



BULLETIN

NUMBER 15

DECEMBER 1965

DIRECTOR'S CORNER

Diogenes, or Archie Moore, or one of the other old-time philosophers, once said, "Never alibi. Your enemies won't believe you and your friends won't care." So I'll just say I'm sorry the November issue was so late and I hope you'll get this one in time for me to wish you at least a Happy New Year. And I hope you had a wonderful Christmas!

Are you, too, beginning to feel the symptoms of Spring fever, racing variety? Have you been looking over the car, considering what to do before that First Event? So have we. It's too cold to get really enthusiastic here, but Spring nearly always follows Winter, and will be here in a couple of months now. As usual, we'll probably finish the final details the night before, no matter when we start.

In the meantime, with the rules and championship races and the holidays behind us, we'll settle down to some Formula Vee again, starting next month.

We can't all be champions, even if we all had championship cars, but on the other hand there's no reason why one Vee should lap another, either. Well, yes, there no doubt are reasons, but if we can point them out maybe they'll go away, making Vee racing more interesting for everyone. So if you have any good tips--especially the kind that are known among the front runners, but not many others--won't you pass them along?

SIGNS OF THE TIMES

Competition Press, which has been in the past somewhat less than enthusiastic about Formula Vee, devotes six column-inches to the Vee race in the Pacific Coast Regional Runoffs, and even lists the first six places, lap times, etc. in their December 4 issue.

The usual front runners--Jerry Demele, Don Zacharie, Walt Mathewson and Glen Biren--finished in that order, but with a new name half a lap out in front. Woody Harris took first, with no strain. Bill Hinshaw retired with a broken fan pulley.

Speaking of fan pulleys, take a good look at yours. If the hub doesn't have a small arc-welding bead all around, fastening it securely to the web of the pulley, don't wait for the spot welds to break, as they probably will. Get a new one. Only the very recent ones have the extra welding, which is definitely needed. We found that out the hard way--twice!

How many of you noticed the little tabulation in "Sports Car" showing entries in SCCA events by Class? In National events, Formula Vee was a close second only to "E Production". In Regional events, Vee is so far out in front that when both are combined, Vee is still first. First Overall!

Some totals--Vee	870
Ep	860
FC	284
FB	102
FA	28
(as of Sept. 13)	

CHEATING?

Perhaps it's wishful thinking, but isn't there less of that "he beat me, so he must be cheating" stuff lately? There's still some, all right, but it seems to be narrowing down toward dealer-owned cars. There have been several comments on this in the past month or two.

My personal opinion is that a dealer's car is at least as likely to be legal as is anyone else's, and probably more so. In the first place, they have more to lose if they're caught cheating--like customer good will, for instance. In the second place, they have had--and still have to some extent--one advantage that most of the rest of us lack, and that is knowledge.

Volkswagen mechanics aren't superhuman, at all--not even those with German accents (though that seems to help some). However, many of them have been working on this one make of car for years, they have gone to VW schools, they've been in on the various changes, and they're probably driving VW's of their own, on which they've been experimenting. If the dealer is enough of an enthusiast to back up these mechanics with parts and time, and has a better than average driver, he doesn't have to cheat. Have you ever actually heard of one being disqualified?

So lets not condemn dealer's cars, or red cars, or blue-eyed drivers, as a group. If there is reason to believe an individual is cheating, let's protest him, but lets not grumble among ourselves that anyone is being unfair in making his car *legally* faster, just because we don't know how he's doing it.

RULES FOR 1966

A complete set of rules will be presented as soon as they are announced by SCCA, but in the meantime, here are the *changes*. (Comments in parentheses are my opinions only, in case anyone is interested.)

Sec. 1 "...based on *standard Volkswagen 1192cc Sedan components...*" (Actually, the only item affected is the clutch. Transporter rear-end gears have always been permitted, and there are no other parts--except suspension, of course--that distinguish the Transporter power train from Sedan. That pretty well settles the clutch question, though.)

Sec. 3A2 "The use of any single anti-sway bar. The anti-sway bar fitted as part of the standard suspension may be removed."

Sec. 3A4 Unchanged (Our recommendation--100%--to permit relocating tie rods below the steering arms was ignored. On cars using the standard VW ball-joints this cannot be done without "alteration or modification", though it can if Heim joints are used.)

Sec. 3 "The front suspension and steering shall be standard Volkswagen Sedan, prior to serial No.116,000,001.." (This is the serial number for the first 1966 model VW, which has ball joints.)

