gained his track experience first hand. He began road racing in 1966 and has driven everything from a Triumph TR-4 to a Porsche 944. Most recently, Gary won the Jim Russell British School of Motor Racing Media Challenge Formula Ford event at Riverside—October, 1982.

CN welcomes Gary's "Full-Bore" Corvette evaluation at Riverside.

