

ALAN JONES **THE ORIGINAL AUSSIE GRIT SPEAKS OUT**

AUTOSPORT

JOLYON PALMER

BRITAIN'S NEWEST F1 HOPE

“It will be a proud
moment to join Jenson
and Lewis on the grid”



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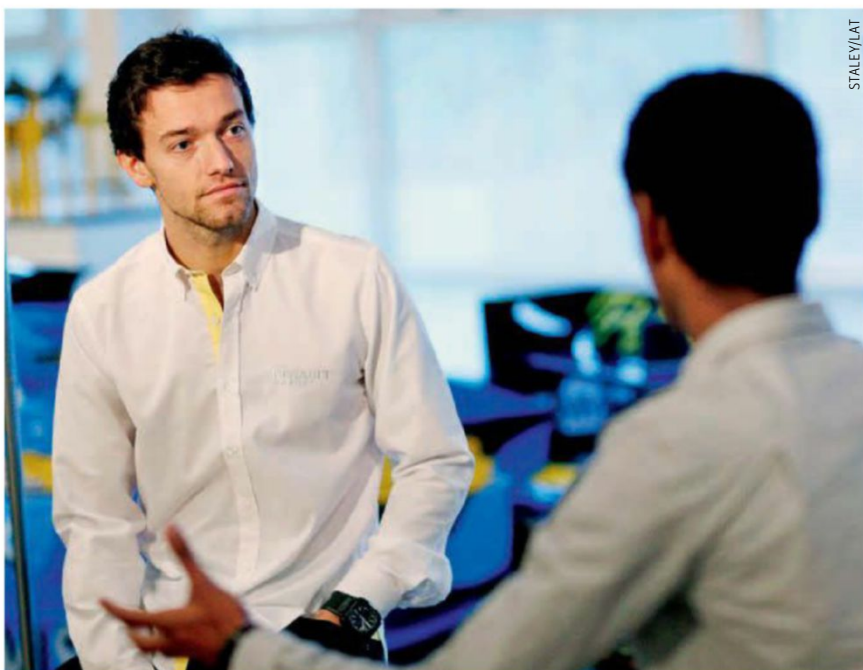
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Palmer's out to prove he's got F1 star quality

IT CAN BE DIFFICULT TO MAKE AN IMPRESSION IN F1's midfield. The Renault team's top brass has admitted that it goes into the 2016 season in a conservative mindset, meaning that *Autosport* cover star Jolyon Palmer faces a tough challenge in his debut year as a grand prix driver.

Our cover feature, written by Lawrence Barretto, who met with Palmer at Renault's Enstone base on Monday, reveals a driver with real determination to succeed. And Palmer's credentials are certainly on the money.

As a GP2 champion, he has proved himself as ready as he can ever be to make the step up; and with what counts for a huge amount of seat time in this era of very limited running, he has the foundation to make a good impression. He also has a well-regarded team-mate in Kevin Magnussen – a driver who also has something to prove – to measure himself against.

That is good news for Renault, which has two hungry drivers able to push each other on throughout the season.

His destiny will be intertwined with that of the new Renault squad. There's a huge amount of goodwill towards what is best called 'the Enstone team' (previously Toleman, Benetton, Renault and Lotus before becoming Renault again), and the quality that somehow remains there even after several troubled years means that it can rise again.

It's down to Palmer to prove this year that he can rise with it.



EDD STRAW EDITOR

edd.straw@haymarket.com

@eddstrawF1



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Staley/LAT

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JOLYON PALMER

I DON'T
WANT TO USE
BEING A ROOKIE
AS AN EXCUSE.
I'M EXPERIENCED
ENOUGH IN RACING
TERMS TO PUT IT
TOGETHER

With comeback kid Kevin Magnussen alongside and reserve driver Esteban Ocon in the wings, Jolyon Palmer has to perform for Renault in F1

By Lawrence Barretto, F1 Reporter

 [@lawrobarretto](https://twitter.com/lawrobarretto)



COATES/LAT

Jolyon Palmer is all smiles, perched on the front-right tyre of Fernando Alonso's 2006 title-winning Renault in the team's conference centre at Enstone. He confesses to experiencing a sense of pride at being photographed here for the cover of this magazine.

"I've read *Autosport* since I was tiny," he says. "I read it all the time. I often thought being on the cover would be a life goal, so I'm very proud."

Loftier ambitions now await. When 25-year-old Palmer lines up on the Formula 1 grid in the Renault RS16 for next month's season-opening Australian Grand Prix, he will become the 144th British driver to start a world championship race.

"I'm really proud to be a Brit in Formula 1 because of the history," he says. "Britain is the home of motorsport, most of the teams are based here, and there is great history in F1. If you look at the previous British champions there are a lot of great drivers and currently we've got two great drivers in Lewis Hamilton and Jenson Button. So to be joining them on the grid is a proud moment and it gives me a lot of incentive to emulate them."

The foundation of securing this F1 drive lies in his GP2 title in 2014, according to Palmer. The Briton put a package together that made him an attractive prospect to the team, then still called Lotus. "I signed as their reserve driver, which was a good deal at the time, since it had a lot of track time and good opportunities for 2016," he says.

As part of that deal, it is believed that the contract included a clause guaranteeing him a seat provided he could secure a certain amount of sponsorship funding, understood to be in the region of £4-5 million, for 2016. But it wasn't until Romain Grosjean made the call to quit the team, and sign for Haas, that Palmer felt he had a genuine chance to land the seat.

"That was the moment where it all started to fit together really," he says. "I knew from the start of the year that the big reason for me doing a 2015 reserve role was to be racing in 2016. I didn't want to just do it, get a lot of test mileage and be like a lot of other third drivers with nowhere to go. So that was what I was told for 2015, that there would be opportunities at the end of the year. So I was just focusing on doing a good job. Then suddenly the opportunity came up."

Securing the seat was far from straightforward. Lotus was struggling financially and negotiations for

Renault's purchase of the team were dragging on, so its future was up in the air. If a team

that worked out of Enstone was to survive, Palmer essentially had to deal with two entities to resolve one contract.

"It was a really difficult moment and negotiations were complicated because Lotus was still running the team, and there was no sale to Renault, yet it was looking highly likely that it was going to go through, so



Autosport's Lawrence Barretto grilled Jolyon Palmer in Enstone's trophy-packed conference centre

“THE TWO TORO ROSSO GUYS HAVE SHOWN WHAT’S POSSIBLE. YOUTH CAN BE A POSITIVE IF YOU HAVE DRIVERS WHO ARE MOTIVATED”

Renault wanted to be involved in any decisions that went for the future,” he says. “So I was dealing day-to-day with Lotus, because I was still with the team and bosses from there, but Renault were still looking at everything in the background.”

Eventually, Renault signed a letter of intent to buy the team and then completed the sale. The team’s future was safe and so was Palmer’s presence on the grid in 2016. That wasn’t the end of the instability, though. Just days before the team’s official launch at its Technocentre outside Paris last week, McLaren outcast Kevin Magnussen signed a deal to replace Pastor Maldonado when the flow of PDVSA sponsorship dried up.

As a result, Renault has the least experienced of the confirmed driver line-ups on the grid. Waiting in the wings is Esteban Ocon, a Mercedes protege who proved his credentials by claiming last year’s GP3 title, and who has been signed as reserve driver. Does the arrival of two hungry young men heap the pressure on Palmer to perform or risk losing his drive?

“It doesn’t really affect me,” he says. “I knew Esteban was going to be quite likely and a very capable third driver, and there had been a lot of rumours about Pastor in the winter, so I was just concentrating on my own preparations.

“I’m quite pleased Kevin has come in because he’s a very good driver. He had a good year in F1, was on the podium, and I get on really well with him so I’m pleased. It’s a very good benchmark.”

Palmer points to the impressive debuts of Max Verstappen and Carlos Sainz Jr, who formed a rookie

line-up for Toro Rosso last year, as a reason to believe Renault’s youthful approach could pay dividends.

“Yes, it’s a young line-up, but we’re really hungry and we all want to have long-term success with Renault, so we’re all pushing each other really hard,” he says. “The young guys have done really well in the past two years. The two Toro Rosso guys have shown what’s possible. Youth can be a positive if you have two drivers who are motivated and pushing really hard.”

Like Verstappen, Palmer is following in the footsteps of a racing father. Jonathan Palmer made 82 F1 starts, taking a best finish of fourth in the 1987 Australian GP with Tyrrell. His son, like many F1 drivers, received a go-kart for his birthday and used to “thrash it around” his garden but never felt any pressure to pursue a career in racing.

“At school I was into various sports, especially football,” he says, smiling and letting his gaze wander, almost as if he is picturing himself back on the pitch. “But one

day, suddenly something just clicked and I realised I wanted to be a racing driver professionally, and it’s gone from there.”

Palmer had a back-up plan, studying business management at Nottingham University, in case the racing career didn’t pan out. But it was only ever a ‘plan B’ for him.

“I always planned to have a »



McLaren refugee Kevin Magnussen and Mercedes protege Esteban Ocon will add pressure

“I DID QUITE A LOT
OF RACING OFF THE
BEATEN TRACK, SO
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back-up," he says. "I wasn't sure what to do, so I chose that. It was an OK course, not too many hours, and it's something I'm quite good at. The racing dream remained through my years in Formula Palmer Audi and Formula 2. When I was fighting for the title I was always thinking, 'I wonder if this could happen, wouldn't that be great?' but at the same time I was always quite grounded. My dad has always loved racing but on the other side I have my mum who keeps me pretty levelled. So I went through university and decided to fully focus on racing."

A racing surname can bring pressure with it, but Palmer says it hasn't really bothered him. The presence of his father has gradually reduced as he made his way up the ladder but he remains an invaluable source of advice and support.

"If I look through my junior career, having the Palmer name is not a big deal to me; I'm just another driver but with the Palmer name," he says. "There are lots of other drivers out there with 'a name' that have also achieved more. I'm not saying my dad didn't do a good job in Formula 1 but there are the likes of Rosberg, Prost, and all sorts that are previous champions, so I don't consider that there is massive pressure from that."

"My dad has played a pretty massive role. From the early days he was helping me out. He's obviously got a lot of experience and he can pass that along to me. Over time, he's had less and less involvement but he still manages behind the scenes, which is important because F1 is quite difficult. It's very political. In terms of the day-to-day or driving he just leaves me to do it, which is good."

His father has been proactive in the business world since calling time on his driving career, running Formula Palmer Audi and F2. Palmer began competing in those championships, rather than taking more conventional single-seater entry points such as Formula Renault, and that led to a rather unorthodox route through the junior formulas. Does that put him at a disadvantage compared with those who had a more mainstream path? At this point, Palmer could use his media training and put the shutters up. But instead he gives an eloquent and honest answer, in keeping with the approach he refreshingly

employs throughout our interview, and concedes that the decision to race in championships run by his father made the challenge of getting to F1 tougher.

"I did quite a lot of racing off the beaten track, so I reached GP2 with relatively little experience," he explains. "I then had a lot to learn in a short period of time. But I can't complain. It has worked out fine. And it was a cheap way to go racing in comparison with Formula 3 or World Series by Renault. It was very cost-efficient."

Palmer was a quick learner, and over the course of four seasons in GP2 honed his racing skills and learned much about working with professional racing teams before winning the title. It was the groundwork to make that final step to F1.

"I absolutely loved the racing," he says. "The drivers, especially at the sharp end, were at a really high level, so to race with them was a good challenge."

Key to his title success was his consistency; he started on the front row nine times out of 11 and scored points on 20 out of 22 occasions. "Something I learned in GP2 was how to put a race together," he says. "GP2 is not F1 but it's still complex in terms of strategy, the pitstops and the tyres, because we're on Pirellis already and there is a lot going on. So a big strength of mine was to race well and consistently. The previous couple of years I'd shown some speed, some racecraft, and then in 2014 I just put it together and showed that I can be a complete package."

That success opened the door to F1, albeit in a reserve role but one that allowed him to get mileage. He completed 13 of 19 first-practice sessions, albeit with the track at its greenest and the knowledge that he couldn't push to the limit for fear of damaging the chassis Grosjean was lending him. Palmer thus felt he was unable to shine. Head of trackside operations Alan Permane has urged him to be less cautious this season and, while Palmer admits he did hold back a little, he explains the required aggression will naturally >>



Palmer won GP2 in 2014 (top); father Jonathan (left) has been supporting his career in the background

come through this year given his new role.

"He's got a point," he says. "He told me that in person and I understand where he's coming from. But it's very different being a Friday driver to being a racing driver, so there were probably times where I was slightly cautious last year, but because you're driving on a Friday morning you're very aware that the focus is not on you, it's on the team and on Romain having a good weekend. You're also less familiar with the car because you only hop in for 20 laps every few weekends. So I think it's a lot easier when you're dialled in like the race drivers are, and obviously if you crash the car — it's a shame, nobody wants to do that. So I think he's got nothing to worry about. If you look at what I've done in the past, I don't think I'm too careful. I attacked hard in GP2 and will do the same this year."

The challenge facing Palmer and his team-mate Magnussen this year is mighty. The delay in Renault finalising its purchase of Lotus has compromised chassis development. The trickiest part has been adapting the car to fit a Renault rather than a Mercedes power unit at such short notice. But at least the team will have the stability and budget to develop throughout the year. Palmer is realistic and sees the long-term potential.

"It could be a difficult year for the team," he says. "I want to look back and say, 'That was great, I've done as much as I could

"IT'S A LONG-TERM GOAL FOR ME TO BE HERE FIGHTING FOR THE CHAMPIONSHIP"

and didn't leave anything on the table. I'd much rather be driving for a Renault factory team than Lotus with a Mercedes engine or whatever, because the long-term potential for Renault is huge. They've come back to Formula 1 as a manufacturing team, so it's obvious they want to win. They're a massive company and have taken a lot of stick in the past couple of years with just being an engine supplier, so they've definitely got a point to prove. They have made a long-term commitment and have big aspirations, so for me as a rookie driver at the minute it's fantastic to have this support. It's a long-term goal for me to be here and fighting for the championship."

For now, Palmer has a one-year deal and knows he needs to be consistently quick if he wants to extend his stay beyond that. Team-mate Magnussen got a second chance at F1, but that's a rarity in this sport. "There is pressure but at the same time I feel like I'm quite good at dealing with pressure," says Palmer.

If anything, the only pressure seems to come from himself. His answers are always considered, clear and concise. He knows what he has to do and comes across as ruthlessly determined to do so. He is also adamant that he will not be reaching for the book of excuses should things go wrong this year.

"I don't want to use the fact that I'm a rookie as an excuse," he says. "I want to be quick out of the box. I don't want to have any races where I've had needless mistakes and blame it on rookie errors. I'm experienced enough in racing terms to put it together, and I've had a year of experience in Formula 1 terms."

With the interview at an end, our photographer heads over with a selection of his best shots. Palmer flicks through the images of him with the Union Flag draped across his shoulders.

"There are so many British Formula 1 champions," he says. "I'll be lining up with two of them on the grid and I want to make it three quite quickly."

And with that, he thanks us for our time and heads back into the factory for meetings with his engineers. The quest to become the 11th British Formula 1 world champion continues. 🏁

MAGNUSSEN'S BIG

AS BIRTHDAY messages go, the one Kevin Magnussen received from McLaren last year was awful. The team had decided that after a five-year association, he was no longer required.

The timing of the decision was such that the Dane's chances of staying in F1 were remote. His career looked to be over. He even admitted as much. "Two years out would have been

the end," he says. "If you're a world champion, you might be able to come back but in my position, being out for two years would have been the end of my F1 career. This was make-or-break."

But Magnussen refused to give up hope and that faith was rewarded with a seat at Renault, replacing Pastor Maldonado. It was quite the turnaround in the

space of just a few months and brought to an end a miserable run of luck.

Magnussen made a splash on his F1 debut with McLaren, finishing second in Australia in 2014. That was the last time a McLaren driver stood on the podium. But he missed out to Jenson Button for a race seat the following season. McLaren then took too long to sanction a race programme alongside

"I'm hungry to come back and prove my worth"



BREAK

his reserve duties and a potential IndyCar deal fell through when he stood in for Fernando Alonso at the 2015 season opener. He ended up spending a year on the sidelines.

Talks with Renault first began when it became clear that the French manufacturer was seriously looking at making Lotus its works team. There was a glimmer of hope. But that appeared to be extinguished when Maldonado and Jolyon Palmer were named as the team's line-up.

"It went quiet for a bit after those talks," he says. "Then at the beginning of the year, we started having contact again."

He had been handed a lifeline when Maldonado's sponsor PDVSA ended its contract with Renault because of a dispute over terms.

"I was hoping I would get the seat so much," he says. "I was crossing my fingers. Luckily, I made it."

You could argue that it was time Magnussen got some luck after the run that he's had. Formula 1 rarely gives second chances, but Magnussen has his – and he's determined to make the most of it.

"A few things have changed since I've been out of F1," he says. "Development happens quickly in this sport. But I don't feel rusty and I'm confident I will get in and be fast. I'm extremely motivated after a whole year away."

"I've been sitting on the sideline during the races for so many weekends and I'm hungry to come back and prove my worth. I've raced my whole life, so I'm keen to get back in the car again."

PALMER'S RISE TO FORMULA 1



2005-06

Palmer moves out of karts and into T-Cars, the tin-top series for 'underage' drivers, in 2005, taking fifth in the points. In '06 he again finishes fifth – one of two future F1 drivers in the top five (the other is Max Chilton).



2007-08

He moves up to his dad's Formula Palmer Audi series in '07, but misses the last few races after a life-threatening quad-bike accident. He returns to the fray the following season and takes third in the standings.



2009-10

Keeping on father Jonathan's single-seater trail, Palmer moves up to Formula 2 in '09, but it's a tough season and he finishes 21st. Things go much better in '10, where he's a thorn in the side of eventual champ Dean Stoneman.