Sec. 3B "...Camber control devices may be used." (Our recommendations to define the coil springs as the sole springing medium--99%--and include "provided they carry no weight"--80%--were ignored. Presumably Z-bars, Empi Camber Compensators, transverse leaf springs, or anything else goes now, as long as coil springs are retained.)

Sec. 4 (Now pertains to brakes only.) "Brake drums, backing plates, brake shoes and wheel cylinders shall be 1192cc VW Sedan." (Good--except for the shoes. Exchange shoes, relined by American companies won't always be stock VW, so watch for them.)

Sec. 5 (No change in the engine definition--the "1192cc maximum displacement" is retained, even though the bore and stroke specified exceed this displacement.)

Sec. 5B "Replacement of the standard exhaust system with a separate pipe of constant diameter for each cylinder, terminating 1" to 3" behind the rearmost part of the body!" (Very good--even better than our proposal!)

Sec. 5G Limited to "Removal of any cooling duct component". (Presumably could include fan and shroud.)

(Continued on Page 2)

(Rules for 1966)

Sec. 5L (Separate section covering oil baffles, formerly included in K).

Sec. 5M "Use of an oil temperature indicating device in the crankcase."

Sec. 5N "The use of any VW oil pump." (For you latecomers, the VW1500 pump has about 20% more capacity, costs but a few bucks, and fits the same as the 1200.)

Sec. 5O "The use of valve spring shims, provided the fitted length of the spring is not less than the standard dimension."

Sec. 5P (Not yet included in the rules as issued, but to be included in the GCR, are the above dimension, plus dimensions for bore--standard "green" plus .008"--stroke, valve sizes, cam specs and several other measurements. How about that!)

Sec. 10 "Use of the following non-standard VW replacement parts is allowed. These parts must be normal replacement parts and shall not result in any unauthorized modification of any other component. Allowed: Fasteners--nuts, bolts, screws, etc.--wiring, gaskets and seals, brake lines and fuel lines, spark plugs, piston rings, wheel bearings, connecting rod bearings and crankshaft main bearings of same type and size as standard VW, fan belts."

So there you have it. Still not perfect, but a good deal of improvement, and NO backsliding! While many of our recommendations were not adopted, many of them were, too--dual braking system, revising the exhaust rule without breaking it wide open, temperature bulb in the crankcase, 1500 oil pump, and the lists of non-standard parts. Providing measurements of critical areas, too, though not in our ballot, was proposed several months ago. With this set of rules, inspection should be easier and more effective than it has been in the past, to the advantage of everyone. Vee owners everywhere owe a vote of thanks to the officials of SCCA (and to this Association, too, if they are not members).

ACROSS THE BORDER

Volkswagen of Canada is awarding a perpetual trophy to the top Vee driver each year. It's a beautiful thing, and even if the driver doesn't get to keep it, he'll also get a small replica to prove that he had it once.

Incidentally, if you don't see much about Canada in this publication, it's because I can't get anything about Canada out of Canada.

I know that there are two Formula Vee Associations, at least--one in Ontario, and one in Alberta. (Vee enthusiasts on the West Coast belong to this one.) An officer of each club is also an individual member of this Association, so it is assumed that they are familiar with what we're doing, but it's strictly one-way "communication" across our Northern border.

FROM OUR ON-THE-SCENE CORRESPONDENT

I just had another of those half-hour phone calls from your new (by now) President, Whit Tharin. The last one was a week ago, right after the Daytona race, while he was waiting for the boat to Nassau. His yard-long letters and leisurely phone calls have been a terrific help in composing these bits of Vee lore, in case you hadn't noticed.

By now you surely know who won at both Daytona and Nassau, but I hope you'll still find some little items here that you haven't seen in any other publication. By virtue of getting the SE Division Championship this year, Whit ran in both these events. Here are some of the sidelights, as he saw them--

The racing at both events was assault and battery. Nearly every car sustained at least some body damage. At Nassau, especially, it appeared that driving skill was not necessarily the basis upon which the "invitations" had been extended. In fact, it was rumored that one driver was running his first race, having substituted for a "name" driver at the last moment.

At both courses the racing, as predicted, was pretty even. At Daytona the first 5 cars had qualified with less than a second difference, and over half were within a two-second differential. Dan Fowler left the pack behind, which was attributed to his driving, rather than his car, especially after Nassau, when the same car, with another driver, "also ran".

Boyd Hough (Phoenix, Ariz.) who placed second, had an obviously faster car, but was unable to take advantage of it, due to handling problems. He gained on Fowler and Tharin (also fighting for second) on the straights, but lost it--several times--in the corners. Whit swapped places with him once or twice a lap, but had to drop out after 26 laps, when his throttle cable came loose, of all things! (Checked just before the race, too.)

