

936 SCCA TYPES CAN'T BE WRONG

At least they wouldn't admit it.

• The most popular class in the SCCA's amateur racing program is Formula Ford. According to the club's statistician, an average of 25.49 of them showed up for each race last year, edging out second-ranked Formula Vee, which could muster only 21.22 entries. In all, more than 936 Fords are known to be racing in the U.S., and the popularity of the class extends to Canada and Europe as well. To the spectators, however, Formula Fords seem even more numerous than the statistics indicate. This could have something to do with the way they fill the air with flying nose cones in the first turn of the first lap of every race when a half-dozen hot-blooded young pilots simultaneously agree that being second is synonymous with being chicken.

Two reasons are commonly given for driving a Formula Ford. The first is that these simple-but-sophisticated single-

seaters are the primary trainers for Formula One. In no other amateur class do professional aspirations burn so brightly. Every Ford driver believes that "formula-car experience" is the key to getting a pro ride. When asked to crank their sights down a little closer to reality, however, most of them will also tell you that Formula Fords offer one helluva good ride. And on this point they are not wrong.

Joe Stimola, who runs a race-car preparation shop on Long Island, brought a typical example of a first-class amateur car around for us to run through our road-test procedure. The car was a Crossle 30F, the latest model from an Irish firm specializing in formula cars. It had one of Stimola's engines, a 1600cc pushrod four-cylinder Pinto, which dynoed out at 111 hp at 6000 rpm. Since all of the ratios in the four-speed Hewland transaxle can be changed in a matter of minutes, Stimola

plugged in the set he felt would be optimum for the standing quarter-mile. With that one concession to drag racing, the Ford made three passes, clocking a best of 14.0 seconds and 96.8 mph.

Braking and handling were equally spectacular. A deceleration rate of 0.94G was attainable without locking the wheels. A cornering force of 1.05 G was measured on the skidpad. No effort was made to set the car up for these two tests. It ran just as it rolled off the trailer.

Formula cars are delightful because they reaffirm Newton's laws. An engine rated at 111 hp doesn't sound like much in absolute terms, but it's a real hero in a car that weighs 930 pounds. And the same principle applies when the driver turns the steering wheel or presses on the brake. It doesn't require much force to produce drastic results. Smoothness and accuracy, not brute strength, are the qualities that

SCCA TYPES

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make a good formula-car driver. If you are truly sensitive to machines, you'll never find a more willing racing companion.

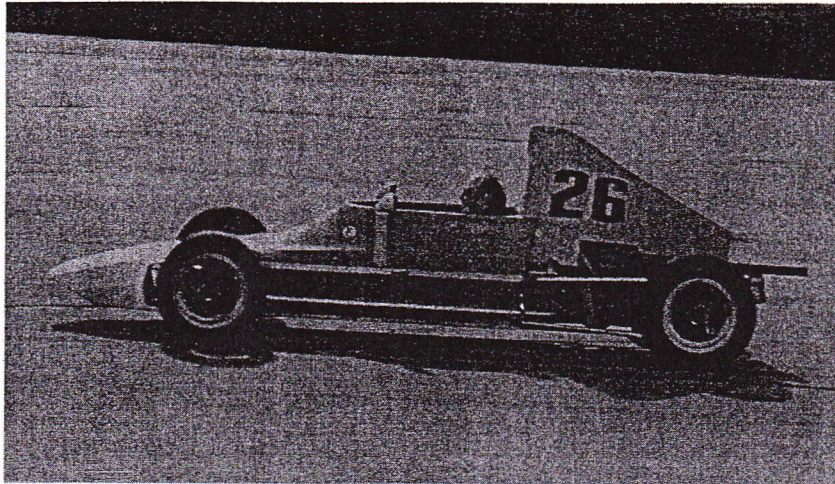
Because of the nature of the rules, all Formula Ford cars, regardless of the brand, are very similar. All have tube frames (monocoques are prohibited, as are wings), use the same basic Ford engine and Hewland four-speed unsynchronized gearbox, have fully independent suspensions and disc brakes all around and race on 13-inch wheels 5.5 inches wide.

But there are, of course, important detail variations. Some have outboard brakes, others inboard. Even though the bodywork is fiberglass and sparse compared to the elaborate shapes found on Formula One cars, there are still significant aerodynamic differences between various Formula Fords. The racers say that some cars are easier to draft than others, and some have less air resistance when running alone. But the differences are generally more subtle than those between the cars in most other classes of racing. The class is so competitive, that squeezing one more horsepower from the engine is considered a bonanza.