2011-13

Palmer's first season of GP2, with Arden, is a difficult one and he fails to score a point. For 2012 he switches to iSport and takes a notable maiden win in Monaco. The improvement continues in '13 at Carlin with two wins.



2014

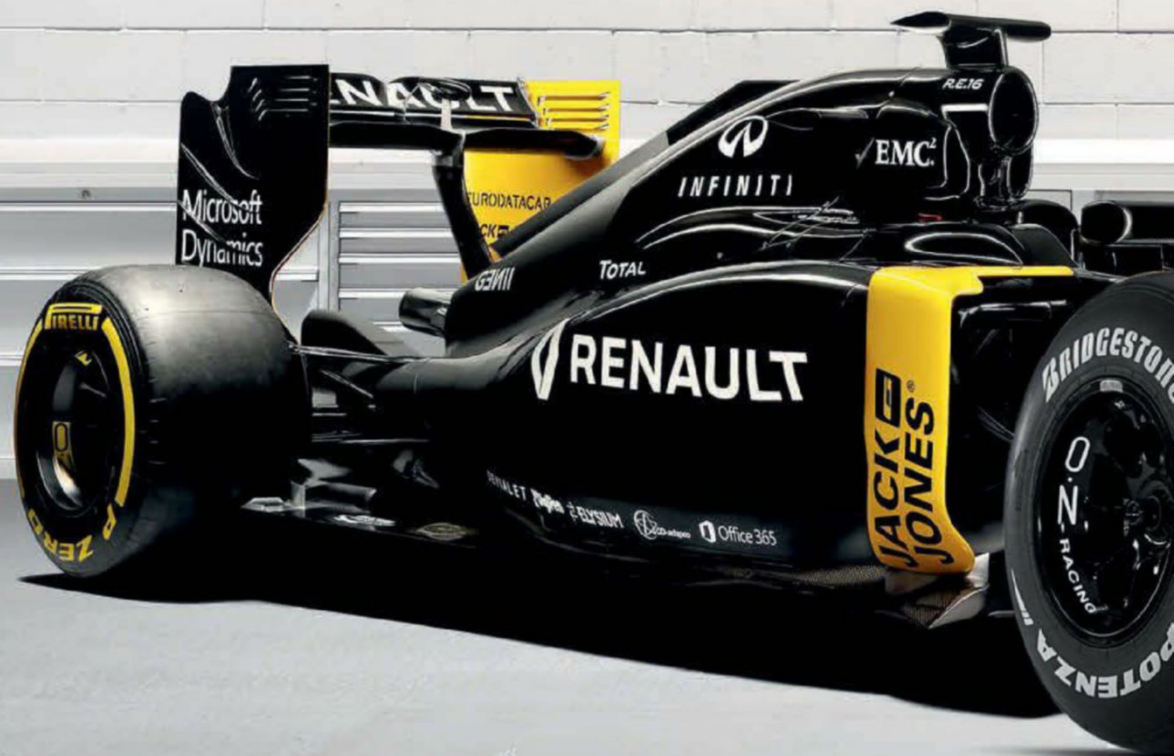
Now a man in demand in GP2, Palmer switches to the ever-potent DAMS team and is quickly out of the blocks and racking up a series lead with four wins. That puts him beyond a late-season Stoffel Vandoorne surge.



2015

Palmer beats European Formula 3 champion Esteban Ocon to the third-driver role at Lotus, and takes part in Friday free practice at 13 grands prix in the car of Romain Grosjean, performing impressively.

HERE COMES THE **NEW** RENAULT...



Will Renault's new culture
integrate as seamlessly
as our cut-and-shut
illustration of F1 cars
past and present?

SAME AS THE OLD RENAULT?

After a protracted takeover process, Lotus is finally Renault (again).
Let's meet a team that is both new and very familiar

**By Lawrence Barretto, F1 Reporter
and Ian Parkes, Chief F1 Correspondent**

🐦 @ianparkesf1 🐦 @lawrobarretto



Renault took its time. A very long time. But after months and months of negotiations it has returned to Formula 1 as a works entity, buying back the Enstone-based team it originally sold off at the end of 2009.

Renault's decision to pull the plug on the project six years ago came about through a drastic revision of its F1 strategy. Stung by the toxic publicity brought on by the team's involvement in the Singapore GP crash scandal, Renault CEO Carlos Ghosn believed that the only way forwards was to get rid of the team and make engine supply a profit centre. That move yielded success of sorts, since as engine supplier to Red Bull Renault powered the drivers' and constructors' champions between 2010 and 2013.

But the strategy was already beginning to unravel when the hybrid formula was introduced in 2014. Engine supply had not been as financially lucrative as expected, a situation exacerbated by the investment required to tool up for the new generation of hybrid power units. There were misgivings, too, about the PR value generated by the relationship with Red Bull, especially

once that team embarked on a marketing tie-up with Renault's Infiniti brand. When the new Renault hybrid power unit proved woefully down on power and reliability, what marketing value the company generated from F1 began to evaporate.

As the 2014 and '15 F1 seasons wore on, the relationship with Red Bull soured into public rancour; and, worse still, other Renault customers such as the now-defunct Caterham team fell into financial difficulties and defaulted on payments. It was time for Renault to reconsider its strategy, but would Ghosn now decide to invest more or quit the sport altogether?

Ultimately Ghosn chose to make Renault the master of its own F1 destiny again, but the delay in getting the deal over the line has heaped pressure on a team that has suffered from underinvestment for several years and lost a number of key technical staff. Still, many of the fundamentals are there.

Technical director Nick Chester, managing director Cyril Abiteboul and engine chief Remi Taffin remain, and have been joined by ART Grand Prix boss Frederic Vasseur. Bob Bell returns as chief technical officer. *Autosport* spoke to the people tasked with making Renault fly again. »



FREDERIC VASSEUR

Racing director

Frederic Vasseur is effectively France's Monsieur Motorsport, so when Renault came calling it was no surprise when he answered 'oui'.

In taking on the newly created role of racing director, Vasseur might not have considerable F1 experience to fall back on, but that should not matter a jot given his achievements over the years in virtually every other category.

For the past decade Vasseur has run ART Grand Prix, a veritable breeding ground for new talent; it nurtured, among others, Lewis Hamilton, Nico Rosberg, Sebastian Vettel, Valtteri Bottas and Jules Bianchi during that period.

McLaren reserve Stoffel Vandoorne added to ART's list of champions by taking the GP2 title in emphatic style last season, while new Renault reserve Esteban Ocon clinched the GP3 crown. Vasseur also runs Spark Technologies, which builds the Formula E cars, and was a joint founder of engineering company AOTech.

For Vasseur, now was the ideal time to step up into F1, and the Renault vacancy provided the opportunity to do both that and to place his own stamp upon an F1 organisation.

"Yes, I had a good season last year," says Vasseur, the emphasis on the personal pronoun epitomising his self-belief.

Directing the focus back to his team, he adds: "We were very successful in GP2 and GP3, winning all four titles, and we had a good [debut] season in DTM. It was very much easier for me to leave a company in a successful period than if 2015 had been a disaster. It was a good move at the right moment. I had a good feeling it was the right time, and not because I am French, but because the challenge was exciting."

Like McLaren, Renault has opted out of including the role of team principal in its management structure. As racing director, Vasseur will superintend and take ultimate responsibility for the slickness of the team's operation on race weekends. Having been successful in that regard further down the motorsport ladder, he exudes confidence that the team is in safe hands.

Assessing the differences he has encountered so far in running an F1 team compared with those in the lower categories, Vasseur says: "My feeling is there is nothing big."

"You have exactly the same structure – OK, there are more people, but you have engineers, mechanics, drivers. You have to push the drivers, to ask them to brake later, to take a corner a bit earlier, things like this. The approach is quite similar. The only difference is you have to manage ten times more people."

"There is a very productive and good cooperation between Cyril [Abiteboul, managing director] and me. We are a good combination, and so far everything is going the right way."

For a man accustomed to winning, Vasseur appreciates Renault's philosophy heading into its new F1 project of needing to build over a period of time before it can challenge for podiums, wins, and eventually championships.

"The first objective is to build a strong team and a good base for the following years, not to deliver results in '16," he says. "We have to take time to rebuild a competitive team, to do it step by step, and not to have a big revolution. For sure it's going to be difficult to deliver good results this year, but on the other side we have to keep everybody under pressure."

"You have to be used to winning. You can't decide in '17 or '18 and say, 'OK, this season we have to push, guys.' You have to put people under pressure – the guys in the pit stops, the mechanics in terms of reliability, the engine, the chassis – that everybody has to push like hell."

CYRIL ABITEBOUL

Managing director

There was a moment last year after the Chinese Grand Prix when an incensed

Christian Horner dragged a sheepish-looking Cyril Abiteboul into his usual post-race media session to explain the latest abject performance of Renault's power unit. Ten months on, and following a turbulent 2015 overshadowed by the very public fallout with Red Bull, Abiteboul will not be subjected to such an embarrassment again.

While Renault has agreed to see out the final year of its contract with Red Bull, the nature of the relationship has been redrawn – even to the extent of Red Bull securing a naming deal for the engine with new sponsor TAG. Abiteboul, who has retained his managing director role in Renault's new works line-up, now has more pressing tasks to fulfil during and between race weekends than playing Horner's whipping boy.

That is why, for this forthcoming season at least, Abiteboul has no intention of bashing heads together publicly, but rather will let the dust settle on Renault's recent takeover of Lotus, and slowly build up personnel and resources.

"We've not quantified targets," he says when Autosport asks him to define Renault's goals for this season. "We want to have a reasonable, reliable, easy-to-work-with platform on which

"WE'VE ASKED ENSTONE
TO BE CONSERVATIVE AND
IT WILL BE THE SAME ON
THE ENGINE SIDE"

we can build, both from an engine and chassis perspective. We want mileage for the team, for the drivers, for everyone to get the data needed to build for 2017 and 2018, so we want something easy.

"We don't want headaches, issues, so we have asked Enstone to be conservative in their solutions, their approach, and it will be the same thing in Viry on the engine side. We think we know what we have to do, but we are not going to try and rush the introduction of things that will not be ready. We need to be extremely careful about that.

"But what we want to be sure of is to recreate ambition, so we are not going to be easy on the teams. If we say there is no target for 2016, only for 2017, then it's not a good message to send. So there will be a target – there may not be a podium or a championship. It will be a different type of target."

Following a severe round of redundancies to help offset a near £65 million loss in 2013, Abiteboul knows staffing levels need to be addressed quickly if Renault is to compete for a world title by the end of this decade.

"Right now we are 490 people in Enstone. The plan is to grow to 650 by the end of 2017," he says. "The biggest teams have 800 people, and we think we will be in a position to compete against those people – and I'm referring to Ferrari, Mercedes, Red Bull.

"How we will do this is by sharing a lot of activities between Viry and Enstone. We believe we will be able to match them, even though we will have fewer people on site." »



BOB BELL

Chief
technical
officer

There is an old saying that you should never go back. Where Enstone is concerned, Bob Bell has now returned twice.

From 1997-99 Bell was senior aerodynamicist with Benetton before leaving for a spell with Jordan, only to then head back to what was Renault F1 in 2001.

Initially appointed deputy technical director, Bell was promoted to the senior role after Mike Gascoyne's departure to Toyota, and was one of the key personnel behind Renault's successes in 2005 and '06. He even acted as team principal and managing director after others were purged in the aftermath of the Singapore crash revelations, before leaving in late 2010 for a four-year stint at Mercedes.

Bell is now back at Enstone again, this time as chief technical officer of Renault's new works team. With Remi Taffin and Nick Chester in the technical director roles of the engine and chassis divisions, Bell's is an overarching position.

Although it is his third spell at Enstone, Bell would like to believe the years away have provided him with fresh insight.

"You can get very insular," he says. "Something I've always tried to avoid in my career is getting pigeon-holed. I've tried to move around, to see different things, to experience different ways of doing things, and that makes you a better, more-rounded player. So for me there are a lot of benefits in having been away, being off and seeing something very different.

"I've come back with fresh ideas, fresh thinking, and with a slightly different approach to things."

And while the surroundings may be familiar, he sees this latest return as a new and very different prospect. "It is a much more integrated challenge than it was previously," he says. "It is about Enstone and Viry being one group of people – geographically separate of course – designing, developing and operating a racing car.

"That was talked about in the previous incarnation, and we tried hard to make that case, but now it really is, and it goes beyond that. There is a real Renault presence here. The beauty of channeling it through Enstone is that you don't lose sight of the fact that what we're all about is scoring points on a Sunday afternoon. Nothing else really matters. It's this great reservoir of capacity being funnelled into this very result-focused outfit that is tasked with delivery."



NICK CHESTER

Technical director

With limited financial resources, what Lotus achieved last year was impressive. Nick Chester was responsible in part

for that, taking overall responsibility for car design and development for the third successive year. He retains the role under the new regime, but admits that the 2016 car is something of a compromise given the uncertainty around the team's future last season.

"It was a challenge," says Chester. "Normally, once we get to May, it gets very hard to integrate a new power unit [in the following season's chassis concept]. We didn't know for sure until right at the end of the year so it was tricky. We had to change the back of the chassis, we had to change the cooling layout. It was a huge amount of work. The guys responded really well and we're on track to get to the first test. It wasn't easy and it's all going to be very tight but it's all doable."

Given the good base car the team had last year and the relative stability of the rules, Chester says the new car "won't be enormously different", adding: "We didn't have to change the philosophy of the car; it's very similar. There are some areas that will be different but visually, it won't be massively different. Integrating the power unit took out most of our time, to change all your chassis and cooling designs in a month is a huge job. It's not as optimised as I'd have liked. They are not big compromises but we didn't have as much time optimising it as we would have preferred."

As with all teams, Renault will have the challenge of balancing resources between developing this year's car and focusing on next year's machine, since the regulations will be shaken up once again in 2017. Although his bosses have set modest targets for the first few years of the project, Chester is adamant the team will not allow this year to slide.

"Renault are going to want a car as quick as we can get it, and there will be pressure to deliver that, but they are also realistic. The team has come from a tricky financial position and it's going to take time to build up. This year will be a transition while we improve the team. Hopefully we will make steps for 2017 and 2018 until we get to a competitive position."

REMI TAFFIN

Engine technical
director

As part of Renault's bid to get on top of the problems that have plagued it during the two years of the new 1.6-litre turbocharged hybrid-power-unit era, the manufacturer has promoted Remi Taffin to the role of engine technical director.

He has been charged with overall responsibility for the power unit and will work closely with Nick Chester to ensure engine and chassis cohesion. Taffin, now in his 17th year with the manufacturer, knows this season will be a challenge, given the late finalising of the project, but is hopeful of progress.

"It feels like we can breathe again," he says. "We know this year will be hard, but it feels good to have a long-term plan."

He admits that Renault was playing catch-up at this point last year. It was still making changes to its spec for the opening race before discovering a number of problems at the first test. This time, though, he believes things are different. "A year ago, we were still changing what we would have at race one," he says. "This year, we already know what we will be racing and are now just in the process of making sure it's fully reliable and calibrated. We have learned from last year."

Renault was significantly down on power compared with Mercedes and Ferrari, and several developments failed to deliver meaningful improvements. Taffin is convinced Renault has made progress and is well set to close the gap. "We are confident we will have a good relative step," he says. "We think we will achieve more than our competitors through the winter. I guess what we can achieve by race one is something like a third of the gap. The first half of the gap we should target this year and the second half will have to be done through 2017."

With a works team, Renault will have overall control and Taffin believes that will aid the squad's long-term prospects. "It gives you more freedom to sit down and look at what will be next year or the year after," he says. "When you're delivering an engine for a customer, they want to know what they will get for the next race."

Mercedes and Ferrari won't stand still and Honda is expected to make gains too.

But it seems that Renault has learned from its mistakes. Last year, it took too long to admit its errors, and in the race to find a viable solution it made further mistakes.

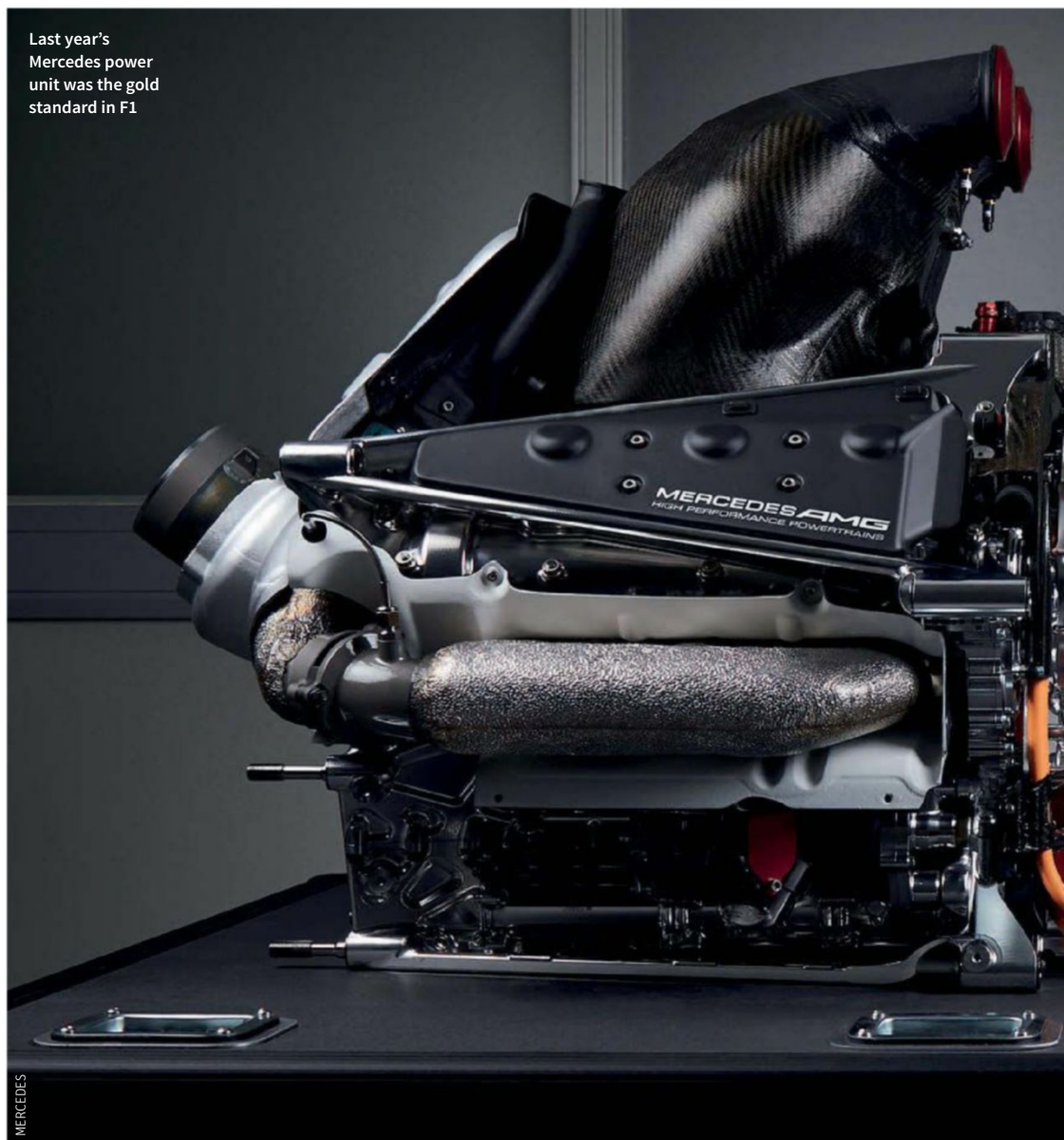
"This is about making sure that at every step, everything is working as we predicted," says Taffin.