Chet Freeman, (Central Div.) was fastest qualifier, starting on the pole, but he couldn't hold it. He retired early in the race, leaving fourth place to Rick Kohler (Canton, Ohio). Joe Dodge (Nyack, N. Y.) soon swiped it from him, automatically moving up to third when Whit dropped out.

The promised scrutinizing did not materialize, either before or after the race, though a VW expert was on hand, just in case. Perhaps the publicity did the trick. There were no protests, though there was some muttering concerning one of the cars, mentioned as a likely candidate.

Brand names didn't count for much--the first five places were taken by Beach, Formcar, Autodynamics, Zink (a possible newcomer) and Bobsy, in that order.

There were only 13 out of a possible 18 entries. Boyd Hough was the only one from the Pacific Coast; NE, SW and MW Divisions had two each.

At Nassau Vees really got a lot of run for their money, starting with two qualifying heats on Sunday. (Whit and Chet Freeman, the only Vee drivers making a double-header of these events, missed this one due to a previous engagement at Daytona.) The first heat was won by Chandler Lawrence, of Woonsocket, R.I., who was never heard from again, and the second by Roger Barr (Glastonbury, Conn.).

The main event, still billed as the "Grand Prix of Volkswagens", from the days when it was run in VW Sedans, occurred on Friday, starting with a field of 34 cars. Whit and Chet, not having qualified, started at the back with several other late arrivals, including Lew Kerr (in a Bobsy this year).

As at Daytona, the cars were fairly equal, which may have had something to do with the resemblance to a Demolition Derby, but incompetent drivers got most of the credit. Charlie Kolb (Florida) after working up to 5th from 16th place, was eliminated by one of the week-end warriors, and Roger Barr, after several billiard plays, decided he'd collected enough tire marks and voluntarily turned spectator. After another contender obligingly lifted the front end of his Vee off Roger's back and drove off, Roger parked, remarking, "I suddenly have this tremendous feeling that I want to live!"

The two big "Names" were out in front, giving the event its international flavor. Chris Amon and Bruce McLaren (both from New Zealand) took first and second, followed by Tony Belcher (Florida)--all in Beaches. Lew Kerr worked his way from the back of the pack up to 4th by the time the flag fell. Bob Bondurant, in another Beach, came in 5th, followed by Lee Cutler (Beach) and Ray Caldwell (Autodynamics) in that order, (they nearly had to divide 6th and 7th between them all the way). Completing the first ten places were Chet Freeman (Bobsy), Whit Tharin (Formcar) and Peter Revson (Autodynamics).

A. J. Foyt was scheduled to drive a new car on the scene--a "Gladiator"--but found he couldn't squeeze into the cockpit; so at the last minute his 5'2" mechanic Johnny Pouelson substituted. He, too, was replaced, after five or six loops (not laps) by Ed Hamill.

Most of the first ten cars were factory entries. Whit Tharin and Lee Cutler drove their own cars, and Tony Belcher (having flipped his own recently) drove a borrowed one. Ray Caldwell could be included, too, as he drove one of his own Autodynamics.

Most of the front-runners were using wide wheels of some kind, probably a third of them (all through the pack) had tuned exhaust systems, but none had the long nosed

(Continued on Page 3)

(From Our On-The-Scene Correspondent)

bodies encouraged by the Nassau Speed Week promoter's "special" rules. Other than these deviations, the Vee rules were scrupulously observed. Joe Hoppen (who races a Vee in the NE Div. and is also a whiz on VW's at Volkswagen of America) supervised the teardowns. Teardown is the correct word, too--even the cranks were removed and checked, gear teeth in the rear end counted, etc., on the first four cars. Last year's lesson was evidently well taught--not a single deviation was found.

