

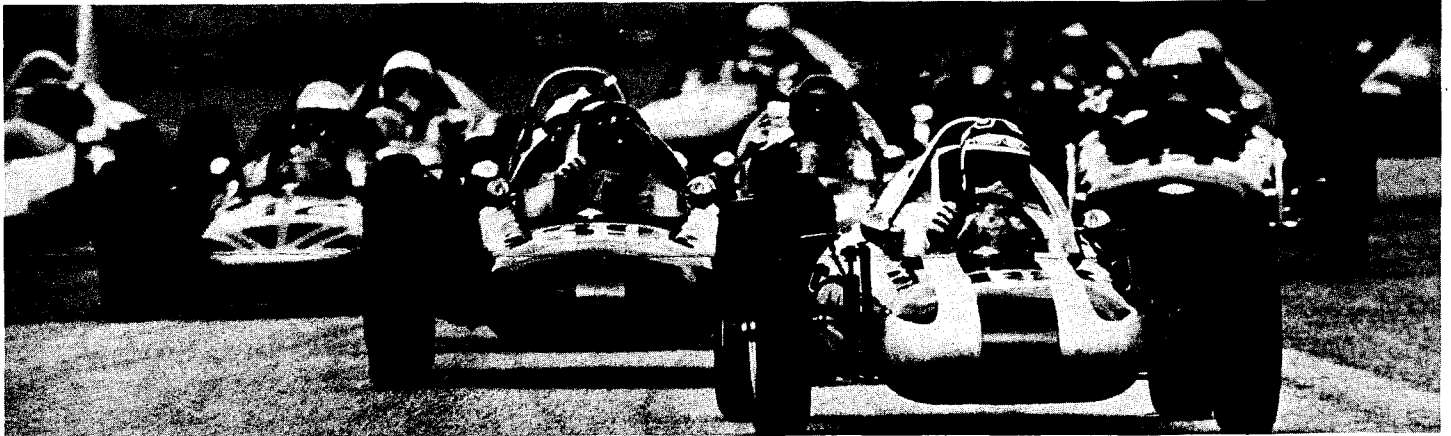


# VEE LINE

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## PIEPER CLAIMS "WORLD VEE CHAMPIONSHIP"



The action was fast and furious in the first turn. Some drivers take to the grass to maintain or improve positions, but Pieper (No. 18) and Scott (No. 39) won't give an inch.

21-YEAR-OLD ROOKIE TOPS 76-CAR FIELD AT DAYTONA SPEEDWAY

### DIRECTOR'S CORNER

We haven't said anything about membership for quite some time. You may be interested to know that we have passed the 800 mark now. We started 1968 with 600, even. In one light, this looks good, especially as there was no special effort made in the past year to recruit for Formula Vee. There was an article in *Argosy* magazine (whose readers are evidently mostly armchair racers), but nothing compared to those previously published in the major motor-sport magazines. An increasing number of our members are unsolicited Vee owners who have somehow been persuaded that they should join FVI. Perhaps you have been instrumental in bringing one or more of them into the fold. If you haven't, how about trying it? There are obviously a lot of prospective members still running around loose.

Yes, 800 members is a nice figure; but if there really are 2000 Vee owners in the country—or even 1500—we still have some way to go before we can *prove*, without any room for argument, that we actually represent "all" of them. So how about talking it up a little? Show the round "FV" emblems on your car, and persuade your neighbor in the pits, if he isn't already a member, to become one. The address is printed on your membership card, if you need it, or just "Ephrata, Wash." will do. (Yes, we're getting that big, in Ephrata, at least.)

### SCCA CONVENTION

Well, I've just returned from my first SCCA Convention! It wasn't exactly in my back yard but it's only two hours by Ghia to the Spokane airport, and three hours by plane from there to Denver, so I decided at the last possible moment to take it in.

In my opinion it was a well-organized and well-run meeting, from registration on through to the end. There were open meetings of all the boards and committees, at which anyone could speak his piece, and they were generally capably conducted. Discussion was confined to subjects of general interest (no nit-picking personal gripes which so often come up at such conclaves) and all in all, it was well worth attending.

One subject which was discussed at both the Scrutineering Seminar and the Competition Board meeting was roll bars. The rule for 1969 states that the specs previously "suggested" in the General Competition Rules will now be mandatory. However, when they are thoroughly examined, it is obviously impractical, if not impossible, to enforce them as they are written. Some clarification is promised in the near future. However, you can expect to find increasing emphasis on the requirement that the bar be at least as high as the top of the driver's helmet in a normal driving position this season, so if your "normal position" at tech inspection is with your head pulled down between your shoulder blades, you'd better learn to drive that way.