"We have to be sure of what

we have got and that it is right to introduce a new step."

If Renault can put these resolutions into practice it could create a solid foundation for future success.

But, given recent form, that's a big 'if'. ❧



FORMULA 1

Abandoning the token

MENTION THE WORDS 'TOKENS' AND 'black-and-white boxes' to Formula 1 fans and to many a grey fog of bewilderment descends.

F1's controversial token system was introduced for the 2014 season as a way to police power-unit development through to 2020, but it has emerged that it is already on the way out and will not be used in 2017.

The intention of the token system was to ensure that manufacturers maintained a relatively tight rein on costs as unrestricted development could have resulted in a financial free-for-all. But the decision to drop them recognises that it has not worked as hoped.

How tokens worked

In short, the power unit is broken down into 42 parts, with each of those allocated a token 'weight' from one to three depending on importance, and with the entire system comprising 66 tokens.

For example, should a team choose to develop the oil-pressure pumps it would have to use one of its available tokens. To improve combustion – defined as ports, piston crown, combustion

chamber, valves geometry, timing, lift, injector nozzle, coils and spark plugs – requires three.

Prior to 2015, certain parts that amounted to five tokens were 'frozen', allowing scope for development of all the remaining parts, totalling 61 tokens. Again, to avoid unlimited improvements, for 2015 the teams were allowed to use a maximum of 32 tokens, equating to 48 per cent of the power unit.

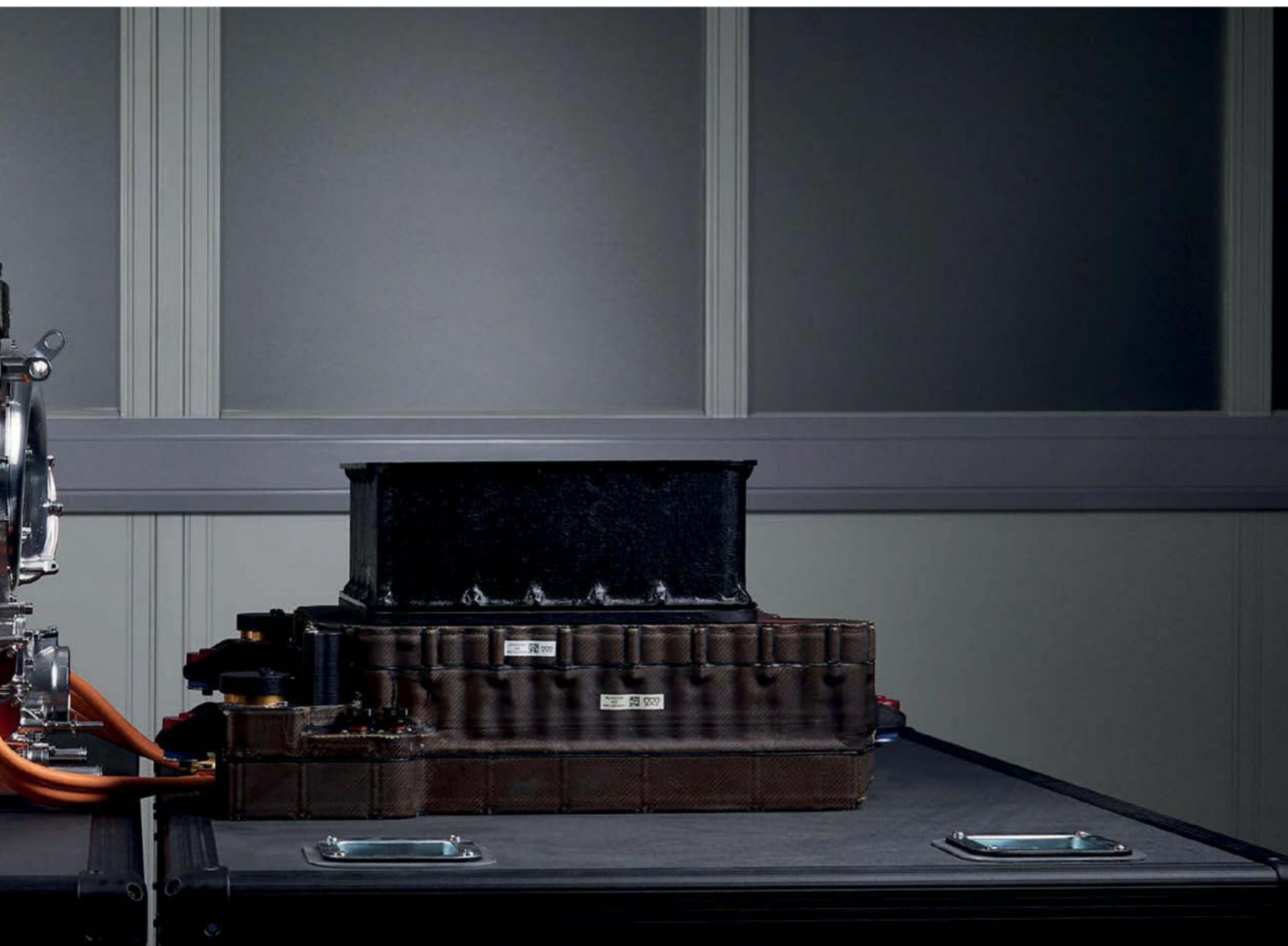
Over time the initial rules stipulated that the number of tokens each season would decrease, so for 2019 and '20 just three tokens would be available, or just five per cent of the power unit open to development.

As each area became 'frozen', so it was blacked out, hence the black and white boxes.

The controversies

The token system has always been a sore point for the manufacturers, particularly when it became clear to Ferrari and Renault in 2014 that Mercedes was in a dominant position.

The two won a heavyweight fight with Mercedes early last year after successfully arguing to the FIA that there was a loophole



system sets stage for engine war

in the regulations that would allow them to develop in-season for 2015 only, rather than homologating a final specification in February.

Then in October last year the four manufacturers – with Honda now on board – agreed to allow in-season development for this year too, and with no decrease in the number of tokens rather than the planned drop from 32 to 25.

Behind-the-scenes talks over the token system have continued, and now it has been agreed that it is to be abolished from 2017.

“The token system is being removed,” said Renault managing director Cyril Abiteboul at last week’s team launch. “We have all agreed to do that because we all need the performance of the engine to converge. An F1 that is dictated by the performance of the engine is not good for anyone.

“You see, it is not good for Mercedes, it is not good for Renault, Ferrari, so we are all interested to change that.

“To stop the public being confused between the penalty system, token system, we have decided to simply remove the token system.”

How Honda would have loved to have returned to F1 last year without restrictions...

Given freedom to develop, it is unlikely it would have encountered anywhere near the number of issues it did, and McLaren would perhaps have avoided racking up as many penalties as it did.

But as the newcomer, its engine had to be homologated by the end of February, ensuring its hands were tied by the token system, except for the nine it had available during the year (the average of those available to the other three manufacturers).

Any other manufacturer looking at F1 and thinking the new hybrid system was the way forward would have been deterred by this.

Now potential new entrants know they will not face the same difficulties as there will be more scope to develop and eradicate problems.

“Talks have resulted in tokens ending from 2017”

Is it right to drop the token system?

While engine performance could potentially converge as a consequence of allowing more development freedom, the opposite outcome is also possible – Mercedes could use its own freedom to develop to maintain its advantage.

But at least Renault, Ferrari and Honda are being given the freedom to play catch-up. They will no longer be able to cite the token system’s restrictions as a reason for failure.

And while the confusion has been eliminated, the way is now paved for the manufacturers to spend at will on development at a time when cost cuts are supposed to be the objective.

It is on the heads of those who lead the boards of the car-giant quartet. At least their customers will not bear the costs of any extravagances. That’s thanks to the customer engine-price limits introduced to stave off the ‘independent engine’ plan.

Still, while the days of the unloved token system may be numbered, a potential arms race may be looming. And with that there could be a whole new set of problems.

IAN PARKES



GANASSI'S LIGHTNING BOLT Chip Ganassi Racing is bringing back the iconic 'lightning-bolt' livery for Scott Dixon in 2016. The livery was first used in 1995, when the team ran Jimmy Vasser and Bryan Herta, and was carried to titles by Vasser, Alex Zanardi and Juan Pablo Montoya prior to its final season in 2001. "Heading into such an historic season with the 100th running of the Indianapolis 500, the lightning-bolt paint scheme taps into some of the most memorable times in [sponsor] Target's longstanding partnership with Chip Ganassi Racing," said Ganassi team president Steve Lauletta. **Photograph by Scott R LePage**

FORMULAE

Formula E calendar to grow for 2016-17

FORMULA E SHOULD ANSWER KEY questions about its season-three calendar in the next few weeks, with a New York race emerging as a contender.

Series CEO Agag will travel to the United States this month, as well as the Middle East and Asia, as he looks to lock down the 2016-17 schedule.

Several new cities have targeted hosting races in the next season, when the championship is set to increase its 10-event programme to 12. The Beijing and Punta del Este rounds, both fixtures in the first two seasons, could be casualties of the planned influx.

"We really need to start making choices now," Agag told *Autosport*. "One or two might fall out – Punta it's not clear we're going to continue. It is the

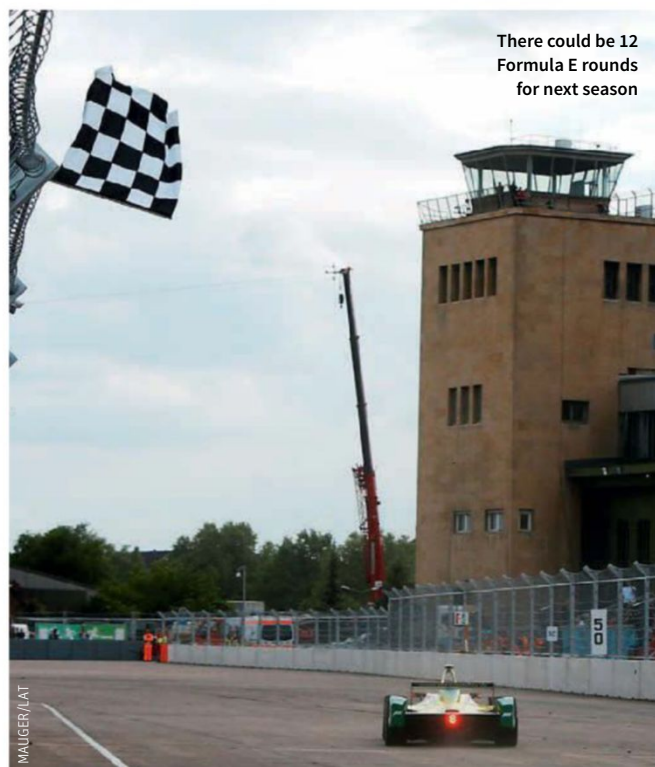
main candidate [to be dropped]. We have to make our mind up on Beijing – I'm inclined to keep it."

If Beijing does retain its place on the calendar, it is likely to keep its first-round slot, because the poor weather in China after September means it would have to take place before the already-confirmed October 9 race in Hong Kong.

A race in the Middle East could replace Punta in December as it would fit into a favourable weather window.

Kicking off the third season in September would present teams with an off-season of less than three months. Agag is open to starting the campaign as late as December from season four onwards to avoid repeats.

SCOTT MITCHELL





FORMULA 3

Regional F3 gets closer

THE FIA IS MOVING AHEAD WITH ITS plans to reinstate regional Formula 3 contests, with the governing body's Single Seater Commission president Stefano Domenicali stating last week that a 2017 start date will be put to the World Motor Sport Council.

This comes just over a year since the canning of the British and German F3 championships, both of which petered out in the face of an aggressive push to establish the FIA's F3 European Championship under the Commission's previous president, Gerhard Berger. While those series weren't very strong anyway, the insertion of Euro F3 sporting regulations effectively banning teams from racing or testing F3 cars elsewhere (since removed) were seen by many as the killer blow.

This time around, the Commission has given itself six months – which it is halfway through – to establish a framework for its new regional F3 concept. Autosport understands that the Commission's Technical Working Group met last month and agreed that chassis for regional F3 series should be the current-spec cars. The TWG is also believed to be working towards a spec-engine formula, with the plan to put power supply for each region up for tender.

Domenicali added that, with the FIA's Formula 4 initiative in full swing, an intermediate step between that level and European F3 is all the more important "to prevent the immediate loss of talented youngsters along the way, who maybe take longer to mature, or who don't have the resources to move up a category". Some may point out that this vacuum is already filled

quite satisfactorily by Formula Renault 2.0 and Euroformula Open, especially as the latter uses the exact combination (current Dallara F3 chassis; spec engine, in this case Toyota) proposed by the TWG. But, with it being a full-blown European series, Euroformula would not fit with the regional F3 concept.

As far as targeted regions are concerned, Domenicali added that "it is also aimed at developing it in areas where opportunities for those who want to become racing drivers are not as clear-cut and established; I'm thinking here of the USA, South East Asia, Australia, India and China."

Of those countries, India's MRF Challenge has just launched its new racer, with J Anand, whose JA Motorsport company runs the series, telling Autosport that he has proposed to the FIA that his series becomes the country's regional F3. With an air-restricted 250bhp four-cylinder engine, more downforce, bigger wheels and tyres, a longer wheelbase and a paddle-shift gearbox, the new car – which MRF ambassador Narain Karthikeyan begins testing at Chennai next week – certainly looks like an F3 machine. The biggest problem is that, while the Dallara Formolino chassis on which it is based is built to F3 safety standards, it is not technically an F3 car.

Which raises the question: will the FIA allow some leeway for regions to adopt the specification that suits them best, or will it try to standardise regional F3 across the world and potentially face a tougher task in establishing it?

MARCUS SIMMONS

IN THE HEADLINES

MICHELIN STILL KEEN ON F1 MOVE

Michelin remains interested in returning to Formula 1 at the earliest opportunity despite losing out to Pirelli for the 2017-19 tyre deal. But it is still adamant F1 would need to switch to 18-inch wheelrims if it came back.

OCON LANDS RENAULT RESERVE SEAT

GP3 champion Esteban Ocon has joined Renault F1 as reserve driver for 2016. The 19-year-old is expected to dovetail that role with a Mercedes DTM race drive.

DYER RETURNS TO F1 WITH RENAULT

Former Ferrari race engineer Chris Dyer, who ran Michael Schumacher to the 2003 and '04 world titles, is to return to F1 to head up Renault's vehicle performance group.

PAFFETT TO DRIVE WILLIAMS SIM

Long-time McLaren Formula 1 tester and Mercedes DTM ace Gary Paffett has joined Williams as a simulator driver.

SCHUMACHER CONDITION "NOT GOOD"

Former Ferrari president Luca di Montezemolo says the latest news about the health of Michael Schumacher "is not good". Schumacher sustained severe brain injuries in a skiing accident in the French Alps in December 2013.

RENAULT OPEN TO RED BULL FUTURE

Renault could continue its Red Bull supply deal beyond 2016. "We have announced a one-year contract, but it may go further," said Renault managing director Cyril Abiteboul.

CALDERON JOINS ARDEN IN GP3

Tatiana Calderon has signed for Arden International for the GP3 series. The 22-year-old Colombian has raced in European Formula 3 for the past three seasons.

CASSIDY LANDS PREMA F3 DEAL

Reigning Japanese Formula 3 champion Nick Cassidy will contest the F3 European Championship with Prema Powerteam alongside his promotion to Toyota's Super GT programme with the TOM'S Lexus squad in Japan. Meanwhile, Dane Mikkel Jensen has agreed to remain in Euro F3 for a second season with Mücke Motorsport.

GHIOTTO JOINS TRIDENT IN GP2

Last year's GP3 runner-up, Luca Ghiotto, will graduate to GP2 with the Italian Trident squad this year. The 20-year-old raced for Trident last year, winning five times but losing out on the title to Esteban Ocon.

NATO'S RACING ENGINEERING PACT

GP2 squad Racing Engineering has signed ex-Arden driver Norman Nato to partner Jordan King for the 2016 season. The 23-year-old Frenchman drove for the team in post-season testing in Abu Dhabi last year (below).