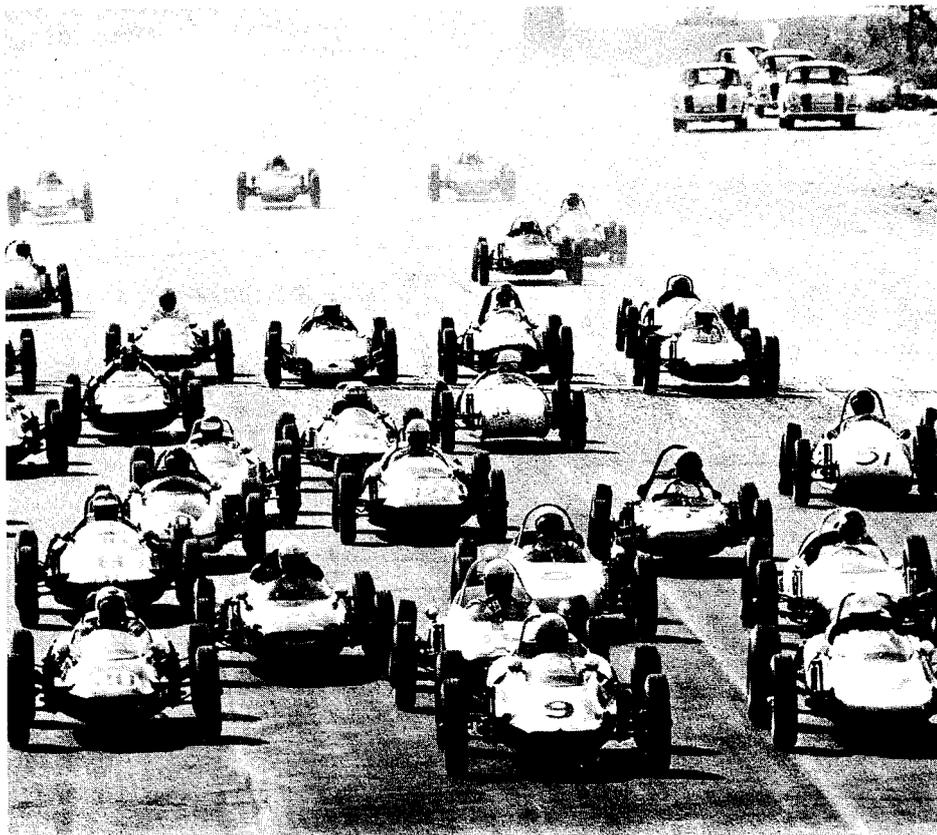
Vees got some more publicity in the special added attraction--the Ladies' Race. Last year it was run in a variety of cars, but this year all the gals drove Vees. For money, yet--\$150, \$75 and \$25! There were two heats--the second one started in reverse order. First place was taken by "Smokey" Drolet (Miami), second by Alice Bixler (also Miami) and third by a Nassau girl, Patsy Kennedy.

And that's not all! On Saturday there were a number of unscheduled, informal races of two to five laps, including several for Vees. As far as your President is concerned, they could just as well have skipped these.

While trying out another make of car, which didn't handle just like his pet, he lost it in one of the turns, ending up way out in the uncharted wastes, wrapped around an old oil drum, filled with sand and hidden by the bushes. The encounter totalled the car, and didn't do Whit any good, either--breaking a leg, tearing shoulder ligaments, and otherwise bruising and abrasing him. To add insult to injury, when a corner worker finally got curious as to why he hadn't returned from his safari, Whit had a heck of a time convincing him he needed an ambulance. He says he's going to rent out his Vee next year, and just watch. (That's what he said about this time last year, too.)

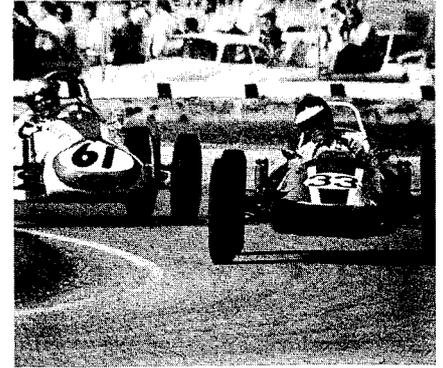
The prize money was fabulous--by the time a foreign VW distributor had kicked in, first place paid \$3,500, plus a possible \$500 in accessory money from tire and spark plug manufacturers. "Red" Crise (the promoter) predicted at least \$5,000 for next year! This equals the posted prize for the Nassau Trophy--the main event! Pro racing in FV?

In case there are any of you who didn't get to attend, you may yet get a chance to see both events. Don't hold your breath while you're waiting, but it's more than just possible that we'll have movies of them!



Moments after getting the starting flag, a fine assortment of Vees, led by eventual winner Chris Amon in car No. 9, guns toward the first bend. Amon, driving a Beach machine, averaged 79.885 mph--a new record for the 103-mile race.

photo: Roland Rose, Bahamas Ministry of Tourism



Dan Fowler, of Minneapolis, drove his Beach Mk. 5 to victory at Daytona, averaging 69.58 mph over the 1.63-mile circuit. Here he shows Boyd Hough, of Phoenix, the way through a corner.

photo: Alice Bixler



Incoming Formula Vee International President Whit Tharin sports a bandanna and a big smile at Daytona where he finished third overall in a Formcar. At Nassau, after claiming ninth in the "Grand Prix", the smile faded when he broke his leg.

photo: Alice Bixler

Some interesting information in the Membership renewals every once in a while: For instance, Eric Harris, who listed himself as a "student" last year, is now an engineer with GE. Congratulations!