You will still be allowed to live dangerously with one-inch roll bar material, if you wish. Even though it was pointed out that at least five presumably legal Vee roll bars were folded up last year, it was maintained that it is possible, if proper bracing is provided, to build a safe roll bar out of one-inch tubing, so there is no reason to question its suitability. If you have one, then, you'd better

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Talk about *international* competition—the "250-Mile World Championship of Formula Vee" at Daytona topped anything you can name in that line outside the Olympic Games! Of the 117 entries, 25 were from 11 other countries. Germany, Austria and Canada had five entries apiece, and there were two from England, two also from Austria, and one each from Sweden, South Africa, Lichtenstein, France, Switzerland, Belgium, and Finland!

As you might expect, most of the 90 U.S. entries were from the East (more than a third of them from Florida), but there were 23 other States represented, too. The entry list was reminiscent of those for the Bahamas Speed Weeks—of the 49 drivers from the NE and SE Divisions, for instance, only 20 are listed in the "National Points Standings" in *Sports Car* magazine. Some of the others are drivers in other classes, obviously lured into Vees by the smell of all that money, some are "semi-retired" Vee drivers (Bill Campbell, Whit Tharin, Ray Caldwell) and where the others came from is anyone's guess.

Formula Vee's reputation for enthusiastic driving was well maintained at Daytona. Of the 74 starters in the main event, 29 dropped by the wayside, and not all due to mechanical difficulties. Minor single- and two-car accidents received little notice, but there were a couple which rated national wirephoto coverage. One five-car scramble in the 16th lap sent two drivers to the hospital for patching (there were no critical injuries) and afforded photos of two Vees in mid-air at the same time. Another two-car bash provided some spectacular opportunities for photographers as Meyer Botha of South Africa rolled his car three times due to a contact. He demolished his car and acquired a few bruises and abra-

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MEMBERS' SOAPBOX

...The only thing that really disappointed me about Daytona was the teardown after the race. They impounded the top 10 cars, and tore them all down. What a joke! To my best knowledge, they cc'd one head from every car, and inspected everybody's carburetor top (?). Lord knows what for! And that's all they did. Not one cam degreed, or bore or stroke checked or even the gear ratios by marking a wheel and rolling it around. Some disgusting when you consider that they had in excess of \$30,000 on the line! A man could have had a roller crank and 1500cc cylinders and they probably wouldn't have noticed it. Terrible! I was so disgusted that I wrote a nasty letter to Westport. Also, of the top 10 cars, 9 had the carburetor turned 180 degrees on the intake manifold. This was protested and upheld on appeal 3 or 4 years ago. Did you realize that if an appeal decision is not incorporated in the next year's rules, it is forgotten and cannot be used as a precedent in successive years?

"Not that I had any axe to grind either—I wasn't able to qualify. I ran the bearings in my one and only engine in the first two laps of the qualifying race (after having passed 7 cars in the first lap!). Lost power, oil temperature went to 270, pressure to 10. Nothing broke—it didn't even rattle, just wore out. Teardown shows three rods with copper showing on the bearing shells, and a bad crank. I guess one has to rebuild more often if one is able to extract 5500 RPM in 4th gear out of the little beastie. That was the best engine I ever built. Wish I knew what I did right!

Currently I'm on an extensive lightening campaign (35 lb. overweight). Will be able to get down to 830-835 without too much trouble, and that's as close as I want to go, allowing for tire wear, and perhaps lighter tires when I can get the money. I'm not in favor of a car & driver weight minimum. It's fine if a car is designed and built with an 800 lb. weight in mind, but to try and shave an 825 lb. car down 25 lb. will result in a loss of reliability (i.e. safety) and will result in a rash of structural failures. Most people are not technologically capable of modifying a design without sacrificing strength. Think about it." Chappy Holbrook

Your comments on the Daytona inspection jibe with others I've heard. You may find a clue here as to why the carburetor throats were being inspected (though not why they were ignored). Your engine exhibited the classic symptoms of impending bearing failure—happens every time. If you heed the warning early enough, you may save the crank, at least. It's too late to save the bearings. By the time you can hear a clatter, it is the piston hitting the head, due to enough play in the bearings to use up that .039" headspace. You have a point on modifying an existing car to 800 lb., although with the substitution of a little aluminum in non-strategic places and use of a motorcycle battery, most could get down to that point without structural changes. How about retaining the 825 lb. minimum, empty, with the "1000 lb. with driver"? I believe that the appeal you refer to was in regard to locating the manifold behind the fan housing (on a Vee—this gets confusing if one refers to "ahead" and "behind" the engine when it has been turned around). Per-

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PIEPER CLAIMS CHAMPIONSHIP

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sions, but Ray Weaver (California) walked away from the other car unscratched. Bill Campbell (ARRC Vee Champion in 1966 and 1967) emerged from retirement for this one. After demolishing his car in one of the qualifying races on Thursday, he borrowed Bill Green's car for another try in the consolation heat (which he won) and brought it in third on Saturday, after starting in 63rd place.