HOW THE LMP1 TESTING WAR IS SHAPING UP

THEY'RE ALL MAKING encouraging noises, but has initial testing of Porsche's, Audi's and Toyota's new-for-2016 LMP1 contenders given us any clues to what is going to happen when the series kicks off at Silverstone in April? That's debatable.

Toyota has undertaken two major tests with its all-new TS050 HYBRID, the first at the Motorland Aragon circuit early in January and the second last week at Paul Ricard. It believes it has made a major step forward with a car powered by a new V4 turbo engine and has said that there have been "no dramas" so far in testing.

Porsche did hit trouble in Abu Dhabi last week on its first test of the new year. A shunt with Marc Lieb at the wheel damaged its updated 919 Hybrid, complete with the majority of the revisions planned for 2016, beyond immediate repair. This meant the German manufacturer had to fly in a new monocoque. A day was lost, but according to Porsche LMP1 team principal Andreas Seidl the team was able to make up for the delay.

Audi, meanwhile, has not been out on track with its latest car – which retains the R18 e-tron quattro name – since a test at Sebring in early December. Audi

motorsport boss Wolfgang Ullrich revealed that it has concentrated on development at its Neustadt proving ground and was about to resume track testing.

"We are on schedule," insisted Ullrich, who also played down the significance of a fire during the Sebring test.

The factories are doing their own thing right now, essentially operating in their own respective vacuums. No one knows what gains the others have made, which is why each is wary of predictions.

"We have a process to set targets which consider the gap last year and what we expect the others to do," said Toyota Motorsport GmbH technical director Pascal Vasselon. "We are on plan, but is our plan good enough? We don't know."

Vasselon suggested that the official WEC test at Paul Ricard in March might not reveal a true picture of the relative competitiveness of the three manufacturers in 2016. He pointed out that the 2014 superiority of Toyota's championship-winning TS040 HYBRID was not entirely evident at Ricard ahead of that season.

"We must be careful," he said. "Even at the prologue in 2014, we didn't get a true picture."

GARY WATKINS

Le Mans takes on more cars

The record for Le Mans 24 Hours starters – 60 – is set to be equalled this year thanks to improving depth

A

LE MANS-STYLE SPORTSCAR RACING IS IN RUDER health than even the organiser of the 24 Hours, the Automobile Club de l'Ouest, envisaged. The quality and quantity of the entries for this year's World Endurance Championship blue-ribbon persuaded the French body to bring forward its plans to expand the grid to a level not seen since the mid-1950s.

The ACO had already started extending the pitlane to incorporate four new garages (pictured below). The plan had been to bring two of these into play for 2016 to increase the grid from 56 to 58 cars. The embarrassment of riches it received before the closing date for entries at the end of January led to the decision to introduce the other two as well for this year's event on June 18/19.

"When we saw the size and quality of the entry, we knew we had to find a solution," said Automobile Club de l'Ouest president Pierre Fillon, who admitted that a total of 73 applications had been received. The same reasons explain why the reserve list has been increased from seven to 10 cars.

The solution the ACO found remains a temporary one ahead of more paddock development for 2017. The final two garages at the end of the pitlane were to be used for scrutineering purposes ahead of the construction of a new technical facility under race control, followed by the relocation of parc ferme to the near end of the pits complex. The scrutineers will now have a makeshift home until 2017.

It is not difficult to understand the reasons for the increasing quality of the Le Mans field. Endurance racing under the ACO umbrella is booming. The entry for the WEC is down – though this year's 32 cars should all be series regulars, unlike last year's 35 – but the European Le Mans Series is booming and its Asian cousin is on the up. And the strength of the ACO's ongoing relationship with the organisers of the IMSA SportsCar Championship has played its part too.

In addition to the three teams that have taken up guaranteed entries for their championship success in the Asian Le Mans Series, there is a squad from the Philippines (Eurasia Motorsport) on the list, as well as two cars from Chinese entrant and WEC regular KCMG. The ACO's efforts to spread the gospel of endurance in Asia are undoubtedly working.

There are, as ever with the Le Mans entry list, some strange omissions and additions. The British Greaves Motorsport squad, with a history in ACO competition dating back to 2006, has taken up its guaranteed entry for winning the ELMS, but has only made the reserve list with a second car that will also contest the European series this year. Yet two new French entrants in this championship – Panis Barthez Competition and Lombard Racing – have made the cut with solo cars.

GARY WATKINS





WORLD RALLY CHAMPIONSHIP

Sweden faces the end

THIS COULD BE THE WEEK THAT ENDS Rally Sweden, as the event battles the absence of snow and the economic realities of inclusion in the World Rally Championship.

Rally Sweden will be cancelled later this week if temperatures in the Varmland region do not dive well below zero. Heavy rain and temperatures around five degrees have melted snow and ice on the route. Running studded tyres would destroy the gravel roads and leave the organisers with a huge repair bill.

Equally, cancelling the event at this stage would have massive financial ramifications for one of the series' less-well-funded rounds.

Beyond the weather, Rally Sweden CEO Glen Olsson is struggling to come to terms with the financial demands imposed by WRC Promoter for inclusion from 2017 onwards.

"We're supposed to pay more and we haven't been able to reach agreement," said Olsson. "We would like to make a little money – not just give it all to WRC Promoter and the FIA. If we can't get that, then I don't believe that we can continue."

Weather permitting, Rally Sweden starts on Friday morning with a revised schedule including 13 of the planned 20 stages.

DAVID EVANS

TOP 3

Swedish rally drivers

Rally Sweden might be struggling, but the country has produced some very fine drivers over the years



#1 STIG BLOMQVIST

Nobody has won the Swedish more times than the real Stig (although Marcus Gronholm has also won it five times). His home wins came in cars as diverse as a V4 Saab 96 and an A2 Quattro.



#2 BJORN WALDEGAARD

The first ever drivers' World Rally Champion. Two of his 16 career world championship wins were at home – more importantly, one of those (1975) came at the wheel of a Lancia Stratos.



#3 KENNETH ERIKSSON

In a career spanning 22 years, Eriksson won six WRC rounds, three of which were at home. Made his name winning the 1987 Ivory Coast Rally, but was most at home in the snow.

IN THE HEADLINES



TOYOTA REVEALS NEW LIVERY

Toyota has introduced a new colour scheme for its LMP1 contender in 2016 (above, pictured on the 2015 car).

G-DRIVE SWITCHES TO JOTA

G-Drive Racing will defend its World Endurance Championship LMP2 title with the Jota Sport squad in a deal that also covers the British team's European Le Mans Series campaign. The G-Drive branding was carried by the OAK Racing Ligier team last year.

STEWART TO MISS START OF SEASON

Tony Stewart will miss the start of his final NASCAR Sprint Cup season owing to back injuries sustained in an all-terrain-vehicle accident last weekend. He sustained a burst fracture of the L1 vertebra in the accident, which occurred while he was on holiday on America's west coast.

NEATE LANDS THIRD HONDA

Andy Neate has signed with Team Dynamics to drive a third Honda Civic Type R in the 2016 British Touring Car Championship. He will join champion Gordon Shedden and three-time title winner Matt Neal at the squad.

BECHE JOINS TDS RACING FOR LE MANS

Mathias Beche will step down from Rebellion Racing's World Endurance Championship LMP1 line-up to drive for TDS Racing at the Le Mans 24 Hours this season. He will also contest the full European Le Mans Series for TDS.

RUSSIAN WTCC ROUND BACK TO MOSCOW

The Russian round of the World Touring Car Championship will be staged at Moscow Raceway after a plan to move it to Sochi fell through. The Sochi race was due to start the season, but the Moscow event will be held on June 10-12.

BMW RESHUFFLES DTM LINE-UP

BMW drivers Augusto Farfus, Timo Glock and Maxime Martin have all switched DTM teams. Glock has joined RMG, with Farfus at MTEK and Martin at RBM.

MANOR HEADS TO LMP2

Manor Motorsport, run by ex-Manor Marussia key players Graeme Lowdon and John Booth, will race in the World Endurance Championship this year. It will run an ORECA-Nissan 05 (below) in the LMP2 class; former Manor F3 racer Tor Graves is the first confirmed driver.



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FEEDBACK

All-female series will be a huge step back

I was dismayed to open my email inbox to see a letter asking me whether I would be interested in joining an all-female championship. Months ago, when Bernie Ecclestone said this might be a way forwards for women in motorsport, I felt the notion was patronising and insulting to all female drivers competing on equal terms with their male counterparts. To see that this idea has gathered enough momentum to possibly become a reality is disheartening in the extreme.

Women have fought for years to be recognised as equals in motorsport, and many of us have performed repeatedly at a level where we are race winners and championship contenders. Our achievements were not created in a segregated environment, and it saddens me to see the potential for motorsport to take such a monumental step backwards, masquerading under a false banner of 'progress'.

The answer to more women competing and succeeding is not to segregate us, but instead help us find

the sponsorship we need. I applaud the potential backers of this new series for being interested in supporting women, but I implore them to reconsider where they are placing this investment, and instead look to the female drivers already out there, racing, running up front, winning, and looking for the sponsorship opportunities that will allow them to keep competing. We are out here, we are talented, and we are fighting to find the financial support to go and break boundaries.

As a little girl, I dreamed about F1. I did not dream about a separate girls' championship. Now, racing in the US, I dream about IndyCar, and specifically the Indy 500. I'm currently the only female pole winner at Indianapolis Motor Speedway, and I dream about repeating that feat for the Indy 500. And of course I dream about race day. I dream about putting myself in a position where I can regularly run up front, and I dream about drinking the milk in Victory Lane.

Mann's world: Brit racer Pippa dreams of Indy 500 glory, not a women-only series

This is my dream. It is an honour that has only been bestowed on 69 drivers in history, and it is an incredibly difficult dream that very few will ever achieve. But that's what makes it great.

If I ever achieve this dream, yes, I will be the first woman to have won the Indy 500. But you know what? The car that I drove to Victory Lane will still have no idea of my gender. And I will still be written into the history books as one of the fewer than 100 racing drivers to ever achieve this feat.

Pippa Mann
By email

Motorsport can be dangerous...

The letter from Simon Astley regarding the Monte Carlo Rally was interesting (Feb 4). I'm always amazed when watching TV coverage at the danger rally spectators are prepared to put themselves in in order to get a closer view, standing on the outside of fast, slippery bends being only one example, but perhaps you have to have your imagination chip removed in order to spectate a rally!

Neil Davey
Ivybridge, Devon

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Autosport editorial
Bridge House
69 London Road
Twickenham
TW1 3SP

@
E-mail
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WILLIAMS/LAT

CORRECTION

Thanks to all the readers who contacted us to point out that Jean-Pierre Jarier replaced Ronnie Peterson at Lotus (The best F1 drivers never to win, Feb 4).



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Where there's a will

The much-anticipated 2017 rules package should have been decided by now, but instead the stakeholders are still caught up in details

By Ian Parkes, Chief F1 Correspondent

[@ianparkesf1](#)

NOT FOR THE FIRST TIME FORMULA 1 FINDS ITSELF in disarray as it attempts to formulate a set of regulations.

When the audacious-sounding 2017 plans were first aired they were greeted with much fanfare. Finally the Strategy Group, described on the record by at least one of the eminences who sit on it as “not fit for purpose”, had got its collective act together and delivered some sort of vision. After all, who could argue with an attempt to make bolder, more aggressive cars that would slash up to six seconds off current lap times?

With wider front and rear wings, fatter front and rear tyres and a reduction in overall weight, here was an opportunity for aerodynamicists to be creative once again, to rebalance the competitive equation away from the power units. Of course there were some misgivings, and a number of technical experts suggested that the new rules might not automatically lead to an improvement in the spectacle or the racing, since faster cars would not necessarily create more overtaking opportunities. Viewed through this prism, the putative 2017 technical package seemed not quite as well resolved as it could be.

Politics as well as practicalities have provided a number of stumbling blocks, the most troublesome of which has been the implementation of the tyres. Once again Formula 1's sole tyre supplier has been left in an invidious position.

Initially the suggestion was to increase tyre width to 320mm at the front and 420mm for the rear, which would have approached the dimensions last seen in the early 1980s. But while Pirelli has advanced simulation facilities, without actual track testing it cannot acquire enough meaningful data under real conditions to ensure an optimal finished product.

Ideally, Pirelli requires a 2017 car to conduct testing, but of course no team could produce such a model so far in advance, especially without a definitive set of regulations. But it should at least be possible to run a modified version of an older car; the power delivery of a 2012 V8, for instance, might differ from the current generation, but the car could provide a reasonably solid baseline for such factors as downforce loadings while being out of date enough for no team to gain an advantage.

Unfortunately, though, the Italian manufacturer is prohibited from using such a car for any testing. Formula 1 has history in being wilfully self-destructive, but you would think that in circumstances such as these, when it is in the common good for Pirelli to attain the performance and safety goals required for 2017, that some compromise could be found.

Surely at least one of the parties involved while the Strategy Group was deliberating should have pointed out that for the project to work, Pirelli would need to test its tyres. From day one, after the plans for 2017 were declared, the FIA – with agreement from the teams – should have made it mandatory for Pirelli to have use of a relevant, modified car.

At least that way Pirelli would have its baseline so when the actual '17 cars hit the track early next year, it would be able to tweak its tyres accordingly before the season begins in earnest.

Dare I say it, but if Max Mosley were in charge and he was acting on the rules, then he would have done whatever was required to guarantee their implementation (especially if they were his brainchild). That is not to reflect on Mosley's reign as some sort of golden era, merely an observation that time and again he drove through change through sheer force of will. He didn't always succeed but very often he did – and, more often than not, in the face of concerted opposition.

I see two reasons for this. The formation of the Strategy Group, giving the teams a greater voice, has led to a dilution of the FIA's powers. And while current president Jean Todt has done wonders for promoting road safety during his time in office, it has often been said he is someone who lacks bite when it comes to F1.

In early December it was announced that Todt and Bernie Ecclestone had been provided with a mandate to make decisions on key issues regarding F1's future. But so far it would appear that no forthright resolutions have been made.

As a governing body the FIA should be authoritative – with Todt taking a lead, and as and when required also taking a stand, even if his preferred approach is to seek consensus. In a previous era, under Mosley, fax machines in team HQs the world over would have sprung into action to disgorge ‘Max Missives’ detailing exactly what the new rules were and how they would be enforced. Perhaps many of the more extreme ideas would be rolled back, toned down or quietly forgotten by the time they were due to come into force, but the substance of what the president wanted to achieve would remain.

Instead, we find ourselves in the middle of February and the technical chiefs of all the F1 teams are still arguing.

We have reached a point when the rules need to be finalised. The end of this month is the deadline, otherwise from March 1 through to the end of June there has to be unanimity when it comes to implementation or change of anything previously agreed upon. And when did you last see unanimity in F1? 🚩

“The tech chiefs of the F1 teams are still arguing”



MAUGER/LAT

A tale of two races

Sam Bird led throughout from pole, while Sebastien Buemi went on a charge from the back. When the safety car emerged, two very different performances converged and Formula E got its best race yet

By Scott Mitchell, Features Editor

 @ScottAutosport





Sam Bird started the race as he meant to go on: sliding and out in front. His Virgin DSV-01 had a touch more wheelspin than most as the lights went out in Puerto Madero, but the Briton had enough to keep front-row rival Nico Prost at bay on the run to the first corner.

Bird was a surprise polewinner, not least because his superpole effort is best described as 'on edge'. The heavy DS Virgin cars have been tricky for Bird and team-mate Jean-Eric Vergne to extract the maximum from on a consistent basis this season, but there has been a stark upturn in form after a difficult start to the season.

"To be frank, the car is no different to the one that performed badly in Beijing," team principal Alex Tai explained. "But our understanding on how to set up a car that's pretty difficult to handle has come on in leaps and bounds. It's all engineering. It's not like we aced development and built a brilliant car in which Sam can just cruise around; we really worked for this one."

While the car is visibly still on the edge, in Buenos Aires Bird maintained his balance with aplomb. Appropriately for a race in the country that gave us the tango, there was an element of beauty in the way he danced his car to victory.

The front

Bird's lead over Prost was just under a second at the end of the first lap, and with the Renault e.dams package setting the pace so far this season it was no surprise to see the Frenchman in Bird's wheeltracks throughout the first stint.

The pressure never relented, only increased. Particularly in the final few laps before the car swaps, when Lucas di Grassi — having started seventh after a scruffy qualifying effort — cleared Stephane Sarrazin and pulled onto Antonio Felix da Costa's gearbox. Bird led a four-car fight for the lead in his dancing DSV-01, and gained a touch of breathing space when da Costa, excelling yet again in the season-one-specification Team Aguri entry, dived past Prost at Turn 1 for second.

What worked out even better for Bird was a quickfire brace of technical issues on the leaders' in-lap. First, da Costa

Bird leads Prost and da Costa as the action kicks off in BA

stopped exiting Turn 1. The failure of a part that "probably only costs one euro" ended the Portuguese's race on the spot, elevating Prost into second. But his victory bid took a hit soon after, as a lack of energy just as he headed for the pitlane meant he had to coast into his garage — holding up di Grassi, who nerfed the back of the ZE15 as he tried to stick to the 45km/h minimum pitlane speed. And any chance Prost had of finally getting on the podium this season was over when he lost it all by himself shortly after the pitstops, and briefly nosed the wall. He still ended up fifth, but admitted it was a frustrating period.

"I don't know," he said when asked what was causing his issues. "I need to do something very different but things are not going my way — it's a bit disappointing."

With Prost neutered, di Grassi assumed second after jumping into his second Audi Sport Abt Schaeffler FE01 despite that delay in the pits, though the gap to Bird out front was now 3.1 seconds. Crucially, though, the stranded Aguri car of da Costa required the deployment of the safety car. The first consequence of the ensuing caution



period was di Grassi duly positioning himself under Bird's rear wing.