While the cars are admittedly simple, they are in no way cheap. A new Crossle like this one with steel wheels, no fire extinguisher and no seatbelts sells for \$8500. That price includes an engine race-prepared in England and guaranteed to perform with valor if not distinction. Which means that if you are hunting lap records, you'll need something better. Stimola's engines, which have earned their share of gold medals in the last few years, sell for \$2600—and that may seem like a generous sum for what is fundamentally a blueprinted Pinto engine.

The engine rules allow no significant modifications. The valves, pistons, connecting rods, crankshaft, carburetor and camshaft are all supposed to be stock. "That's what makes the cost so high," Stimola says. "I have to be so careful with the details to get the horsepower." The understressed nature of a carefully built stock engine does have advantages though. Unlike most pure racing engines, Formula Ford engines seldom tear themselves into instant junk. Stimola says that some of his customers get 15 races without a rebuild. Try that in your Eagle-Offy.

While a Formula Ford engine is theoretically a direct transplant from a passenger car, the driving experience is something altogether different. Just sitting in the Ford's driver seat requires a new mindset. For one thing, you can't see your feet. Of course, you don't look at your feet very



YOUR BASIC RACER: STEEL TUBING. GRAY PAINT AND VERY LITTLE ELSE.

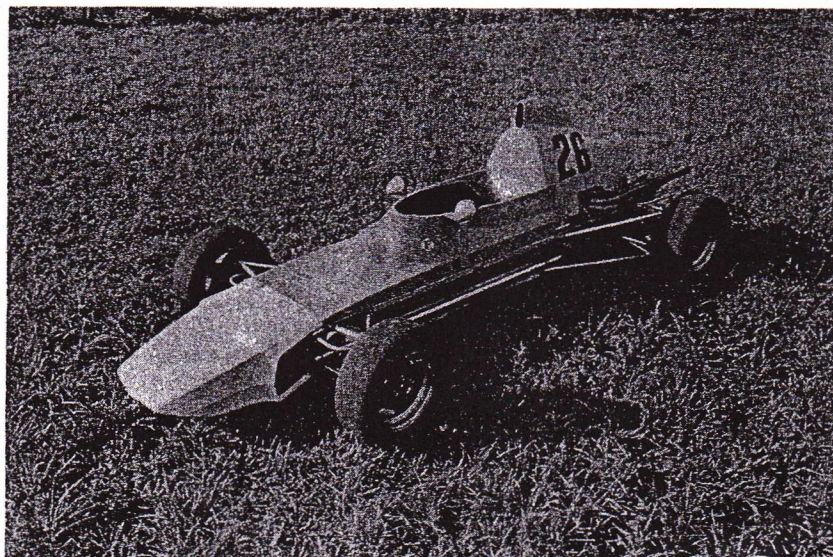
often in an Oldsmobile, but you can *never* see your feet in a Formula Ford. Getting in is like sliding down into a long overshoe. Stop when you hit bottom. Now where are the pedals? No use looking down. Your thighs take up all the space under the dash. So you poke around with your toes to see what moves. The one on the left is spongy. The thing in the middle is so solid it's either an excellent brake or a piece of the frame. Can't tell which. On the right is the accelerator. You can tell because it's notchy. Formula Fords have long throttle cables that always feel like they were lubricated with sand.

Once you get the pedals figured out, the rest of the car is simple. The Crossle is typical in that it has three dials on the dash: a large tachometer in the center flanked by a small water temperature gauge on the left and a combined oil temperature and oil pressure on the right. The shift lever is high and just to the right of

the steering wheel. There is no windshield at all. The cowl flares almost to eye level in front of the steering wheel, and it's designed to direct air-flow up over the driver's head. Rocks and bugs are another matter, however, and goggles are absolutely necessary. A roll cage would come in handy on occasion too.

But there is no room for this worry in Formula Ford. Its confining dimensions and minimal weight contribute to an extra measure of exhilaration. Newton wrote the equation years ago: Any car that will rush up to 140 mph and corner at greater than one G is a mighty fine ride.

If that leads to compromises in driver protection, well, it just comes with the territory. The Formula Ford pilot doesn't concern himself with thoughts of mortality. His biggest problem is 24.59 cars bobbing and weaving around him . . . or, if he lost his bid in the first turn, where his next nose cone is coming from. ●



HIGHTAILLING IT: COMBINED ENGINE COVER AND AIR SCOOP IS AN OPTION.