Zinks ran true to form, comprising 21 of the 74 starters, 15 of the 45 finishers, and five of the first six places. (Fourth was taken by an Austro Vau driven by Austrian Peter Peter.) There were eight each of Beaches and Autodynamics, five Bobsy Vegas, and an assortment of lesser known makes and specials. (Formcar owners only: Two of the three Formcars entered made the final grid. One DNF but the other moved up from 32nd place to 16th, passing 4 Zinks on the way not counting those which dropped out.)

The conclusion of the race was somewhat more typical of a Regional than of an event of this calibre. Both Steve Pieper and Harry Ingle had been getting pit signals indicating that they had another lap to go, and there had been no "last lap" signal at the finish line; so both came around the last corner figuring strategy for the last lap ("try to come around the last corner in second place and sling-shot to the finish") when they found the checkered flag waiting for them. In fact there was some division of opinion among the officials as to whether or not they were even on the same lap—at first Ingle was posted as being one lap behind!

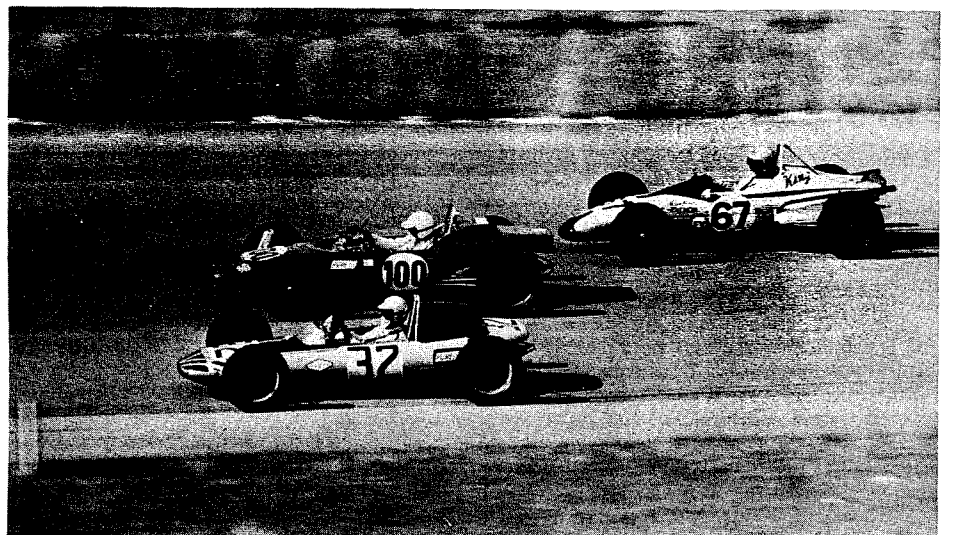
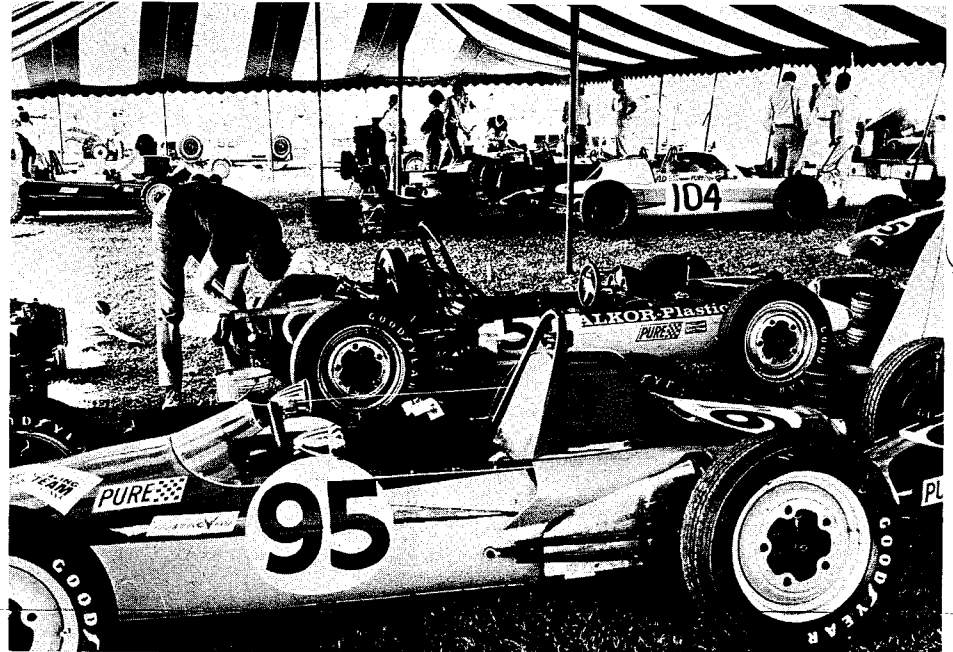
Twenty-one-year-old Pieper could be a logical candidate for "Rookie of the Year" this season. Last April he entered SCCA driving school and ended the year tied for the Regional championship. He described this as his "first National race," which might indicate that he would be eligible for the award this year.