Having been unshaken in the first stint, Bird remained undeterred by the Putrajaya race winner's presence in his mirrors. In fact, a stellar restart caught di Grassi out a little bit and Bird eked out a minor gap. It was not a lot, but it was something — particularly as Bird's delicate tango was descending into something a little bit more interpretative as the race wore on. The slides were still controlled, but the difference in mid-corner stability was at its most evident in the final third of the race.

After one or two lurid slides and a slightly poor exit from Turn 1 on lap 28 of 35, Bird came under fire. Di Grassi attacked on the long run down to Turn 4, but Bird held firm.

And suddenly di Grassi no longer occupied his mirrors.

The back

Sebastien Buemi had to make amends. For the second race in a row, a mistake cost him pole position, only this time the consequence was much worse — his pirouette in the group phase of qualifying left him 18th on the grid. Back in the

summer, the championship leader had talked of eliminating the mistakes that ended up costing him so dearly in season one, but this was very much a move out of the wrong playbook.

"I'm driving, I'm braking and that's my fault," he admitted, "but there are just a few things we still need to understand. We have fantastic pace, if we nail things we are quicker. But it's just very hard to actually put it together. The car is very hard to drive in some aspects, but if you drive it hard you are the quickest."

Aggression was the order of the day and he wasted no time in getting stuck in, although the big moment at Turn 1 as he lunged down the inside of three cars was an anomaly. The rest of his first stint ran like clockwork.

He was 14th after lap two, 13th after lap three. Next time round he was 12th, two laps later 11th. With less than a quarter-distance completed, he moved into the points.

Buemi's mini-fightback in Punta del Este was a fantastic example of the difference a driver can make in a good car, but this was even better. Because, as team-mate Prost came under pressure from an old car at the front, Buemi's »

IN THE HEADLINES



TURVEY CLAIMS MORE POINTS

The dogged efforts of Oliver Turvey were again rewarded with a points finish. The Briton qualified just behind his champion NEXTEV TCR team-mate Nelson Piquet Jr but passed the Brazilian in the early stages. As Piquet slipped back thanks to a new electrical map going wrong, Turvey held off faster opposition to bag two points in ninth.

DRAGON RACING LOSES GROUND

Dragon Racing slipped back in Argentina, with the team left to rue a choice on set-up direction after Punta del Este. Drivers Jerome d'Ambrosio and Loic Duval locked out the front row in Uruguay but were 10th and 12th respectively in Buenos Aires qualifying. Duval scored points in sixth but d'Ambrosio's race effectively ended after contact on the first lap.

VERGNE BEATS ILLNESS TO RACE

Jean-Eric Vergne recovered from a bout of food poisoning to take part in the race and deny Argentinian hero Jose Maria Lopez a shock debut. Vergne reported ill on Saturday morning and DS Virgin Racing explored the possibility of Lopez, Citroen's World Touring Car double champion and who was a guest of DS at the event, replacing him. Lopez had a seat fitting, but Vergne recovered. He qualified 15th and finished 11th despite completing no laps in practice.

SUB CARROLL SITS IT OUT

British driver Adam Carroll was an unused substitute for two teams in Buenos Aires. Mahinda called out the 2008-09 A1GP champion to deputise for Nick Heidfeld if the German felt he had still not recovered sufficiently from the wrist injury that forced him to miss Putrajaya. Carroll also had a late DS Virgin seat fitting before Vergne recovered.

DURAN ENDURES BAD WEEKEND

Salvador Duran had a disappointing "homecoming" for Team Aguri, struggling all event and retiring from the race after hitting the wall. His issues began when his car stopped on track in shakedown on Friday. He crashed in qualifying, hit d'Ambrosio at the start of the race and was in the wall again later on.



ZE15 was like a guided missile. Turns 1 and 2 were beautifully smooth, Turn 3 became a slingshot and at Turn 4 he picked off most of his victims.

With six laps to go until the pitstops, Buemi was eighth and 12.4 seconds off the lead. As he trundled down the pitlane he'd picked off another two cars (plus the stranded da Costa) and had chipped a second off the gap to the front. Thanks to Prost's energy issue, Buemi was able to nick another place.

He emerged from the pitlane fourth. And although he lost a fraction of time behind his ailing team-mate, the gap to Sarrazin was non-existent, di Grassi in second was seven seconds up the road and Bird was only four beyond that.

And then the safety car emerged, and Buemi now had the leaders right in front of him.

He passed Sarrazin immediately after the restart, having been thwarted by the caution period just as he dived down the inside of the Venturi driver for the first time, and had a 2.4s deficit to Bird. Four laps later he took advantage of Bird rebuffing di Grassi to dart down the inside into the hairpin and steal second.

It was a fine move, one that carried an element of risk. Buemi's battery was approaching 55 degrees, the cut-off for powertrains being able to regenerate energy. When that happens, the 'engine-braking' phenomenon is lost and the front-loaded brake bias has to be moved to the rear.

"But you don't know when it's going to happen," Buemi explained. "You know more or less what lap, but it happens from one corner to the next and I was a bit scared when I attacked him because I didn't want to go straight on..."

He didn't. And suddenly only Bird stood between Buemi and the most remarkable of victories.

The thrilling conclusion

Two completely contrasting drives converged six laps from the end of what should be recognised as the finest race in Formula E's short history. There have



been explosive and controversial encounters, but this was just a proper fight. The safety car assisted Buemi, of course, but he overtook 15 cars to get into a position to attack Bird.

Little over a second split the two once Buemi had passed di Grassi, and the sliding Bird looked increasingly vulnerable, particularly given Buemi's prowess through the first few corners.

By rights, Bird should have caved. He'd done an extraordinary job to lead for so long, but Buemi was half a second adrift, his pace was unquestionable, his package remains the best on the grid and (ignoring qualifying) he was driving remarkably well. Bird just did a better job.

He was given a little hurry-up after a wobble through Turn 1, after which the

Sarrazin leads from Frijns and Conway in early points battle

Bird celebrates his victory with the DS Virgin Racing team

pressure intensified. He defended into Turn 4 with four laps to go, and again a lap later. On the penultimate lap Bird had Buemi all over him out of Turn 2, then defended into Turn 4 and locked up. Buemi cut back, but Bird defended into the hairpin. Three seconds behind, although well clear of Sarrazin in fourth, di Grassi was long since out of the picture.

Buemi had asked a bit more of his battery in the second half of the race and was two or three per cent down compared to Bird. A good end to the penultimate lap gave Bird room, and he was clear as they came to the crucial Turn 4. Eight faultless corners later and the immovable object finally defeated the unstoppable force.

"It was really tough but I'm so thrilled," Bird enthused. "We were unfortunate at Punta because we did show good speed there, we were up there with the big boys again. And here we got the ultimate points haul, really, apart from fastest lap."

"It was a really tough win, my hardest race so far. I need to watch the race back... I look forward to watching it back."

The race rightly ranked quite highly for Buemi as well. But the championship leader, who extended his advantage over di Grassi from one point to four, was a little frustrated.

"That's obviously one of my best," he said, "but I'm a bit annoyed with what happened in qualifying. I'm very happy with that but we had the car to win – we should have won this race."

The Buenos Aires ePrix was in many ways the perfect race. Two exceptional drives were worthy of victory, but Bird's excellence proved decisive. ❁





THE SECRET STAR OF THE SEASON

Antonio Felix da Costa's achievements so far this season cannot be overstated, given they have come in the season-one-spec Spark SRT_01E that Aguri is running, even with software gains the team has been targeting. For there is no doubting that far greater gains have been made between season one and season two by frontrunning powertrain builders such as Renault e.dams.

In Buenos Aires da Costa qualified third, a fraction behind Nico Prost in the lead Renault ZE15. That's the car in which Sebastien Buemi topped practice by half a second. Da Costa ran second, having passed Prost on merit, before his agonising retirement shortly before the pitstop phase – the result of a broken plastic safety clasp.

"It's painful," da Costa admitted. "To be honest, I think I left the wrong image of myself in this championship in the first season. I'm happy to be putting a good name out there again. It's a shame for the team and the points, but we're showing potential and that's the main thing."

Another impressive performance that went unrewarded was that of debutant Mike Conway. The Briton considerably outdid anything 1997 Formula 1 world champion Jacques Villeneuve managed in the second Venturi entry, sneaking into the superpole at his first attempt and running comfortably at the sharp end throughout the race. He peaked in fifth, but spun while battling in the second half of the race.

"I'm disappointed because I think we could have held position," he said. "It would have been harder because I pitted a lap earlier so would have had to harvest more energy, but it's a shame."

RESULTS ROUND 4/10, BUENOS AIRES (RA), FEBRUARY 6 (35 LAPS – 53.935 MILES)

POS	DRIVER	TEAM	TIME
1	Sam Bird (GB)	DS Virgin Racing Virgin DSV-01	45m28.385s
2	Sebastien Buemi (CH)	Renault e.dams Renault ZE15	+0.716s
3	Lucas di Grassi (BR)	Abt Audi Sport Abt Schaeffler FE01	+7.525s
4	Stephane Sarrazin (F)	Venturi Venturi VM200-FE-01	+9.415s
5	Nicolas Prost (F)	Renault e.dams Renault ZE15	+11.316s
6	Loic Duval (F)	Dragon Racing Venturi VM200-FE-01	+15.660s
7	Nick Heidfeld (D)	Mahindra Racing Mahindra M2 ELECTRO	+16.444s
8	Robin Frijns (NL)	Andretti Autosport Spark SRT_01E	+18.685s
9	Oliver Turvey (GB)	NEXTEV TCR NEXTEV TCR001	+22.007s
10	Bruno Senna (BR)	Mahindra Racing Mahindra M2 ELECTRO	+22.456s
11	Jean-Eric Vergne (F)	DS Virgin Racing Virgin DSV-01	+24.482s
12	Nelson Piquet Jr (BR)	NEXTEV TCR NEXTEV TCR001	+24.641s
13	Daniel Abt (D)	Abt Audi Sport Abt Schaeffler FE01	+27.998s
14	Simona de Silvestro (CH)	Andretti Autosport Spark SRT_01E	+36.171s
15	Mike Conway (GB)	Venturi Venturi VM200-FE-01	+39.581s
16	Jerome d'Ambrosio (B)	Dragon Racing Venturi VM200-FE-01	-1 lap
R	Antonio Felix da Costa (P)	Team Aguri Spark SRT_01E	17 laps – electrical
R	Salvador Duran (MEX)	Team Aguri Spark SRT_01E	14 laps – accident

Winner's average speed 71.165mph. **Fastest lap** d'Ambrosio, 1m10.285s, 78.930mph.

Superpole 1 Bird, 1m09.420s; 2 Prost, 1m09.751s; 3 da Costa, 1m09.761s; 4 Sarrazin, 1m10.298s; 5 Conway, 1m12.391s.

Qualifying 1 Sarrazin, 1m09.236s; 2 da Costa, 1m09.381s; 3 Prost, 1m09.473s; 4 Bird, 1m09.474s; 5 Conway, 1m09.602s; 6 Frijns, 1m09.616s; 7 di Grassi, 1m09.677s; 8 Abt, 1m09.814s; 9 Piquet, 1m09.931s; 10 d'Ambrosio, 1m10.067s; 11 Turvey, 1m10.126s; 12 Duval, 1m10.130s; 13 Heidfeld, 1m10.321s; 14 de Silvestro, 1m10.446s; 15 Vergne, 1m10.581s; 16 Senna, 1m11.306s; 17 Duran, 1m13.256s; 18 Buemi, 1m19.421s.

Championship 1 Buemi, 80; 2 di Grassi, 76; 3 Bird, 52; 4 Duval, 32; 5 d'Ambrosio, 30; 6 Sarrazin, 28; 7 Heidfeld, 23; 8 Frijns, 21; 9 Prost, 21; 10 da Costa, 16.





“Head down, arse up and go for it. That was me”

Alan Jones epitomised Aussie grit almost before Mark Webber was born. In a rare interview, he reflects on his race and title-winning years with Williams

By Anthony Rowlinson,
Group Editor

[@Rowlinson_F1](#)

It's easy to overlook Alan Jones – 1980 Formula 1 world champion, in case you'd forgotten. His title fell smack in the middle of a sequence of first-time champs – Mario Andretti, Jody Scheckter, Jones, Nelson Piquet, Keke Rosberg – and of these only Piquet would go on to repeat the feat (winning in '83 and '87).

But Jones – stubborn, determined, no-bullshit Alan Jones – was right there in the thick of a fierce turn-of-the-decade scrap that featured a truly stellar cast in race-winning cars. In his title year, seven drivers won races; there had been seven winners the year before and there would be seven again in 1981.

Indeed, 17 of 1980's 21 points scorers were race winners or winners-to-be: talents including Gilles Villeneuve, Rene Arnoux, Alain Prost, Emerson Fittipaldi, John Watson, Didier Pironi, Jacques Laffite and Carlos Reutemann.

Winning, let alone dominating in the manner of a Lewis Hamilton or a Seb Vettel, didn't come easy. Yet win Jones did, in a style that combined pace with robust fortitude, to take 12 grand prix victories (or was it 13? – we'll come to that later) and a place in the annals as Williams's first world champion.

Not that he's one to boast about it. Jones arrives to chat to *Autosport* dressed casually in shirt and slacks, no trace of ego or starry-ness, and settles down for a cup of afternoon tea in London's Grosvenor Hotel. Then he casts his mind back a decade or three... »

Jones leads Villeneuve and Reutemann at Watkins Glen in 1980, his title season

Autosport: That was a pretty classy field you raced against when you were fighting for the title: Mario Andretti, Gilles Villeneuve, Jody Scheckter, Nelson Piquet, Alain Prost, Jacques Laffite, Rene Arnoux...

Alan Jones: ...Yeah, and probably just point three of a second separated the grid.

A: What was it like racing in such a tight, competitive field?

AJ: We didn't really realise just how competitive it was, and we certainly didn't realise how dangerous it was. We thought we were driving state-of-the-art cars, but when I look back on them now it's just, "Shit, did I drive that thing?"

A: The turbo F1 era was just beginning in the late '70s, but you won your title in a Cosworth-powered Williams. So you had a great chassis (the Williams FWo7B), but what was it like trying to make up the power deficit?

AJ: The turbo cars (Renaults) invariably always outqualified us because they could turn the boost up, but we realised that we could give them a hard time in the race because they couldn't race with that sort of boost.

So you would go to a circuit like Hockenheim, you'd go to a circuit like Austria – particularly if you had a bit of altitude you were even more buggered – they'd turn the boost up and they'd get on pole. But you'd know that they had to turn it down for the race so you would just concentrate on that.

What gave me a lot of pleasure was actually knocking them off and getting on pole at Silverstone [1979 British GP], because that was a bloody quick circuit.

A: In a good ground-effect car, was it all about keeping it nailed in the corners?



Jones was a kindred spirit with Patrick Head and Frank Williams



Jones is just as much the straight-talking Aussie as ever

STALEY/LAT

AJ: Well, it was the commitment *into* the corner that mattered. You would commit extremely late and that's what happened to me at Belgium in '81. I committed myself into the corner and one of my skirts stuck up. It just went off, lost grip completely, and I was straight into the fence. One of the radiators burst and I got third-degree burns on my left leg.

But they were good, those cars – you could still slide them. People used to say you couldn't slide the ground-effect cars, but you sort of could.

A: You're the second Australian F1 champion after Jack Brabham...

AJ: ...the only living one now...

A: ...what was your background coming up?

AJ: I started racing billy carts down a hill! Then I went to go-karts. Then I did a bit of racing in my old man's Cooper-Climax. Then I pretty much left to come over here.

A: How old were you?

AJ: Big Ben was a wristwatch, I think! And then I did the old Dormobile around Europe and went to some of the sportscar races. I very quickly realised that if I wanted to do anything in motorsport I had to come back to England. Because it was, and still is, the mecca of motorsport.

A: Your dad, Stan, was a successful racing driver in Australia, so was he responsible for getting you started?

AJ: There's no question about that. I don't know if I would even have got into racing had my father not been a racing driver. I just grew up in that atmosphere and ever since I can remember I was going to be a racing driver.

A: Your F1 story is interwoven with the early years of Williams. Frank and Patrick Head still get a bit misty-eyed about the late '70s and early '80s when they started winning with you and Clay Regazzoni. What do you remember about them?

AJ: First of all, Frank's the best bloke I've ever driven for; Patrick is the best engineer I've ever worked with. And I think it was just one of those things... we all gelled.

And because we were all a similar age, we'd all come up together and victories and successes were sweet for everybody, because it was a first for all of us.

They were wonderful days and we were all good friends. I just don't think those sort of relationships exist anymore.

A: What about the French GP in 1980, when you flew the Union Jack flag from your car on the victory lap?

AJ: Well, the race before was the Spanish GP, which I won. I am down as having won 12 GPs and that pisses me off – I didn't – I won 13. All I know was that I went to Spain, I practised on the Friday, qualified on the Saturday, raced on the Sunday, took the chequered flag, was given the trophy by Don Carlos the king, or whatever his name is, and went home with the trophy. >>

DETERMINATION VERSUS GEOGRAPHY

The Aussie battle

AFTER ALAN JONES turned his back on Formula 1, Australia waited a long time for a driver with the opportunity to fight at the sharp end, if not the ability. Mark Webber's F1 career might have taken a turn for the worse in his role as Sebastian Vettel consistently defeated him, but the popular driver, now World Endurance champion, was still deserving of his multiple GP victories.

Daniel Ricciardo, leading the Red Bull team Vettel has now vacated, has the opportunity to do more.

And Australia's only living F1 world champion pulls no punches when it comes to weighing up Ricciardo's ability to become the third title winner from down under.

"Oh, there's no question," he insists. "At the end of the day, he has won three grands prix, he has done some fantastic overtaking manoeuvres and he's good in the wet, which is always a good sign.

