

Formula Vee/Formula First Conceptual Proposal for Progression

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Formula Vee is a class of racing that is unlike any other. We believe it to be the oldest and most successful road racing class in the world. It has reached this status for one major reason. A solid rules package based on inexpensive and readily available Volkswagen 1200 components and keeping that rules package basically unchanged for almost 40 years.

As we close in on the fifth decade of the class, problems can be seen for the future. These problems stem from the exact reason why the class has been so successful in the past, no rules changes. The 1200 Volkswagen was last produced in 1965. VW of North America scrapped out the last of the 1200 specific parts in the mid-80's. Availability of quality new aftermarket parts is thinning to a minimum. Today, most Formula Vee's are built utilizing a majority of used/recycled component parts. Safety issues are beginning to appear due to the age/fatigue and quality of available new and used/recycled component parts. Specifically, front spindles and rear brake drums that break when under a high cornering load. Some high quality replacements are being manufactured on a very limited basis, but the associated costs make these parts very expensive. All Formula Vee parts suppliers agree that within the next few years, availability will get harder and prices will continue to escalate.

The object of the class has always been to focus on driver ability, not to focus on a marquee or model. Volkswagen components were used for the class because they were inexpensive and very available. Volkswagen had no interest or backing for the class until after it was a huge success.

We have done an excellent job of keeping our class stable for 40 years. In order to survive and prosper in the next 40 years, we must change/update our rules package while maintaining the objective of the formula. The following is a recommended list of areas to be updated:

- **Engine**
- **Front axle beam**
- **Braking system**
- **Wheels and tires**
- **Overall dimensions**
- **Class name**

We will now give definition to each of the areas of concern.

Engine

Current Problems:

- New parts very limited availability
- New race engine costs - \$7200
- Age of used engine parts – Crankshaft, Con Rod and Rocker Arm Breakage
- Quality of new parts – Exhaust valve head breakage

Suggested Solution:

- Volkswagen 1600
- New parts unlimited availability
- New race engine costs - \$ 3200 estimated
- Many aftermarket parts available specifically designed to increase longevity

Front Axle Beam

Current Problems:

- New parts very limited availability
- Complete assembly costs - \$1200
- Age/safety of used parts – front spindle breakage

Suggested Solution:

- Volkswagen ball joint type front axle beam
- New parts unlimited availability
- Improved safety and strength
- Complete assembly costs - \$800

Braking System

Current Problems:

- New parts quality/safety – rear drum breakage
- Drum brakes out of date

Suggested Solution:

- Volkswagen disc brakes front and rear
- New parts unlimited availability
- Improved braking/safety
- Complete 4 wheel disc brake cost - \$450

Wheels and Tires

Current Problem:

- Slick tire longevity/costs out of control - \$600 per set-per weekend
- Slick tire increased suspension loads and cornering speeds
- VW 5 lug wheel creates “stigma”

Suggested Solution:

- Spec tire focused on extreme longevity – seasonal tire
- Spec steel or aluminum wheel with increased width to eliminate VW skinny wheel “stigma”

Overall Dimensions

Current Problems:

- Limited height and weight of driver – 6’ 2” and 220 lbs. max.
- Formula Mazda “stealing” large racers

Suggested Solution:

- Increase wheelbase and overall length to accommodate any driver – 6’ 7” and 270 lbs. Big people want to race too!

Class Name

Current Problem:

- Formula Vee has not been the preferred place to start your racing career since 1968.
- Formula Vee has a VW “stigma” and VW has not wanted anything to do with us since 1971 after the start up of Super Vee.

Suggested Solution:

- Change the class name to Formula First and market itself as a starter class – the only US class currently marketed as a starter class is F2000, front runners in F2000 have seasonal budgets in the \$250k range.

We would propose that a “test” car or cars be built to check out each upgrade area as well as build support for upcoming introduction. Formula First test car programs have been successfully used in many places around the world. Remember that our resistance to change has been our key to success, so it is imperative to establish that progress (not change) is required. These test cars do a very good job of demonstrating progress. In checking with SCCA, arrangements can be made to race a test car at a regional level for no points or trophy. Currently we are working on procuring a FV that can be converted into Formula First specs as to demonstrate the ease of conversion.

It should also be mentioned that the USA is the last country to look at updating our Formula Vee's. Every FV community worldwide that could be found has made some type of change to update.

In closing, Formula Vee racing in the USA is not in any trouble that needs immediate attention. We are looking into the future to see how we can improve our status as a class and insure that driver ability, not annual budget, is the top priority.

William Bonow