**The BULLETIN of the
Formula Vee Association**

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EAST IS EAST AND WEST IS WEST---

From Harriet Gittings' newsletter (Fremont, Cal.)---

"It is noted that there are well over the maximum 32 entries for the all-Formula race at Laguna Seca. They will accept cars according to qualifying time, and have the last race of the day a consolation race for all non-qualifiers. We all know the 13 Vees will be the hardest hit. (Anyone remember when we were told we'd have an all-Vee race if we could get 12 cars?) Naturally the consolation race won't accept open wheel cars with the A, B, C, and Sedans which did not qualify for their races, so...."

From Dr. Ed Shantz, Ithaca, N.Y.--

"We sort of closed out the season with a non-spectator event at Watkins Glen this past weekend, and had the greatest bunch of Vee races anyone had ever seen. The first three to six cars were always within five seconds of the winner, and we had nine different cars finish in the top three in five different races, with a total of 16 entries. I managed to get a 2nd, two 3rds and a 4th, but no matter how many times I was in the lead, I could never manage to be there the last few hundred yards.

"Of course we usually have only one or two races per Class in this part of the country, like everyone else, but this race is put on toward the end of the season by the five Regions of upper New York State."

And from in-between, Howard Hoover, of Indianapolis, sends a couple of race results from "Formula Vee and C" races at IRP. In the first one there were 22 Vees and 5 C's. The C's placed 1, 5, 7, 23, and DNF. At the other there were 23 Vees and 3 C's. The C's got 8th, 22nd and DNF. The racing mags no doubt reported a terrific "C" battle in the first race, but I wonder how they handled the second one.

FROM VIET NAM

"Hello, Don--Just finished the monthly "Bulletin" and as usual am re-enthusiased about the possibilities of active participation in FV in the near future.

My squadron is pulling out in about 10 days, and we will be back in California around the middle of January.

My reason for writing is that I am having difficulty finding any information on buying a used Vee. Our squadron is only staying in the States about 11 months, so I do not desire to invest in a new ready-made car, nor will I have time or facilities to build a kit, this time in.

I am sure that due to the large interest in FV in the States there must be a fairly good supply of used machines on the market. My problem is, I don't know where or who to write to.

Would appreciate any assistance on your part. Thank you very much.

Lt. JG Len Guneau, USN
Attack Sqdn. 195
FPO San Francisco, Cal."

Let's find this kid a Vee. OK? Even if you only think you know where he might inquire, how about dropping him a line?

JAPAN, TOO

"...I'm a service man stationed in Tokyo. There aren't any Vees in Japan yet, but I'm in the process of buying one and having it shipped. There is great interest in motor sports here, and I believe FV will catch on very quickly. At present, factory teams dominate the races, and the owner-driver has little chance, but Formula Vee would change this.

"I'm presently racing a Sunbeam Alpine, but it is out-classed in GT II.

S/Sgt. Gerald S. Roon

THESIS

Although it arrived too late to be of any effect in our discussion of the rules proposals, Formula Vee was the subject of an extensive engineering thesis by John Proctor, of Boston. (He is an engineer for Pontiac.)

Based on the proposal that any modification be allowed, provided only stock VW parts were used, he analyzed the possibilities of various combinations of compression ratios and RPM. Some of his conclusions--

1. At 5000 rpm, 9:1 compression ratio, both piston and con-rod are near their limits in stock state.

2. At 7000 rpm, con-rod bolts are overstressed.

3. At 9000 rpm, the con-rod would fail.

4. At 7000 rpm, valve float would be a problem, and wear on the entire valve train would be excessive.

5. Cooling and detonation would be problems at 9:1 and above.

6. At 9:1 and 7000, SAE HP jumps to nearly 70. At 15:1 and 9000 (theoretically) to over 103.

7. At least the first figure could be attained with the stock parts, by heat-treating, shot peening, nitriding, and otherwise improving the physical qualities of the parts. Estimated extra cost: \$400. Attempts to reach the top figure would run in the area of \$1000, not counting failures. With the top in sight, of course, no one could stop along the way.

THERE'LL ALWAYS BE AN ENGLAND!

The cover of the November issue of "Safer Motoring" (a British publication) features a color photo of the first Vee in England--a Formcar borrowed from Porsche for demonstration at a VW club meeting.

WASH.
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