



photo by Paul Bonner

#31 Dick Tilden, 1958 Zink C4 F-Vee; #29 Mike Stacey, 1963 Bobsy Vanguard F-Vee; #48 Dan Abercrombie, 1967 Zink C4 F-Vee; #00 Krista Johnson, 1968 Zink F-Vee.

Formula Vee – Major Fun Minor Budget

-story by Dan Davis

From the 1964 SCCA General Competition Rules "Formula Vee"

1 – Definition: A formula for single-seat, open-wheel racing cars based on Volkswagen sedan components, and restrictive in driver ability rather than design and preparation of the car."

Don't scrub speed and drive with your fingertips, use all the track for track-out, keep the accelerator wide open, stay off the brakes, maintain rpm, maintain momentum – all these instructions were coming to me from the F-Vee owner and champion F-Vee racer. It was my first few practice sessions for a vintage enduro at Sears Point Raceway. The goal was to match his 2-minute flat lap. He had achieved this after the second practice session in the very vintage, very well set-up and legal, very period prepared 1964 Autodynamics F-Vee. Yes, I did hit the magic 2 minute mark and equally satisfying we won the one hour vintage enduro overall!

That was just another race in my continued education in vintage F-Vee racing since 1987. That was the year that Victory Lane Magazine, in cooperation with the Bahamas Sports Car Club and SVRA, organized a big week of F-Vee feature races during the SVRA organized Bahamas Speed Week Revival also known as

the SVRA Grand Bahamas Grand Prix. It began a long time ago with an occasional number of vintage racing weekends in various F-Vees alternating with a variety of other vintage racing cars from vintage Sprites, Bugattis to F-1 and Can-Am. All were and are satisfying, fun and



photo by Don Gwynne

#68 Mike Callahan, Zink Z-5

most of the time competitive. However, none offer the most fun for the dollar that a competitive dice with a fellow F-Vee racer does. My first exposure to F-Vee goes way back to about 1963 when the first Formcar F-Vee was introduced to SCCA racing. I was racing and occasionally winning in a SCCA H Production Fiat Abarth Double Bubble Coupe. A friend arrived with one of the first Formcar F-Vees at Green Valley Raceway in Texas. After all his former fellow

racing to this day. Over time there were minor but significant technical rule changes such as allowance of zero-roll rear suspension devices, changed tire rules, deletion of the requirement of an operating generator, the standard cooling fan and fan shroud. F-Vees fitting later rules are noticeably quicker than earlier F-Vees.

In vintage racing, various vintage racing clubs and organizations have adopted some rules that vary from the original rules. Vintage F-Vees therefore are usually run in several classes reflecting performance differences. More and more clubs are finding vintage F-Vee race grids growing. Some are regularly attracting over 20 F-Vees. The accompanying sidebars discuss how clubs and Victory Lane Magazine, as part of its 25th year celebration, is organizing with many vintage clubs and organizations, a continent wide group of Vintage and Historic F-Vee features called, the Victory Lane Vintage F-Vee Festival Races. Every year a different event will be designated the Victory Lane Vintage F-Vee Festival Reunion. The details are in the accompanying sidebars.



photo by Josh Hires

#60 Peter Mathewson, 1973 Caldwell D13.



photo by Mike Billings

Jon Wong waits for VARA race.

Formula Vee Rules from 1964 SCCA General Competition

Rules

1 - Definition

A formula for single-seat, open-wheel racing cars based on Volkswagen sedan components, and restrictive in driver ability rather than design and preparation of the car.

2 - Weight and Dimensions

Minimum Weight, without fuel or driver 825 lb.

Wheelbase, Minimum - 81.5"

Wheelbase, Maximum - 83.5"

Track, Front - Standard VW - 51.4",

Track Rear - Standard VW - 50.7"

Overall length, Minimum - 123"

Overall length, Maximum - 127"

Body depth at firewall, Minimum - 25"

Body width at firewall, Minimum - 34"

3 - Suspension

A. The front suspension and steering shall be standard VW sedan. The following modifications are allowed:

1. Removal of one torsion bar.
2. Incorporation of a sway bar.
3. Use of any shock absorber, which can be mounted on the standard mounts.
4. Relocation of the steering gear box to a central position, and replacement of the tie rods with others of a suitable length.