"I tested him in an A1GP car at Silverstone years ago. He had never been in the car, he had never been to

Silverstone and he was quicker than the drivers we had. I wanted to sign him up but [Red Bull junior scheme boss, Helmut] Marko wouldn't release him. Anyway, he has gone on to bigger and better things since then.

"He's the real deal. He'll get the job done. Put it this way... if he was in a Merc, he would get the job done."

Ricciardo's not the only Red Bull-backed Aussie in single-seaters, mind. Luis Leeds, 16, will compete in the UK this season as a Red Bull junior in MSA Formula, off the back of a podium-finishing campaign in Australian F4 as a 15-year-old against much more experienced opposition.

Joseph Mawson, not a Red Bull junior but clearly talented, won races in German F4 last year and should be a title favourite in this campaign.

Those two represent the best hope for an Australian establishing themselves on the mainstream single-seater ladder, a task that Jones believes is perennially tougher for youngsters from his home country. That difficulty is why Aussies



The latest generation of Aussie grit: Daniel Ricciardo (above), Luis Leeds (right) and Joseph Mawson (far right)



– even the ever-smiling Ricciardo – have a steely edge to their personalities you don't always see with other drivers.

"I don't know whether it's part of being Australian or whether it's because we are geographically disadvantaged, and we have had to come such a long way to do what we have to do," Jones

replies when asked what it is that brings that out of Aussie racers. "We are probably just maybe a little bit more determined to get the job done.

"When I raced in British F3, I couldn't go home and have a roast dinner with mum. My whole family were back in Australia. It's a bit of a commitment to jump on a ship or a plane and

come over to England and go motor racing. I think that just makes you more committed. There there are a lot of racing drivers that are committed, but it certainly makes you very determined."

Fighting for survival on the route to a professional career in motorsport, let alone Formula 1, is tougher now than it's ever been.

Jones raced in four GPs for Embassy Hill team in 1975



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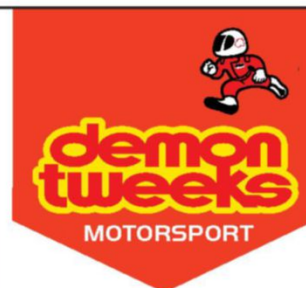
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*"In these ten years of Formula 1,
my greatest joys came
from the fans."*

Ayrton Senna



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INTERNATIONAL SHOP

A: Have you still got it?

AJ: Yeah, I have. Now Jean-Marie Balestre [president of FISA, the governing body at the time], for reasons best known to himself, said the race didn't count. [The grand prix was declared 'illegal' post-race by FISA, amid a power struggle with the F1 teams' association, FOCA. It was removed from the championship table and no points counted towards the standings.]

I think anyone that's called Jean-Marie has got to be looked upon with a certain amount of suspicion anyway – but I shouldn't be talking ill about the dead.

The next race was the French Grand Prix. The two Ligiers were first and third [on the grid], Arnoux's Renault was second, and they were all celebrating Saturday night. They had the speed but we wore them down. I passed one and then the other and went on to win. So I had great delight in waving that flag.

England was my second home then – I used to treat the British Grand Prix as my home grand prix. So I had great delight in hoisting the Union Jack and driving round and waving it in all their faces. And then I wouldn't get on the podium while Balestre was on it. That gave me an unbelievable amount of pleasure.

A: Patrick – or should we say Sir Patrick – told us something once...

AJ: He says I don't have to curtsy to him...

A: ...when you won the title in 1980, you had a bit of an epic night...

AJ: Well, when I won the title in Montreal, Mansour Ojjeh, who owned TAG, our sponsor, in the space of me winning the race and going back to the hotel, had a load of victory photographs printed, framed, and hung all around. There must have been 40 of them and we had a pretty good night. When I went back to the hotel it finally sort of dawned on me, and I remember jumping up and down in the shower singing "I am the champion".

But I think what Patrick might be referring to is when I won the Las Vegas GP in 1981. That's a different story altogether... [chuckles].

A: Maybe we should leave that off the record?

AJ: Yeah. That's definitely non-printable, that one!

A: Given the era you raced in, it's good that you're here to reminisce about it...

AJ: Well, that's true. We thought we were driving state-of-the-art cars. We thought we were the business. I look at it now and think, "Christ! No way!" I think somebody offered Mark [Webber] a drive in one of my old cars and he said, "Shit, no!"

A: Some of your battles against Gilles Villeneuve have passed into F1 legend. What was he like to race against?

AJ: Well, I said it then, and I'll say it again... I never believed Gilles was going to die in bed. He was a bit of a hard man to race against, but extremely fair. But when you look at some of the shunts he had... In Zolder [Villeneuve was killed after an accident during qualifying for the 1982 Belgian GP], if you look at his accident, my understanding was he had the shits because [Ferrari team-mate] Pironi was outqualifying him. And he came in for a brand-new set of tyres and went out to try and do the Blattenhauser and [Jochen] Mass was there. Now normally someone would have said, "Oh f*ck, you've ruined my lap. Bugger." But he wasn't prepared to do that, he tried to double-guess Mass and hit him. And that's what cost him. And I think that was the make-up of Gilles. But a very, very hard bloke to race. If you passed him, you had to earn it. He would never give you a spot, that's for sure.

A: What about Nelson Piquet, or Carlos Reutemann, your team-mate in 1980 and '81? They were quick...

AJ: Carlos was quick on his day. He was psychological. When everything was operating OK, he was bloody quick. But he >>

JONES AND HIS EXTRACURRICULAR RACING ACTIVITY



US F5000, 1976

Jones (64) was a race winner in Theodore Racing Lola in the States



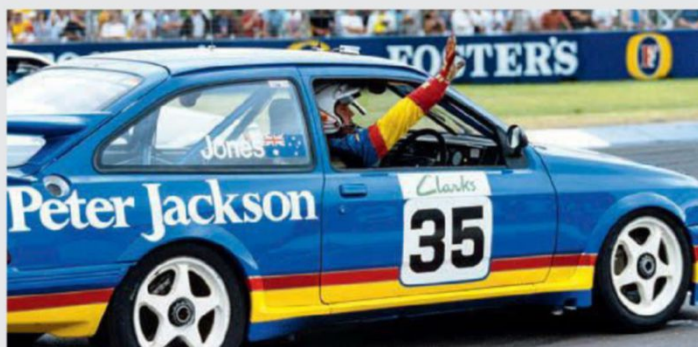
CAN-AM, 1978

Winning five of the 10 races, Jones claimed '78 Can-Am championship



LE MANS, 1984

Jones claimed sixth in Porsche 956 with Vern Schuppan and Jean-Pierre Jarier



AUSTRALIAN TOURING CARS, 1992

Jones was a mainstay of tin-top racing down under through late 1980s and '90s

THE LAST HAAS IN F1

“A complete bloody disaster”

FORMULA 1'S NEWEST TEAM, Haas, enters F1 with a significant level of expectation. And that's because of its impressive technical ties and strong driver line-up.

The similarly named but entirely different Haas operation that entered F1 in 1985 did so in some style. And 1980 world champion Alan Jones was coaxed out of retirement to spearhead the team.

“I thought, ‘Well, who knows?’” he says. “‘I’m back in F1. I’m getting paid very good money, who cares? If it turns out terrific it turns out terrific. If it doesn’t, well, I’ve got more money in the bank.’” It also had serious partners in Goodyear, Ford and American

company Beatrice. And a little-known designer named Ross Brawn, joined late on by a certain Adrian Newey.

But for all the potential, and Jones's commitment, the project was a disaster.

“I likened it to being in a kitchen and having all the fantastic ingredients but the cook f*cking it up,” Jones says. “I won’t say who the cook was, or the cooks – but there were some there that bugged the cake. Not least of which was that we had the ‘hand grenade’ initially, which was the Hart engine. Which just blew itself to pieces with monotonous regularity. And then we had the Americans come along and say, ‘You’re going to see American muscle at its best’. And I said, ‘Oh, really, that’ll be good.’”

Jones contested three races in 1985 (he withdrew from another), and the Hart powerplant was replaced with a Cosworth by the third round of ’86, which Jones

remembers as “a beautiful little engine, but it was gutless”.

“You either couldn’t drive it out of the pits and it would go pretty good on the track or vice-versa,” he continues. “At that stage Honda had electric boost adjusters but we had Bakelite sticks, sticking out of the dashboard, because to get your boost right you’ve got to be at a constant amount of revs – 10,000 revs, say. And then you bring the boost up to where you want it and then you do the other bank. It used to take me two laps to do the boost because I’d have to do one lap with the left bank and the other lap with the right bank.

“I’ll never forget, I was at Monza and we were 24-or-something ks slower down the straight than the Ferraris. He asked how much wing was I running, and I said, ‘Keith [Duckworth, Cosworth boss], for Christ’s sake, have a

look, do me a favour’. They were running a barn door and they were 24ks quicker. Ours was virtually flat.”

A qualifying peak of 10th, in Hungary, was an anomaly and although Jones did grab top-six finishes in Austria and Italy he was 12th in the rankings with four points.

Like its namesake’s 2016 effort, Haas’s cars were prepared in multiple locations. “So, the engine was bloody hopeless – it was done in Northamptonshire – and the electronics were done in Dearborn,” he points out. “And never the twain would meet.

“So it was a complete bloody disaster. Could have been good, but it just was never to be.”

“The hand grenade, the Hart engine, blew itself to pieces”



Jones (here in sixth) would later clash with Piquet at Belgium ’81

was a bit temperamental. Like everything had to be 100 per cent, otherwise [Jones whistles and makes an ‘away-with-the-fairies’ gesture, before continuing in a mock-Latino accent], “Frank, for me, I have a big problem, I have an ingrown toenail”, or something.

Nelson was hard to race against. I think any of the quick guys were hard to race against because that’s why they were quick. They were very competitive. I remember at Zolder in ’81, I went down the inside of Nelson, we touched wheels and he went off. And he walked back to the pits and he said to Frank, “I’m going to break his legs.” Frank just looked at him and laughed and said, “Well, make sure you get him quick.”

A: Was F1 more fun then?

AJ: No, I don’t think we had more fun. I took it extremely seriously, to be honest. On the outside I don’t know what it looked like, but, for instance, whenever we raced ‘away’, I’d never take my golf clubs, I’d never go down to the pool. I used to spend a lot of time in my room. I would always be very conscious of the fact that I didn’t want to get sunburn. I was there to go motor racing and that was it. And when I left my front door I got into race mode and turned into a bit of a not-nice person – and I admit that. Then when I got home on a Monday or a Tuesday I would turn into a totally different person. I would go down the pub and have a few beers and have a game of pool and be a different person. But when I went racing, I went racing.

A: Is that why you fitted in so well at Williams?

AJ: Well, Frank, you know he’s charming, but he’s committed. I mean, how has he stuck it out the length of time that he has and done as many grands prix? One of the reasons that I gave up was that I was sick of the bloody flying and sick of the crowds. And FW does it in a bloody wheelchair!

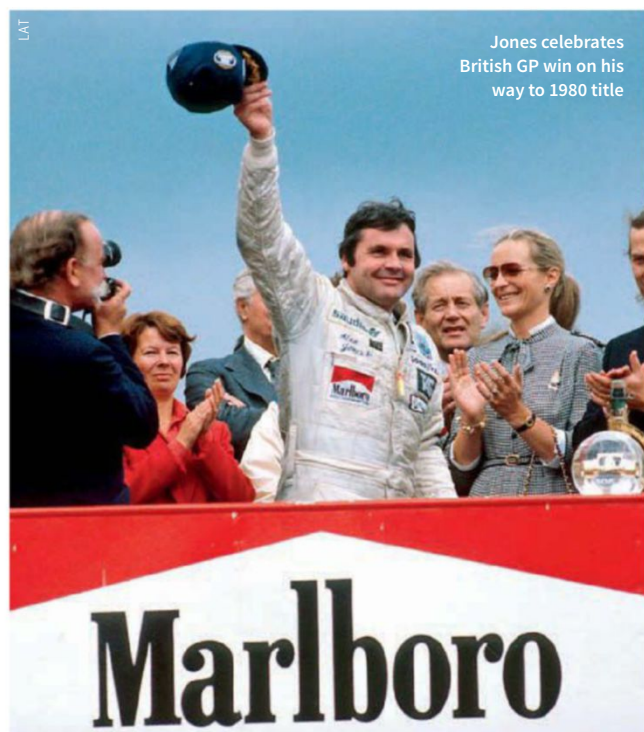
He’s very single-minded, very competitive. He’s a racer. And Patrick is a racer – also very single-minded and as committed as any driver I have ever seen. If I ever scraped the wall or spun off and damaged the rear, [laughs] Patrick would be very unhappy and he’d let you know about it.

A: You were probably thick-skinned enough to take it.

AJ: Oh shit, yeah, I’d tell him to f*ck off! We had a bit of a standing joke because if the car ever broke down, I would always say, “Patrick, you owe me one.” And if I did a mistake and spun off or something, I owed him one. So we had a good relationship.



Jones with 1985 Haas. Hard work netted just four points in 1986



Jones celebrates British GP win on his way to 1980 title

A: What was it that they liked about you? What was your defining characteristic as a driver?

AJ: To be honest, just sheer determination: head down, arse up and go for it. I'm sure that's how I won the French Grand Prix — I just wore them down.

But I was always like that. If I went testing midweek, I always drove like it was qualifying. I didn't see the point in going testing and driving seven tenths then going back to the circuit and driving ten tenths. They all feel good at seven tenths, but when you start getting up about nine and ten tenths, that's when their characteristics start coming out and if they've got any little evil things, that's when you first discover it.

I always say a singer's got his voice, a pianist's got his piano and a racing driver has his skills. And every time he puts his bum in a car he should try. And I think Patrick always appreciated that. He knew I was always giving 100 per cent when I had my bum in the car. 🍌

ALAN JONES IN F1



1975

TEAMS Harry Stiller Racing/Hill
CARS Hesketh 308B/Hill GH1
BEST FINISH 5th
POINTS 2
CHAMPIONSHIP 17th



1976

TEAM Surtees
CAR Surtees-Cosworth TS19
BEST FINISH 4th
POINTS 8
CHAMPIONSHIP 15th



1977

TEAM Shadow
CAR Shadow-Cosworth DN8
WINS 1
POINTS 22
CHAMPIONSHIP 7th



1978

TEAM Williams
CAR Williams-Cosworth FW06
BEST FINISH 2nd
POINTS 11
CHAMPIONSHIP 11th



1979

TEAM Williams
CAR Williams-Cosworth FW06/FW07
WINS 4
POINTS 40
CHAMPIONSHIP 3rd



1980

TEAM Williams
CAR Williams-Cosworth FW07/FW07B
WINS 5
POINTS 67
CHAMPIONSHIP 1st



1981

TEAM Williams
CAR Williams-Cosworth FW07C/FW07D
WINS 2
POINTS 46
CHAMPIONSHIP 3rd



1983

TEAM Arrows
CAR Arrows-Cosworth A6
BEST FINISH (ONE RACE ONLY) DNF
POINTS 0
CHAMPIONSHIP Not classified



1985

TEAM Haas Lola
CAR Lola-Hart THL-1
BEST FINISH (TWO RACES ONLY) DNF
POINTS 0
CHAMPIONSHIP Not classified



1986


TEAM Haas Lola
CAR Lola-Hart THL-1/Lola-Cosworth THL-2
BEST FINISH 4
POINTS 4
CHAMPIONSHIP 12th

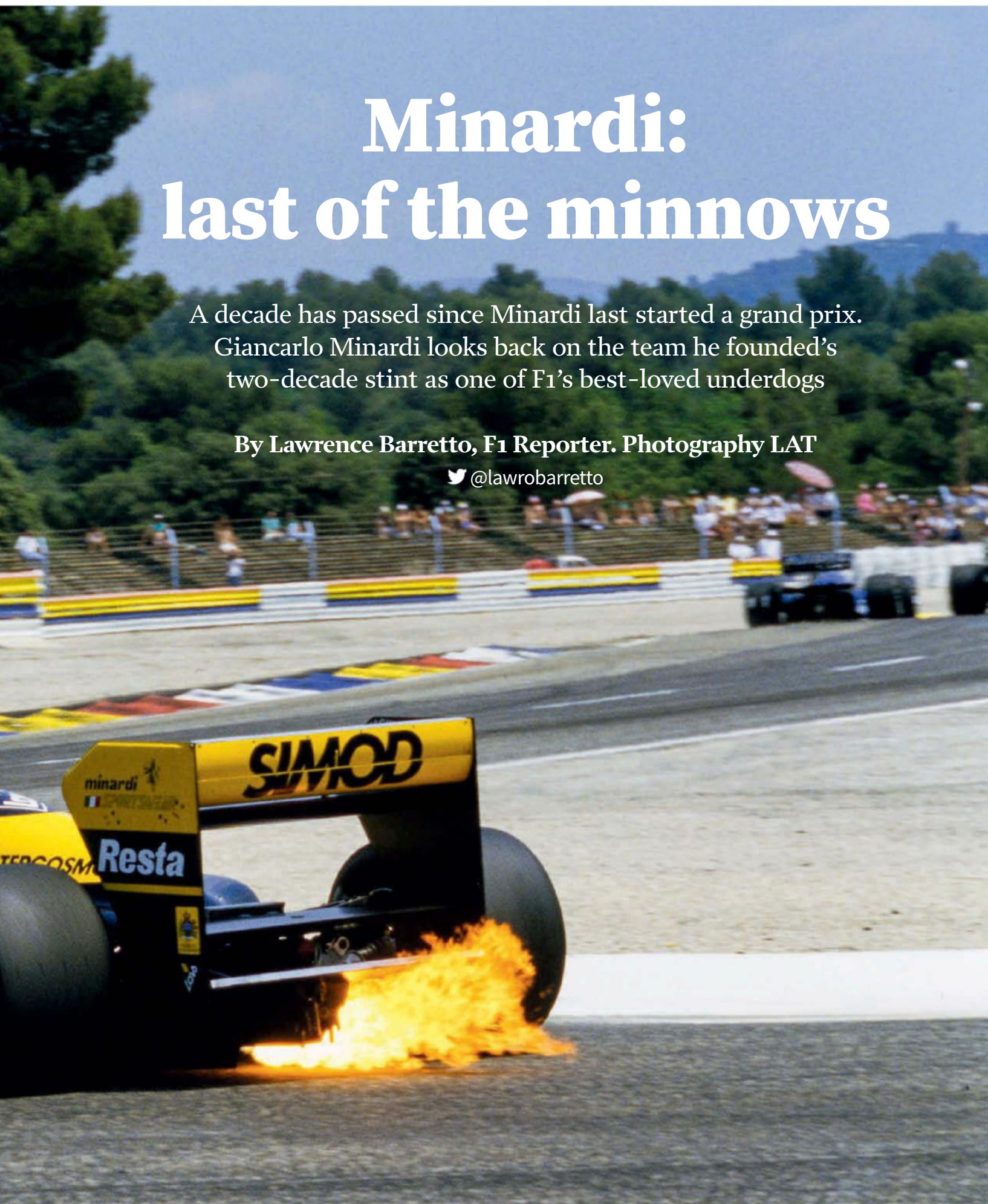


Minardi: last of the minnows

A decade has passed since Minardi last started a grand prix. Giancarlo Minardi looks back on the team he founded's two-decade stint as one of F1's best-loved underdogs

By Lawrence Barretto, F1 Reporter. Photography LAT

 @lawrobarretto



Fernando Alonso, Giancarlo Fisichella, Jarno Trulli, Alessandro Nannini and Mark Webber all have one thing in common. They owe their F1 debuts to the team founded by Giancarlo Minardi, an Italian car salesman who loved racing and was passionate about giving young racers a chance.