Certainly he's been the co-driver of Zink McDaniel. A g t overall, and in econ

Was the event people I've talked racing press, it was color photos, in at was expected, but Speedway) is quote can set aside an en half" of the 2000 enthusiasm, and you

Failure to get was partly due to a rather late start in p will probably be re before long, so bear pros, but the major as many racing mi rookie!) so plan a expenses.

Many thanks to entry lists, etc., on presenting a typical seen before.



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ing up fast—in the “24 Hours of Daytona” on Sunday  
 type Volkswagen Sports Racer with Bill Scott and Jim  
 ich finished that event, they were in 18th place  
 the Under-Two-Liter Prototype class!  
 ccess? Well, judging from the articles I’ve read and the  
 it was. While it was ignored in some segments of the  
 uasiastically reported in others. It rated a full page, with  
 one paper! The entry list was only about half as large as  
 so, Bill France (President of Daytona International  
 saying, “I look for the day, possibly next year, when we  
 eek for Formula Vee racing.” His hope is to get “about  
 to participate! Write some of this off as promotional  
 get the picture of something rather special.  
 oped-for entry list of two-hundred-plus Vees this year  
 city of FIA licenses among Vee drivers, and partly to a  
 on. However, you’ve now been warned that the event  
 d next year, and we’ll have some dope on FIA licenses  
 mind. Sure, some of the drivers at an event like this are  
 f the participants this year probably haven’t racked up  
 s you have (after all, Steve Pieper was practically a  
 ion at Daytona next year. You might even make your  
 “Reb” Carlin, of Merritt Island, Fla., for the clippings,  
 h this was based. At this late date, there’s no point in  
 report, but perhaps there’s some thing here you haven’t



Left: Jockeying for position are Cecil Harris (No. 32) of Texas, the '68 SW Div. Champion, Max Johanson (No. 1) of Florida's champion driver, and Charles Hevenor of California in a new King. They finished 5th, 12th and 15th, respectively, in the 250-mile "World Championship of Formula Vee."

Left: Jockeying for position are Cecil Harris (No. 32) of Texas, the '68 SW Div. Champion, Max Johanson (No. 1) of Florida's champion driver, and Charles Hevenor of California in a new King. They finished 5th, 12th and 15th, respectively, in the 250-mile "World Championship of Formula Vee."

The sweet touch of victory is offered to Steve Pieper at the 250-mile "World Championship of Formula Vee."

**MEMBERS' SOAPBOX**  
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sonally, I can see nothing wrong with either the carb or manifold—or any other part—being relocated as long as no modification is involved and there is no performance advantage. Many cars have the carburetors reversed for convenience in routing the throttle cable. This might even be of some disadvantage from a performance standpoint—I am told that the engine dies under extreme braking conditions with the carburetor reversed.

“Dear Don: One of the many things I don’t understand is the length of pipe to start with on the VW engine. Last month a group of numbers were presented as being the value at which to start. This month your sketch indicates a length of about 88”. A couple of years ago a car magazine presented a formula that makes the length about 20” shorter than the numbers issued last month.

“I could have saved my renewal fee if I had received the VeeLine a week earlier, and had not purchased a copy of ‘Scientific Design of Exhaust and Intake Systems.’”

Don Heath, Las Vegas, Nev.