5. Steering column may be altered and any steering wheel may be used.

6. Use of any desired steering arm or adaptations.

B. The rear suspension shall be of the "Single-Trailing Arm" type, with coil springs and telescopic shock absorbers providing the springing medium.

C. Wheels shall be standard 15-inch VW sedan wheels.

D. Any tire size may be fitted.

E. Any lining material may be used on the standard brake shoes.

4 - Engine

The engine shall be a standard VW automotive powerplant, as based on part numbers 111-100-021 and 113-100-025, and of 1192 cubic centimeter maximum displacement.

Allowed:

- A. Removal of the carburetor air cleaner and choke mechanism.
- B. Replacement of the stock exhaust system with a separate exhaust pipe of constant diameter for each cylinder, to be routed as directly as possible to terminate at a common vertical plane behind the body, and not to exceed more than (4) inches behind the body.
- C. Lightening of the flywheel to a minimum of twelve pounds.
- D. Balancing of all moving parts of the

engine, provided such balancing does not remove more material than is necessary to achieve the balance.

E. Polishing of the intake and exhaust ports, provided such polishing does not enlarge the exhaust port beyond 28mm inside diameter and the intake port beyond 28mm inside diameter.

F. Matching of manifold flanges is permitted.

G. Removal of any cooling duct component.

H. Fitting of any standard VW carburetor originally supplied on above specified engines, and the use of any size venturi or jets which may be fitted without alteration to the carburetor body.

I. Fitting of any standard VW distributor.

J. Removal of the intake manifold heat riser tube.

K. Nothing must be done to interfere with the normal battery charging function of the generator.

5 - Transaxle

The transmission/rear axle assembly shall be standard 1192cc VW. The synchromesh Components must be in place and operating on at least three gears.

Allowed:

A. Installation of any standard VW gear set which can be fitted without modification of any component of the transmission or of the gear set itself.

B. Removal of the handbrake linkage.

C. Alteration of the shock absorber mounts.

6 - Ballasting

No ballasting is permitted.

7 - Frame

The frame must be constructed of steel tubing and of such a design as to present no hazard to either the driver or other competitors.

8 - Body

The body must fully enclose the engine and may not fair in the wheels or suspension. Firewall, floor and safety equipment must conform to the General competition Rules of the SCCA.

Formula Vees: Then and Now at VARA

-by D. Bauerle

Some major changes have occurred in VARA (Vintage Auto Racing Association) with regards to Formula Vee. In years past, F-Vee was considered by many as a "run what you bring" class even though the loosely interpreted rules specified 1200 cc VW. This created a stained reputation for the organization and may even have discouraged participation.

In 2001 - 02, a driver decided to get the group back on track by bringing some rules to the forefront for consideration. Although his efforts brought out more cars, the rules were still too nebulous and therefore needed some attention. VARA requested that a formal set of rules be proposed, and subsequently were adopted. The revised rules incorporated both the Monoposto and SCCA format yet still maintained the spirit

of vintage racing, thus allowing for the greatest number of participants.

The VARA Formula Vee class is divided into three groups: **FV**, **FV1**, and **FV2**. Although not promoted, a fourth group (**FVX**) also runs with the F-Vee groups but not for series points.

Engines and transmissions all follow the adopted rules and are checked annually either at the beginning of the season at annual tech or at a race event if time permits. Points cannot be accrued unless the car has an annual sticker. Minor differences in the three groups are based on year of manufacture and type of rear suspension. **FV** is considered pre '68 with a "Z" bar or similar camber controlling device, running a fan and treaded speed rated tires. **FV1** limits the year to pre '72, it does accept zero roll suspension with dual rear shocks, no fan, and an option to run either a spec American Racer or a treaded tire. **FV2** allows for more modern cars up to '78 with mono-shock rear suspension. All other requirements are the same as **FV1**.

Typical participation numbers in early 2000 ranged from 3-5 cars. Today it is not uncommon to see 20 or more cars on track. The racing is great, the friendships are many, and the experience is well worth the efforts.



photo file

#7 Al Accurso, Caldwell D-13
F-Vee; #36 Dennis Allen,
Adams Aero F-Vee.