



## Through The Esses - Donohue's Out Of The Box Porsche-Riley Analysis

08/31/06 - © Andrew S. Hartwell

A few weeks ago we talked with David Donohue about the Brumos Porsche Grand Am Daytona Prototype team's switch to a Riley chassis. After campaigning a Fabcar chassis for three seasons, the decision to go with a new car was made and Donohue and his co-driver Darren Law took to the track at Barber Motorsports Park just three days after the car was completed by Bill Riley's shop.



Barber was the first run and a lack of preparation and testing time found them well out of the hunt. Watkins Glen followed shortly thereafter and again this experienced team found themselves entering the fight with a new pair of boxing gloves. By the time they got to the third race at Sears Point (Infineon Raceway) the team had only just started to learn how to tie up the laces.

Donohue has read and heard about people making comparisons between the Brumos team's delicate start with the new chassis and how the Alex Job Team (AJR) came to the ring ready to throw a knockout punch in the first round. He spent some time telling us that there are simply too many variables to judge the performance of one team over the other in any meaningful way. He suggests fans of both teams keep in mind that what is happening today is by no means a certain harbinger of what is to come.

"Our out-of-the-box start from Barber, as far as the team is concerned, simply wasn't satisfactory. We took delivery of the car three days before we showed up at the track, and we only had one test day at Mid-Ohio before that first race. At Watkins Glen we really didn't show much speed either, but we ended up with a pretty good finish. And this past weekend at Sears Point (Infineon Raceway) we finally began to show some signs of real progress regardless of the result.

"We are doing all of our learning on the race weekends. This means we are quite limited on the amount of time to try things and try to figure out which buttons to push to get what we want out of the car. We are making headway, but we are making changes to the car on the morning of the race. We are really using these races to experiment and learn the car. For this season, we really don't have very much to lose."

"I think we were reasonably competitive at Sears Point, unfortunately I got into the rear of a GT car and then the #89 rear-ended me at the same time while trying to avoid the whole mess. That rear end impact caused enough damage that we lost about 100 pounds of down force which pretty much took us out of the hunt for running up front. We finished eighth but the car went from an understeer to pretty much of an oversteer in every corner. Especially in the high speed corners where you should be brainlessly flat. Instead we were not quite so brainless! It was a challenge to drive.

"I have to admit that I am bothered by the way everyone keeps comparing us to the Alex Job team and how they came out of the box and sat on the pole at Daytona. There are a lot of parallels here and a lot of things that aren't fair to compare the two teams. For example, Alex didn't take delivery of his car three days before its first race weekend. He had more time with the car and was able to do a bit of testing. He wasn't new to Grand Am either. He ran our car in 2003 at the Rolex 24. Plus his engineer, Greg Fordahl, was our engineer from late 2003 into 2005.

"Greg has been Alex's engineer on the GT program in the ALMS for years, and because he was with Alex when he supported our Rolex effort in 2003, he got on our 'radar screen' as a full time engineer. He is very good and got a lot of DP experience with us at Brumos, and even though he is with the AJR Crawford effort full time, we still go over and ask him questions! He is very bright and a real stand up guy.

"Engineering our cars nowadays is Rick Mayer and Hayden Burvill. They were both also with us last year. Rick lives in Florida near the shop, which is very valuable. We worked together before when I raced the Panoz LMP 900 cars in the ALMS. Rick also works with Risi Competizione and competes against Alex and Greg in the ALMS. It's a small world isn't it?"

Donohue also has a great measure of respect for Alex Job and his attention to detail and his years of experience in having his cars ready to race before the races, rather than at the races.

"Alex' team always does an excellent job of preparing the car. They are consistently one of the fastest cars. Their car, as well as the #10 (SunTrust), and the #99 (Gainsco) are always podium contenders. Then there are cars like the #01(Ganassi) and the #4 (Boss) that don't always practice fast, but are right there when the green flag drops.

"Alex has been around a long time and he knows how to do it right the first time. I'm sure he took ownership of the Crawford later than he wanted but still with enough time to take it to a few private and open tests. And of course he already had a well seasoned team in place as well as a good understanding of the environment at a Grand Am event."

We wondered if the lack of testing time had been the situation for Alex before his first race with the Crawford, would the AJR and Brumos teams otherwise be equals?

"That is something we'll never know. I am certain we would have been much better off if we had more time to prepare, as AJR did. Having said that, I still think we did the right thing by starting with the new car right away. With a better understanding, even with what we know now, we would have done things differently at Barber, and we'd be farther along today. I just can't stress enough that we didn't understand how different it was compared to what we had been working with. I admit that I honestly thought it would be easier. Even at Watkins Glen we showed up and had a difficult time with the car. We eventually started to get a handle on it, but it was too late in the weekend.