Thanks Don. I guess. You’re just adding to the confusion, you know. Don enclosed the formula from the article, which is really quite simple:

$$L = \frac{N(135)}{R}$$

where R=desired scavenge RPM and N=number of degrees between opening of exhaust valve and intake valve. (For use with a megaphone, change the 135 to 150.) Using 210 degrees for N and 5000 for R, you get 63” for L (with a megaphone). Which is about the average length of the pipes in the German system we have, come to think of it. So now you have at least two choices!)

**A NEW BABY**

A meeting of Formula Vee owners and enthusiasts was held on Feb. 13 at Capitol Car Distributors, the VW distributorship in Maryland. It was the beginning of a new FV club called Formula Vee Mid-Atlantic. The club hopes to organize FV drivers in the mid-Atlantic area so they can better encourage FV racing in that area, have a forum for discussing matters of interest to Vee drivers and provide a liaison between area FV drivers and FVI and the SCCA.

**EXHAUST PIPES AGAIN**

This month’s report on exhaust pipes is going to have to be almost totally negative. No one yet has come up with the ultimate system—or even a good one—for general publication, anyhow.

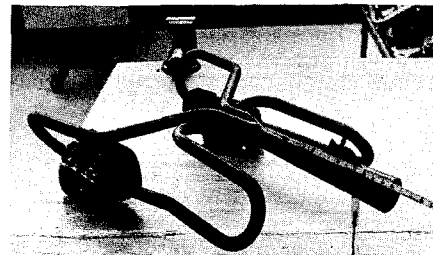
Ed Zink has been experimenting, but so far hasn’t found anything equal on a dyno to his present straight pipes, but if he does come up with a megaphone system which shows any advantage, he expects to be able to sell it for around \$65.

Volkswagen of America, which has expressed some interest in the exhaust-pipe question, recently purchased a set of European pipes—for 1300 cc engines—which they sent to two of the Vee builders for testing. Both reported that they could see no improvement over their present systems. One reported a slight gain at 4500 rpm, about equal at 5000 and a decrease at 5500. The pipes were then donated to FVI for evaluation.

The workmanship is beautiful! The four-hole transition into the megaphone is built into a machined spider, and the welding was done by an artist. However, its principal function has to be looks, with noise secondary and performance ignored entirely. It does not even have pipes of equal length, to say nothing of proper length. There is a variation of nearly ten inches between the longest and shortest pipes, with the others somewhere in between.

It is reported that the Autodynamics is now being furnished with a megaphone system. No performance evaluation is available, but a recent purchaser reports that it “certainly doesn’t sound like a Formula Vee!”

We haven’t started on Petunia’s new system yet, but we’re working up to it. In the absence of any better data, it will still be designed as has been presented in the past couple of issues. We’ll keep you posted. (One thing it will have is a German megaphone.)



German Exhaust System for 1300cc Engine

**SCCA CONVENTION** *(Continued from Page 1)*

be aware that in this instance, at least, “legal” has absolutely no relationship to “safe.” It has been conclusively proved!

You can expect rolling as opposed to “flying” starts to take the place of the usual gridding practice at most events this season. While a show of hands among the drivers present showed far from unanimous approval, it was clear that a majority was in favor of them. They were used at the ARRC last November with apparent success, and will no doubt reduce the body contacts due to erratic starts and crowding at the first corner. There was no discussion of its effect on “spectator appeal,” but it is doubtful that it will provide those moments of exquisite tension that accompany a standing start.

No, I didn’t get even an offer of a punch in the nose! In fact, with one exception, comment on Formula Vee and the VeeLine was quite complimentary. Leon Mandell, whose columns in “Competition Press” several years ago were somewhat less than enthusiastic about the Class, is still a good hater. (“Leon, have you mellowed any in regard to Formula Vee?” “Not a bit! I still regard them as an abomination and a blot on the racing landscape!” “. . . I really believe the publicity you gave them, even though it was adverse, did a lot to create interest in the Class.” “Heaven forbid!”)

There were enough “Vee People” present so that a congenial group could be found most anytime—and anywhere. In fact, this continual “Vee Convention” was noted and commented upon frequently, and was joined, from time to time, by others interested in the Class. It did cause me to miss a couple of cultural opportunities, though—a chance to drive an Austin-American (front-wheel drive) sedan on a gravel slalom course, and a view of a 51-24-36 exotic dancer—but such are the sacrifices one must expect to make if one is truly dedicated.

That’s about all, I guess, of the SCCA Convention which was of direct interest to Vee owners.