Born in Faenza, a city at the foot of the sub-Apennine hills in the Emilia-Romagna region, Minardi grew up around motors. His family ran a car dealership and fuel station, while father Giovanni built and raced his own cars. After running his own dealership, Minardi tried his hand at racing, competing in a series of hillclimbs and rallies, before returning to management – this time in racing.

He began running customer cars in Formula 2 under the Scuderia Everest banner in the 1970s and enjoyed reasonable success. Then, through backing from businessman Piero Mancini, who wanted to recruit Nannini for the 1980 F2 season, Minardi became a constructor.

“It was like a progressive escalation,” says Minardi of his rise from working in the family business to running a racing team bearing his name. “I started to handle a team simply modifying the cars and then I became a manufacturer unavoidably.”

Over the course of the next four years, Michele Alboreto gave the team its best result with victory at Misano in 1981.

“It is a beautiful period of my past,” says Minardi. “Formula 2 is the best-ever category created by the FIA. There were five to six chassis constructors and the same number of engine manufacturers. It was a very tight championship with drivers also coming from Formula 1. More importantly, it was a very selective testbed for young drivers who had the opportunity to attract attention.”

A move to F1 was a natural progression. “The Minardi team was too big for Formula 2 where you needed to build just three cars in a season,” he says. “At the same time, it was too small for F1. Sponsors’ interests were mainly directed towards the top championship. For this reason we had that crazy idea.”

Unfortunately, the V6 engine from Motori Moderni – the new company of former Alfa Romeo sporting chief Carlo Chiti – was not ready for the start of the 1985 season, forcing Minardi to adapt its chassis to run a Cosworth for the first two races. Even when it got the Motori Moderni things didn’t improve. The engine was underpowered and unreliable. The team’s solo driver, Pierluigi

Martini – who would go on to become Minardi’s most loyal servant – failed to score a point. “It was difficult because it was a risky choice,” says Minardi. “We focused on a new engine, so we were a

private team with a private engine. It was a difficult year, but with today’s scoring system we could have got into the points.”

The team expanded to running two cars from the following season but had to wait until the 1988 United States Grand Prix to score its first points finish, through Martini. Crucially, Minardi had built a good chassis. That provided the foundation for the team to really establish itself in F1. Martini scored points three times the following year and even led the 1989 Portuguese Grand Prix for a lap, the only time a Minardi achieved the feat, before finishing fourth. A podium ultimately proved elusive, and that fourth place turned out to be the team’s equal-best result.

Key to its rise in 1989 was agreeing a deal to become Pirelli’s number one team and keeping faith in Martini, whose consistency proved vital. “We were an official team so we did a lot of kilometres with tests,” says Minardi. “We achieved important results, also thanks to the performances of Martini, who was able to handle the car and the tyres very well. Martini was an important driver because he took part in 102 of Minardi’s 340 GPs. He was a trustworthy driver. We are still



Giancarlo Minardi's team started 340 races in Formula 1 from 1985-2005

in contact today. We were strong in qualifying, but a bit less during the races and on the long runs.”

Minardi says he’s not a man for regrets, but admits that, had circumstances played out differently, a podium, or maybe even a win, could have been on the cards in the 1989 Australian Grand Prix. “We had important results and with a little more luck they could have been sensational,” he says. “Like Adelaide ’89, when we got the third fastest time in qualifying behind Mansell and Senna. Unfortunately, it started to rain suddenly and the Pirelli rain tyres were not that competitive. We slipped to sixth place, winning only a point. Thus, the regret for a lost opportunity remains, since we were really competitive in dry conditions.”

The 1990 season was tough, the only highlight being a front-row start at the United States Grand Prix, but fortunes were about to improve when Minardi secured Ferrari power for ’91. It was quite a coup and marked the beginning of an era in which manufacturers realised the benefits of supplying rivals in development and additional funding for their own causes.

“The Ferrari deal was the consequence of the results gained in 1989 thanks to a competitive car and, above all, thanks to the fifth and sixth places gained at Silverstone. Back in Italy, at the airport at Bologna, we were celebrated by fans in a great way. At that moment I was

approached by Ferrari chairman Fusaro who asked me for a meeting. That was a crucial step for us because our costs increased. We started to pay 11 billion Italian lira for the Ferrari engines, much more than the 1.5 billion we used to pay before.”

The move coincided with the team’s best constructors’ championship finish of seventh out of 19 teams. Had today’s scoring system been in place, it would have scored points 10 times, rather than just the twice it did under the old system. For a privateer with a limited budget, Minardi was impressing.

But the Ferrari deal proved too expensive to continue and Minardi switched to Lamborghini for a single season before taking Fords. The next few years were a struggle and, as a number of its small rivals folded, Minardi found itself dropping out of the midfield and struggling for funds.

Minardi’s future in F1 was in danger, forcing the Italian to merge with Scuderia Italia in 1994. “It was unavoidable. We were two important teams,” he says. “The Minardi team was more technological because it manufactured its cars by itself.” But the partnership didn’t last long: “It could have been a ➤

“We had important results – with luck they could have been sensational”



1981: European F2 race winner Michele Alboreto in action at Pau



1985: Minardi graduates to F1



1997: Tough times as Trulli shunts



1989: Rain cost podium shot at Adelaide



1999: Badoer in tears after losing fourth



2000: Final year before Stoddart buyout

more profitable marriage as Scuderia Italia had an important staff, but they were less passionate than I am.”

With the team still struggling, Scuderia Italia stepped back and Flavio Briatore came on board. “Bernie Ecclestone suggested it,” says Minardi. “We did a good job until he decided to sell his shares to Gabriele Rumi, a man I really appreciated.”

By now, financial pressures were really starting to bite and points were proving hard to come by. Teams with bigger budgets were able to outdevelop the small Italian squad, and Minardi was struggling to compete. “It was amazing to fight against giants,” he says. “But that was a difficult period. My team engineers, mechanics and drivers were usually taken away by competitors, which made life challenging.

“The engine costs raised without any regulation. In the ‘90s and until 2000 we used an engine for free practice, another for qualifying and another one for the race.”

Minardi’s resolve that he would take young drivers based on potential rather than those who brought backing was being severely tested. “It has always been crucial,” he says. “In my DNA there has always been the idea to work with young drivers, engineers, and mechanics. This choice has always given me great satisfaction. Minardi has always paid its drivers who also enjoyed a financial support by the sponsors,” he says. “Today, there are drivers supported directly by wealthy families.”

But when Esteban Tuero decided F1 wasn’t for him after one season, Minardi was forced into finding another Argentinian driver quickly to appease sponsors the team had committed. Ultimately, he took Gaston Mazzacane, who brought backing with him.

“It was a surprise,” says Minardi of Tuero’s decision. “We had trained Esteban since he was 16. We had already signed some agreements with important Argentinian sponsors so we had a lot of problems and we decided to bet on Gaston Mazzacane.”

That was to be the final season with Minardi at the helm as the team, now on the verge of collapse, was sold to businessman Paul Stoddart. The Australian was sympathetic to Minardi’s history and stature, keeping the team name and its base in Faenza, with Minardi staying on as managing director. Nonetheless, it was a difficult decision for Minardi to make.

“I felt sorry because I knew everything was going to change,”



Fernando Alonso in action for Minardi in his 2001 rookie year

he says. “But I had a moral obligation to look after 130 staff and their families and the future of Fondmetal, Rumi’s company.”

In 2005, the team was sold to Red Bull and rebranded (briefly) Squadra Toro Rosso and then Scuderia Toro Rosso. After 21 years and 340 races the Minardi name in F1 was no more.

“I am proud because it was a wonderful adventure,” he says. “It does not seem real to have lived 21 years in F1. Even today many people stop me and recognise me. I regret just the podium. We came close three times, ending in fourth. Other times we had bad luck, as in ‘99 with Badoer at the Nurburgring. The gear system broke due to a fusion defect when he was fighting for the

podium a few laps from the finish line.

“The team has always kept its identity. Still today, we have a meeting with all the ex-Minardi mechanics every two years – they are really fond of me, and some

engineers still use ‘The Minardi Method’ in their teams.”

That three of the four new teams that attempted to enter F1 in 2010 no longer exist six years later is testament to what Minardi managed to achieve in F1, but also of concern for the future. “F1 needs small teams, since they train mechanics, engineers and drivers, and they protect the top teams,” says Minardi. “I tried to explain to Max Mosley the importance of small teams several times. It’s obvious. If manufacturers remain at the back, then they give up. That’s what has happened lately.”

Minardi certainly didn’t give up, which is why his team will go down in history as one of F1’s best-loved underdogs. ❧

“Some engineers still use ‘The Minardi Method’ in their teams today”



Minardi took its final F1 points in farewell season in the 2005 US Grand Prix



Pierluigi Martini

102 starts for Minardi

➔ 1985-91, 1993-95

“MINARDI IS A GREAT team that's played a real part in Formula 1 history, not just by launching the careers of so many drivers, but also those of so many top engineers.

If you look at the results we achieved, a fifth or a sixth place with Minardi was worth a win. And don't forget that back then there were only points for the top six places – if we had the modern system, we would have been in the points with Minardi about 30 times.

I had the opportunity to go elsewhere on a couple of occasions: after Alessandro Nannini was injured there was the chance to go to Benetton – but there was a penalty clause in my contract – and I also had a Ferrari contract for 1992, but that ended up with me driving for Scuderia Italia, while Ivan Capelli got the

Ferrari factory drive. The following year I was back at Minardi.

There were some very good times. Of course, everyone remembers that we were on the front row in Phoenix in 1990, and although some people say that Pirelli's qualifying tyres played a part, there were many other drivers and teams that had them too.

I already had a good memory of the USA from 1988, when we saved Minardi's season by finishing sixth in Detroit, which was my first points finish.

I liked those American tracks because they tended to be street circuits, and this helped to minimise the difference between the top cars and ourselves. Back then, there was about a 150bhp difference to the top guys – there was just no way we could compete. I always

liked Monaco, too, and we were quick there, but for various reasons we didn't always get the results.

Probably the best season was 1989: we finished fifth in Silverstone – which was a big surprise, as we were never normally quick there – we led in Portugal and then finished the season with sixth in Australia: that was a crazy, rain-affected race, which was the only one in my whole Minardi career where I can honestly say we had a genuine chance to win.

But for me, the season that got away was 1991. It was the first year when we had the Ferrari V12, which was a very good engine, but they didn't give us the semi-automatic gearbox that came with it. This caused a fundamental engineering problem that meant we retired so many times from clutch breakages, even just

Martini (pictured right celebrating his 100th GP start in 1994) started second at Phoenix in the 1990 US GP



pulling away from the pits. Despite that we were fourth twice, which was Minardi's best result, so that gives you an idea of what might have been with the complete package.

There was no secret to our giant-killing success – just the fact that there was a fantastic team spirit, which was led by Giancarlo Minardi

himself, so everyone gave 110 per cent. Minardi was never a top team, but it was a very popular one, and I feel thankful for all the support we had. The fact we're here talking about it now after all those years says something in itself, doesn't it?

PIERLUIGI MARTINI WAS SPEAKING TO ANTHONY PEACOCK

How will driverless cars impact on motorsport?

As Formula E prepares to welcome an autonomous support series sooner rather than later, the series boss, one of its star drivers and a tech-loving team boss give their views on what it could mean for the future

By Scott Mitchell, Features Editor

[@ScottAutosport](#)

What could Roborace look like?

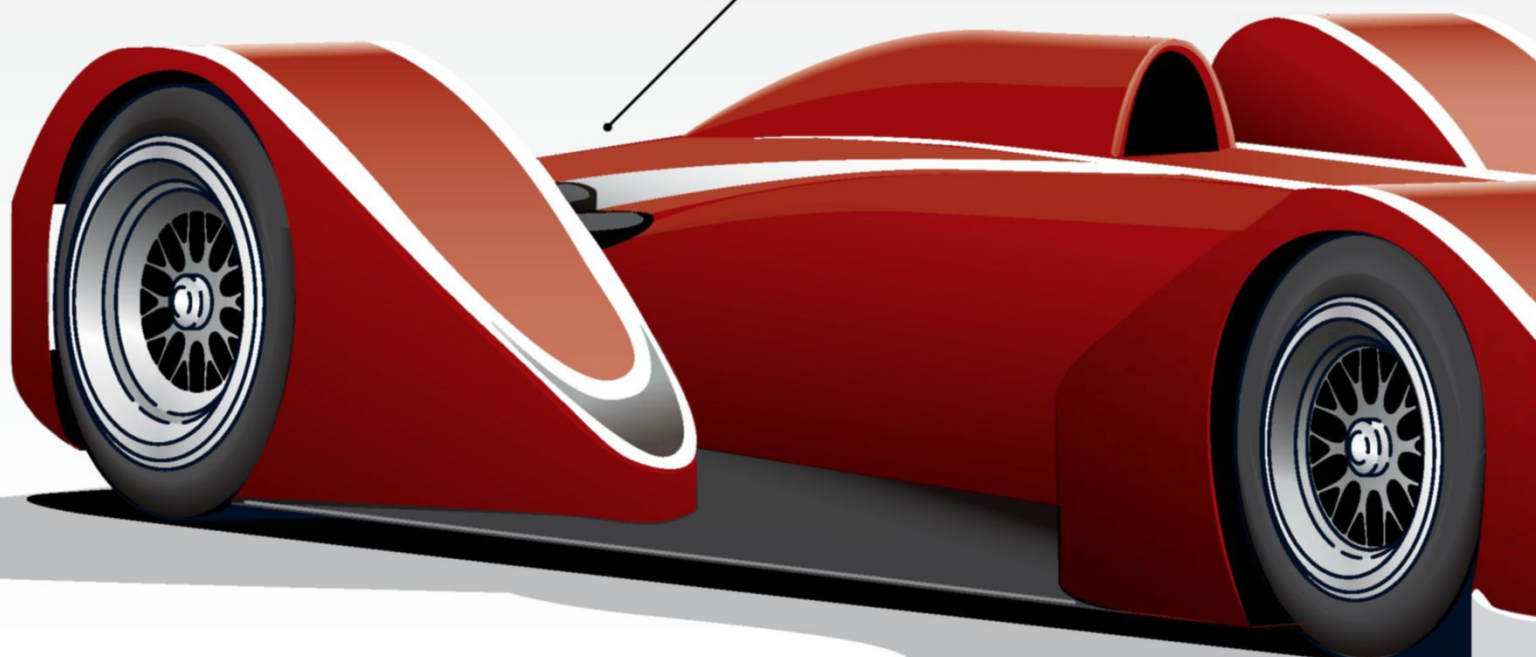


MARK
PRESTON

TEAM AGURI
FORMULA E
TEAM PRINCIPAL

AERODYNAMICS

On an electric car you need less drag. The draggiest thing is the wheels and the rear wing. The most efficient thing is the floor. So you take away the front wings that are sensitive, and have a huge flat floor with really benign aero so the computers don't get confused by a slipstream. You reduce the turbulence and weight behind the car by taking off the wing. Cover the wheels, and reduce drag around the car by wrapping all round the suspension, but really wrapped around.



Formula E brought motorsport into uncharted territory when it turned all-electric single-seater racing into a reality. So it is appropriate that it is now getting involved in motor racing's adoption of the most road-relevant new technology – autonomous vehicles.

Granted, it isn't ditching its drivers, simply offering the world's first driverless racing series a place to call home in its infant years. But given the mixed reception Formula E has received in its first 18 months, it's bold for Alejandro Agag's series to align itself with something so radical.

"Formula E is with humans and there's no doubt about that," Agag says. "Roborace is not motorsport – it's a

technology challenge and showcase and that has total sense with where the industry is going.

"That's why we're very happy it is in our eco-system but it's very different."

The key question is: how different? Electric vehicles and autonomous vehicles are hardly one and the same, but they are both born from developments in the commercial world that manufacturers are clearly identifying as the future. It would be foolish, or even arrogant, to think motorsport could remain exempt from these developments.

