

Unified IndyCar Series Has Been A Boom For Some

BROWNSBURG, IND.

I'm late with this month's column for the racer's bible, *NSSN*, but I have a good excuse. The month of May has proven to be very busy again thanks to the recent IndyCar/Champ Car merger. The added teams have not only increased competition, but also the need to go that extra step to ensure a starting spot for the 92nd Indy 500.

Companies like C&R benefit from times like these by building components to make the cars faster. There's more energy at Indy than I've seen in several years. The fact that all teams are together is a tremendous steppingstone for open-wheel racing.

When every car is a Dallara with a Honda engine, what do the teams do to gain advantage, especially considering this spec has been the same for about six years? The answer is: tune on the given aero package.

Aerodynamics provide the biggest speed gains. The engineers

have to dig very deep for these gains and most of it comes from testing in the scale-model wind tunnel.

For instance, on the ovals, teams are allowed to build their own suspension. The standard package is a 122-inch wheelbase. Through lots of time in the wind tunnel,

some teams have found that a shorter wheelbase creates less drag and develops more downforce.

This is accomplished by pulling the front suspension back, which alters the airflow over the car. At Indy and the other high-speed ovals, teams build 120-inch wheelbase packages. The angles of the aero tubing, which these wishbones are made of, are also very critical for aerodynamics. The 122-inch wheelbase gives the car more stability so some teams will qualify with the 120 inch and switch to the 122 inch for the race.

In 2006, Penske Racing developed a new mirror package that was highly publicized. Instead of the stock Dallara mirrors, they built mirrors that were larger and had a different shape. This mirror shape helped deflect the turbulent air that comes off the top of the front tire away from the rear wing, thus making the rear wing much more efficient. Now, every team uses a version of this mirror, thus taking advantage of a gray area in the rules.

On the tunnel diffusers, which is the air exit of the underside of the car, there are many block-off plates, wickers, etc. that can be used. These plates and wickers alter the speed and direction of the exit air and have a big effect on drag and downforce.

All of these alterations help give the car downforce, in addition to what the rear wing produces. Because of this added downforce, the rear wing can be run at a negative angle, which greatly reduces aero drag. The rear wing is the object sticking in the air and by running the negative angle up to five degrees, the car is much more slippery aerodynamically.

The car still sticks in the corner because of the "free" downforce created by the other aero modifications made to the car.

Because of the added competition this year, qualifying with negative rear-wing angle is an absolute requirement to make the race. In the race, the speeds are slower and the air is turbulent from traffic. Some of that rear-wing angle will be put back for the added downforce in these conditions.

These are just a few noticeable things done to the Dallara cars to make them more aerodynamic. There are hundreds of other "aero tweaks" made by the engineers to reduce drag and make downforce.

At the end of the day, the teams with the most wind-tunnel time have the advantage. Money will always win, no matter what the rulebook says.

THE TECHNICAL SIDE



CHRIS PAULSEN

Veteran Drivers Are Getting It Done In Pennsylvania

MECHANICSBURG, PA.

The youth movement in sprint car racing in central Pennsylvania and around the country cannot be denied. However, veterans like Fred Rahmer and Keith Kauffman aren't ready to pass the torch yet. Even the King of the Outlaws continues to add to his legacy.

When Steve Kinser won the World of Outlaws feature at Williams Grove Speedway last Thursday, May 15, he became the third driver of at least 50-years-old to win there this season. Evidently, the youth movement is on hold at the historic speedway.

Rahmer, who turned 50 in March, won the season opener at the Grove, and continues to lead the point standings in search of his eighth track title. Rahmer already has the most titles at the Grove and the most wins at 75.

There's no doubt Rahmer's desire to win is as strong as it was 20 years ago. On numerous occasions this season at Williams Grove and Lincoln speedways, Rahmer has charged from the back to score top-five finishes.

CHASING THE POSSE



TODD HEINTZELMAN

Kauffman, at age 57, won his 52nd-career Grove feature two weeks ago by narrowly beating Rahmer in what became a 10-lap duel between two of the best sprint-car racers in history. And the trend continued when 52-year-old Kinser parked the familiar No. 11 in the Grove's victory lane for the first time in a few seasons.

Kinser's win total of 38 at the Grove is remarkable considering he's never been a regular. He is tied with the great Kenny Weld, a five-time Grove champion, in seventh on the all-time list.

Second on the all-time win list is Lance Dewease, followed by Don Kreitz, Jr., Kauffman, Lynn Paxton, Smokey Snellbaker, Weld and Kinser.