“You know, it is hard to believe we already have several chapters in our books having been to three races already. It still feels to me like we got the cars yesterday. I think we are making progress though, and I think Sears Point showed that as we qualified in the top 10. But we still have quite a ways to go.

“What else you should keep in mind is that, when we were running 12<sup>th</sup> or 14<sup>th</sup> or somewhere around there and were considered ‘out to lunch’. We only found 3/10ths of a second and we were in the top ten and suddenly viewed as contenders! The series is so ridiculously competitive.

“I think the biggest challenge here is to show consistency throughout the season. Of course we really want to do well in individual races, but we are already looking at the Rolex 24 for 2007. We are trying to sort ourselves around this new car. The team on the ground – the guys actually touching the car – are doing a great job, as I said previously. It really comes down to the drivers and the engineers learning how to work the car. I think all the other puzzle pieces fit well together.”

Donohue is looking forward to the short break between seasons as he sees this time to be the courtship period for Brumos Racing to develop a loving relationship with the Riley chassis. Of course, once the romance starts, he expects the gloves will be fully laced and ready to pound on the competition.

But first, you have to dance with the lady. Better check her shoes.

“Grand Am has three open tests already scheduled. I think we have a few others set up as well. One limiting factor is tires. You only get three sets per quarter from Hoosier, or something like that. I am not sure how many you get in the off-season if any, but I am sure there must be a limit. And next year I think they are bringing in a new Hoosier tire. We have had some consistency issues with the current tires, it seems as if every once and a while you can get a set that just doesn’t have the same performance level or feel to them.

“For example, when I came in under caution at Sears, I took on fuel and tires. Somehow I could tell even before exiting pit lane that I had a bad set of tires. I had scrubbed them in that morning and they didn’t feel right then either. I can’t tell you how I knew or what gave me that impression. And of course Rick was asking me, ‘What is it? The front, rear, left, right?’ and I couldn’t say but I just knew it was that set from the morning.”

Almost-spec tires from Hoosier aside, one equal factor in the AJR / Brumos comparison is the Porsche engine. As Donohue explains, there isn’t any real magic to be found in this part of the car.

“The engine is really a plug and play situation with Porsche doing all the tuning and builds and so on. “

Grand Am amended the rules some time back to allow the use of a drop gear for anyone running a Porsche engine. At the time, only the Brumos Fabcars were championing that powerplant. But with the rules change there came a new wave of cars choosing the German powerplant to propel their chassis.

"I think the drop gear is why you now see so many Porsche engines in the series. Because it is a Boxer engine, with horizontally opposed cylinders, the height of the crankshaft centerline is higher than what you find in a typical V8. By Grand Am allowing the drop gear in the Porsche, it essentially allowed the transmission to be situated lower, in the same way it is with all the V8s.

"It is obviously undesirable to have the highest transmission in the class, that's a lot of weight about four or five inches higher than anyone else. Having the transmission up higher affects both the center of gravity and the polar moment of inertia. People spend ungodly amounts of money to lower 180 pounds four inches."

Donohue sees the trials his team is living through, with running a new chassis so late in this season, to be the kind of 'real world' experience that, when supplemented by off season testing, will position Brumos Racing for positive results in 2007.

"We are trying to stay clean in these final races and get some good finishes under our belt. Of course, that's easier said than done. At the same time we are really trying to get ourselves ready for next year when we want to go all out towards the championship.

"After Sears Point I am very optimistic. I feel like we kind of broke through there and started to get some direction on the car. Hopefully we can build on that momentum. There are still some significant changes we need to make and we know that, we just don't know what those changes are yet. We need some time away from a race weekend to methodically go through the car and discover them. We need to figure out what it is we, as a team, need to do to bring our cars to the next level.

"It's clear the Krohn car, the Comp USA car, the SunTrust car, the Gainsco car and the Ruby Tuesday car are always running up at the front. They are a cut above everybody else. Occasionally the #39 (Crown Royal) car and the #5 (Essex / Make A Wish) and the #19 (Playboy / Uniden) cars visit the upper dimension if you will, but it is a real challenge to get there consistently. The goal is to reach a point where we know we will practice and race well, and have a real shot at a podium every time out.

"Looking at the finishing record for the #23 car, if they don't have some sort of problem in the race – mechanical or contact or something like that – they are a podium car every time. I think that car has really set the benchmark in terms of the team's consistency, and that is what we need to accomplish in '07."

And Brumos Racing appears to have decided that it is their goal to hit that mark, and then exceed it. Donohue simply suggests the fans of Brumos Racing – and all Grand Am fans – be a bit patient, for this veteran race team is determined to come out swinging in next years fight for the championship.