Rahmer runs in every race he possibly can, while Kauffman has backed off his schedule somewhat racing weekly only at Port Royal Speedway where he holds records for wins (126) and track championships (13).

Kauffman also runs select big shows at other speedways. Rahmer also continues to dominate at Lincoln Speedway, where he has three wins and four runner-ups. He leads the win list with 156 and has the most titles with 10.

These guys are all in good cars and they continue to prove that age is really just a number — even in sprint-car racing.

For as long as these guys have been in the sport, the rivalry between the World of Outlaws and Pa. Posse has been around, too.

The 2008 version got started Thursday night with Kinser getting the win.

Williams Grove regulars had a decent night, placing five drivers in the top 10 with Doug Esh having the best finish in fourth. Esh started out the night storming from sixth to win his heat race. The win included a pass of Kinser.

Grove regular and former Outlaw Craig Keel nearly pulled off a monumental upset. He won the dash and led most of the feature. He finished second, but was light on the scale and disqualified.

Six of the top-10 qualifiers were also Grove regulars, with Greg Hodnett setting fast time.

Impressive timers were 18-year-old Cody Darrah in third and 410-rookie Pat Cannon sixth.

Lucas Wolfe spent five seasons in central Pa. before going full time with the Outlaws. His return home resulted in a heat win and a fifth-place finish.

Former Posse regular Jason Johnson made his debut in a second Kasey Kahne-owned entry.

Gas Prices Are Making Waves In Late-Model World

BATTLE CREEK, MICH.

It was only a matter of time. With the nation's economy on a downward spiral and gasoline prices near or more than \$4 a gallon, everybody knew the racing world would react. Everybody was right.

I'm new here to these pages. I am a racing journalist, but I am also a race fan. For almost every one of my 42 years, much of my world has revolved around dirt-late-model racing. My world is about to change.

The first real sign of trouble was a press release issued earlier this month by Ohio-based Donnie Moran Racing saying that high fuel prices will keep the team off the road and closer to home for much of the 2008 season. Moran has been a traveling driver for the better part of 25 years and has spent the past several racing with the Lucas Oil Late Model Dirt Series. His decision opened more than a few sets of eyes.

Just four days after Moran's decision came some more troubling news. Promoter Joe Loven of Volunteer Speedway in Bull's Gap, Tenn., announced he was closing his track for most of the month of May. Loven's reason was low fan attendance over the early part of the season. A general admission ticket at Volunteer costs only \$8.

BETTER THAN THIS



PAUL FLETCHER

Loven attributed the drop in fan count to gas prices.

I'm afraid these things are signs of what lies ahead. We could debate the reason for high fuel prices from now until the checkered flag waves. We wouldn't get anywhere. The prices are what they are and we've gotta deal with it. They began rising almost three years ago in the wake of Hurricane Katrina.

The reason given was the effect on oil supplies. I didn't believe it then and I damn sure don't believe it now. Don't get me started.

A very high percentage of late-model drivers, crews and fans are just regular working-class folks.

They have families to feed and clothe and bills to pay. Many of them can't afford to pay \$4 for a gallon of gas. Racing fuel is much higher than that. The handful of drivers I've spoken to about this issue have all said basically the same thing: They aren't traveling.

Their world is about to change.

Usually, by this point in the season, I've been to 10 or 12 races. This year, as of this writing, I've been to three. I look at my schedule every single day trying to figure out what to leave on and what to remove. Lately, I've just done a lot of removing.

Many fans are in the same boat as me. We're taking on water, and the only bucket on board has a hole in it the size of a silver dollar, which happens to be the amount of money I was paying for a gallon of gas just five short years ago when I lived in East Tennessee.

It pains me to write gloom and doom about the sport I love, but the evidence to support it is there.

But there is a possible upside, at least for some. I'm not a crystal-ball reader, but I'd say most of the bigger-budget teams that follow the two national touring series and race in other big-money events will continue to travel.

Some others likely will have to make adjustments. That could prove to be an advantage for some of the smaller regional series (and their fans) around the country. If you live east of the Mississippi, it's not hard to find a good-paying race within a few hours from home almost every weekend. Those races might start looking pretty attractive to some traveling teams.

I started going longer distances to special-event races 26 years ago when I was a senior in high school. I drove a 1966 Chevella. If memory serves, I could fill the tank for about \$15.

There's a lot of you who remember those days. The good times. Where'd they go? I don't know. Our world has changed, and all we can do is live in it.

And go racing when we can afford to.

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