On the face of it, Roborace may appear to be the next logical step in how motorsport could overegg its technical pudding. The cars are so easy to drive these days, you can imagine detractors crying that getting rid of drivers altogether won't make a difference.

Why should it be that way? Must we subscribe to the view that autonomous

technology is the future of motor racing? Lucas di Grassi does not believe that is the case. Instead, the Brazilian – an Audi LMP1 driver and Formula E frontrunner – believes Roborace could mark a watershed moment in creating clearer definitions of what is a technology race, and what is motorsport.

"In my opinion we're reaching a unique point in human history where machines with AI are about to become better than humans in practically everything," he says. "That's why it's important that it splits – machines controlling the cars in one series, and leave the other series with humans in control.

"I like technology and the tech that could be tested is crazy. What it takes one series to learn in a year, you could do ten times more – because there's no issue of safety. You could get rid of disc brakes and have only electro-magnetic brakes. If it crashes, it's just expensive. >>

WEIGHT DISTRIBUTION

You'd move the weight – in the case of an electric vehicle or computer-operated machine, the batteries and hardware – to wherever is best for the tyres. Whatever tyre you're running you'd design the car around that. We can digress into tyres for hours but they are often made for the car, so keeping weight distribution somewhere near the middle would be the right place in the beginning. They'll be big cars, not microcars.

HEIGHT

You don't need a rollhoop. That's up high because when you draw the line between the helmet and the monocoque it has to be 50mm – in the mandatory crash test the rollhoop is only allowed to squash that much. So without a driver, that can all come down. The only reason the car is high is how the driver sits. That defines a lot of the height. By not having people in the cockpit you can really shrink everything down.





Human stories, especially the rivalries, have been key to racing's appeal

THE DEBATE

Are driverless cars race-worthy?

Formula E personnel have differing views over the purpose and effect of driverless cars. Our journalists do as well



Yes

SCOTT MITCHELL

I don't think the concept behind Roborace will take over motor racing as a whole. But the world is becoming driverless and this is a great opportunity for racing to avoid being stuck on the outside fearing its consequences.

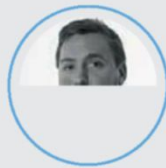
It appeals to me because of what it represents: the potential for progress in convincing the world these are legitimate commercial vehicles.

More than a million people die each year in road accidents. A disease with that sort of death toll would be a pandemic. Motorsport can play a genuine part in accelerating the development of safe driverless cars. That's a fantastic, bold, world-relevant technological exercise the sport has a history of embracing and excelling in.

Roborace has a lot of questions to face about its legitimacy as a motor racing category, and its first iteration will be far from the finished article.

The more time and money invested in the technology, the better the spectacle it will produce. I wonder how much people will care how the car is being controlled if a bold overtake is pulled off at 150mph, and the racing is good.

That puts motor racing at the core of a remarkable journey. Bring it on.



No

ROBERT LADBROOK

While I can see the relevance of the technology, motorsport is built on heroes and stories, and driverless cars would reduce the impact of both.

The vast majority of those two elements come from the drivers – when Sebastian Vettel was dominating F1 nobody cheered for Adrian Newey at the chequered flag, did they?

By removing the drivers you remove the human element that makes this sport so great. Computers can't innovate, react or adapt like the human mind can. Sure, it's clever if they can lap a circuit on their own, and even more clever if they can actually overtake, but can they make a strategic decision to dip into the pits and call a tyre change or a set-up tweak to turn a race on its head like great drivers can?

Drivers will always be more engaging, more relatable and more exciting – be it through moments of sheer brilliance, controversy or calamitous error – than a circuit board and a faceless programmer could ever be.

Motorsport was built by humans, for humans, and has grown into a hugely popular spectator sport. Without the human element to cheer on, we may as well be watching *Robot Wars*.

"You could test crazy tyre compounds, chemistry of batteries that might not be completely safe. All these types of things that are really interesting.

"Let the manufacturers fight to promote any technology they see fit for their commercial vehicles and plans. And let the drivers fight using loud V10s or V8s with similar, show-making entertaining races. Similar cars, cheap operational costs but worth watching. Let us drive H-pattern gearboxes and do some heel-and-toe again."

The argument that a driverless race series could spark the creation of a better world for drivers might seem ludicrous at first, but di Grassi's argument makes sense. If manufacturers have somewhere to plough their research and development into, it stands to reason that conventional racing series – Formula 1 or the top tier of the World Endurance Championship, to name two examples – would then not have to be tied to a research-and-development responsibility.

The counter-claim would naturally be that without a need to invest, would conventional motorsport struggle to attract financial backing from companies who want to demonstrate product links? Well, first of all you wouldn't ban all technology from motor racing, just the most extreme driver aids. And di Grassi believes that reducing the R&D element would naturally make it considerably more viable financially, because massive expenses such as aerodynamic development would be reduced.



SLOXHAM/LAT

"Drivers spend more time on software than mechanical set-up. It really sucks"

Formula E has no intention of getting rid of drivers, despite welcoming Roborace



“What works, and is commercially relevant, and doesn’t interfere with the human sport, you can move to the other racing series,” he says. “What doesn’t, you keep in Roborace.”

“F1 and LMP1 is much more sophisticated than Formula E, so in Formula E there is very little I would change. It’s the opposite. A guy in the old version of the car can still finish on the podium, because the driver can make more difference himself. Of course it should try new technologies but it is important to keep a very good level of car so the drivers are racing each other.”

“The modern race driver spends more time sorting out the software parameters than mechanical set-up for optimising performance on track. And this sucks. It really does.”

“Another important point is the development of technology in motorsport which is commercially relevant. How wasteful is it to spend 100 million euros on aero and then throw it out as the rules change?”

Di Grassi is presenting a very long-term future for motor racing. And in that future, the argument is that motorsport as we know it needn’t have an expiry date. Mark Preston, the former Arrows, McLaren and Super Aguri Formula 1 technical mind who heads up the Team

Aguri Formula E operation, subscribes to that point of view.

“The easy answer is horse racing is still around,” he says. “Horse racing is the sporting version of a previous method of transportation. So I would say the same would happen of car racing, because there’s no reason that people won’t want to watch in the future.”

“Having humans in any sports adds a randomness that makes it exciting. Sébastien Buemi having a problem in qualifying [in Buenos Aires] meant the race was more exciting. My thing has always been motorsport has to be relevant to the world, but it has to introduce random events.”

That’s not to say that Preston believes artificial intelligence doesn’t belong in motor racing. He has been a supporter of autonomous vehicles and emerging technologies for some time, and has high hopes for the impact Formula E can have on mass electrification of commercial vehicles, and on autonomous technology too.

Replacing drivers with computers is not his aim, but allowing the series to showcase elements of that tech is.

Preston believes the current cars could be made to bring parts of autonomous technology into the series in certain situations, such as operating on speed

limiters during caution periods. Elements may even be able to be introduced in time for season three, he says, and the series could then phase in the technology to a greater degree over time.

“During the full-course yellow periods, at 50km/h, that could easily be made safe,” he explains. “You could do demo runs first of all, maybe with a course car and then a medical car.”

“As you build confidence and knowledge it gives confidence to the consumer. We could have one running next year. At what point, I’m not quite sure. The good thing about racing is stuff can happen faster.”

“We have to be relevant to the real world. Some of that stuff in the future can happen faster than you think. We’d have to play about with the rules but it’s all totally possible.”

The good news for Preston, and like-minded thinkers, is that the man in charge is open to adopting elements of autonomous technology into the main show. But Agag stresses that Formula E, at least, will not become the domain of artificial intelligence.

“Yeah, I think it could be some part,” he says. “Maybe the cars going to the grid on their own is a possibility, or other elements – but not the main element. It will remain a human championship.”

FIVE KEY QUESTIONS FOR ROBORACE

Will the AI need a driver to imprint a base lap?

What kind of car will it be?

How will overtaking work?

How fast can they run?

When will we see it on track for the first time?

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Winning McLaren leads way at top of the Mountain



Speedy McLaren denies Nissan a Bathurst double

BATHURST 12 HOUR
MOUNT PANORAMA (AUS)
FEBRUARY 7
INTERCONTINENTAL GT CHALLENGE
ROUND 1/3

THE FINAL 15 MINUTES OF THE 2016 Bathurst 12 Hour were just like the final quarter-hour of the 2015 edition – with one important difference.

Twelve months ago Katsumasa Chiyo zig-zagged through the handful of cars in contention for the win to seize the lead and take a famous win. This time around, the sole Nissan played a similar role, to emerge in fresh air in second place with all its speed on show.

The difference this year was that the one car that remained in front of the GT-R was the fastest in the field – and appropriately, for the first 12 Hour under the ownership of V8 Supercars, the man aboard the Tekno Autosports McLaren was one of that category's brightest stars. Shane van Gisbergen had completely dominated qualifying and was electrifying in the opening two hours of the race, leading by as much as he wanted. Much happened while he was out of the car, including it stopping on-track and losing 30 seconds with an electrical glitch, but the McLaren looked like a contender – until van Gisbergen climbed in for the final sprint and broke the pitlane speed limit, earning a drive-through penalty.

No problem. The Tekno team adjusted its strategy, a timely safety car helped wipe out the gap and 'The Giz' turned on the speed, giving him, Alvaro Parente and Jonathon Webb a well-earned victory by 1.2 seconds.

Chiyo was gallant in defeat, his cause aided by a brilliant opening stint by Rick Kelly, who patiently picked his way from 13th on the grid to third before handing over to the steady Florian Strauss, who now has two Bathurst podium finishes in two years.

Third was a strong result for Bentley, though the team looked set for much more mid-race. Both Continental GT3s were in contention but both suffered tyre failures, one front blowout rather oddly handled by the M-Sport team, leading to front-end damage and the loss of four laps for the Andy Soucek/Maxime Soulet/David Russell entry. The Steven Kane/Guy Smith/Matt Bell Bentley finished third, losing ground in the final stages with worsening understeer.

Audi promised much in the race with its 2015-spec R8 LMS, and the handful of its cars certainly showed speed. But an incident set back the well-fancied Melbourne Performance Centre car of Rene Rast/Garth Tander/Steve McLaughlin, and Phoenix Racing spent much of the time recovering a lap lost early on by the Markus Winkelhock/Laurens Vanthoor/Alex Davison combination.

The car lost time in the final stint with

what appeared to be a mechanical glitch, and it was somewhat odd to hear Vanthoor complain about the car's lack of straightline speed – mid-race, on television, while the car was running in the top three...

Local team GT Racing took its R8 to sixth for Bart Mawer/Nathan Antunes/Greg Taylor, behind the leading Mercedes. Erebus Motorsport performed wonders with its ageing Benzes, at one stage recovering three laps in the Bernd Schneider/Maro Engel/Austin Cindric SLS AMG. That car ended its race in a fence after a tyre failure. The sister Erebus car of David Reynolds/Thomas Jager/Nico Bastian pressed on to fifth, one lap down.

Incidents accounted for many fancied entries, starting with the Maranello Motorsport Ferrari. Forty seconds into the race Mika Salo tangled with the Nick Percat-driven Lamborghini, which was out on the spot. The Finn got back to the pits for repairs but the car was not right and retired not long after.

Two other McLarens also suffered incidents. Rob Bell's second Tekno entry had contact in the first hour, repairs dropping it back to an eventual ninth, while the Objective Racing 650S was in second when Warren Luff smeared the wall, breaking its suspension.

It was no surprise to see Stephen Grove's car win the Porsche-only Class B, particularly since Le Mans 24 Hours winner Earl Bamber and V8 Supercar ace Scott McLaughlin were aboard to share the driving duties.

The Invitation Class I fell to one of the MARC Cars entries, the Ford Focus of Jake Camelleri, Morgan Haber and Aaron Seton. The result was particularly notable for Seton, whose father – Aussie touring car great Glenn – never won in 26 Bathurst 1000 starts, and came 51 years after grandad Bo won what was then the Bathurst 500.

A week ago van Gisbergen had never won at Bathurst either. In 2014, a near-certain 1000 win disappeared after he stalled the Tekno Holden in the pitlane. This time he had to overcome another pitlane error to win. He's now joined the powerhouse Red Bull V8 Supercar team. In this form, it would appear unwise to bet against him completing a unique double in October...

PHIL BRANAGAN

RESULTS

1 Shane van Gisbergen/Alvaro Parente/Jonathon Webb (McLaren 650S GT3), 297 laps in 12h01m05.133s; 2 Rick Kelly/Florian Strauss/Katsumasa Chiyo (Nissan GT-R NISMO GT3), +1.276s; 3 Steven Kane/Guy Smith/Matt Bell (Bentley Continental GT3); 4 Markus Winkelhock/Laurens Vanthoor/Alex Davison (Audi R8 LMS); 5 David Reynolds/Thomas Jager/Nico Bastian (Mercedes SLS AMG); 6 Nathan Antunes/Bart Mawer/Greg Taylor (Audi); 7 Andy Soucek/Maxime Soulet/David Russell (Bentley); 8 Garth Tander/Rene Rast/Steve McLaughlin (Audi); 9 Will Davison/Rob Bell/Andrew Watson (McLaren); 10 Luke Youlden/Roger Lago/Steve Owen (Lamborghini Gallardo).



Norris dances to Denny Hulme Trophy

**TOYOTA RACING SERIES
TAUPO (NZ)
FEBRUARY 6-7
ROUND 4/5**

BRITON LANDO NORRIS TOOK A commanding lead in the points by dominating last weekend at Taupo.

The 16-year-old took two victories – including the Denny Hulme Trophy feature race – and a second placing in race two, in which he had started eighth on the partially reversed grid. With an 86-point lead going into the final round this weekend he looks set to add the TRS crown to his 2015 MSA Formula title and '14 world kart crown.

After qualifying fastest in both sessions Norris led race one all the way, although came under strong pressure from Brazilian Pedro Piquet towards the

end. "I had saved my tyres quite well but Pedro had saved his even better," Norris said. "He was a bit faster than me in the final stages and I had to push really hard. That was nice." Top local James Munro completed the podium.

The feature race again saw Norris in front all the way, but this time he was able to keep pulling away from Piquet – his team-mate in the M2 Competition squad – and win by nearly 3.5 seconds. "We went to Pedro's set-up and it looked after the tyres better," Norris explained. "I was pushing all the way, I wanted to have as big a gap as possible."

But Norris's finest moments came in race two where he twice – at the start and a restart – went round the outside of the pack at the Turn 1 hairpin, overtaking two or three cars each time.

"I actually got to the lead after the

restart but then I ran wide and Jehan [Daruvala] got past me again," he said.

The Indian driver, who is supported by the Force India Formula 1 team, won that race with Ferrari-backed Chinese driver Guan Yu Zhou third. Zhou also took third in the feature and fourth in race one to be third overall for the round behind Norris and Piquet.

BERNARD CARPINTER

RESULTS

Race 1 1 Lando Norris, 15 laps in 21m02.420s; 2 Pedro Piquet, +0.731s; 3 James Munro; 4 Guan Yu Zhou;

5 Jehan Daruvala; 6 Ferdinand Habsburg. **Race 2**

1 Daruvala, 13 laps in 19m55.989s; 2 Norris, +1.358s;

3 Zhou; 4 Brendon Leitch; 5 Piquet; 6 Munro. **Race 3**

1 Norris, 20 laps in 31m37.586s; 2 Piquet, +3.453s;

3 Zhou; 4 Habsburg; 5 Leitch; 6 Taylor Cockerton.

Points 1 Norris, 735; 2 Piquet, 649; 3 Zhou, 634;

4 Daruvala, 626; 5 Leitch, 597; 6 Habsburg, 550.

Norris leads familiar
swirly Piquet helmet
at start of race three

Al-Attiyah on record breaking win spree

**MIDDLE EAST RALLY CHAMPIONSHIP
QATAR INTERNATIONAL RALLY (Q)
FEBRUARY 4-6
ROUND 1/7**

NASSER SALEH AL-ATTIYAH cruised to a crushing 13th victory in his home Qatar International Rally in 14 years. He also eclipsed Mohammed Ben Sulayem's long-standing record of FIA Middle East Rally Championship

victories with his 61st win.

Al-Attiyah led from the start and won 10 of the 13 gravel special stages. It was the first win in a Skoda Fabia R5 for Al-Attiyah and Matthieu Baume.

After Abdulaziz Al-Kuwari crashed heavily out of second place in the third stage, Al-Attiyah was never troubled and reached the Doha finish 6m14.1s in front of Khaled Al-Suwaidi.

NEIL PERKINS



Winning Skoda flies
over the desert

RESULTS

1 Nasser Al-Attiyah/Matthieu Baume (Skoda

Fabia R5), 2h03m20.5s; 2 Khaled Al-Suwaidi/

Giovanni Bernacchini (Ford Fiesta R5), +6m14.1s;

3 Rashid Al-Naimi/Nicola Arena (Subaru WRX STi);

4 Abdullah Al-Kuwari/Adel Hussein (Mitsubishi

Lancer Evo X); 5 Rodolphe Asmar/Joseph Matar

(Mitsubishi Lancer Evo IX); 6 Stefano Marrini/

Roberto Mometti (Mitsubishi Lancer Evo IX).

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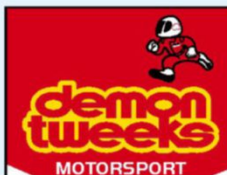
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Reporting to the Electronics Department, you will work to ensure that all aspects of control system configuration, operation and performance tuning of our race cars are performed to the highest standard whilst supporting both Williams' trackside and factory operations. The role will require extensive international travel. The candidate must be educated to at least degree level in a suitable discipline, with a minimum of 5 years relevant experience working in a competitive motorsport environment. Working knowledge of the F1 Standard FIA ECU, McLaren ATLAS and System Monitor software is highly desirable. Experience with Matlab and Simulink is also preferred.

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Caroline (inset) will switch from a Ginetta to the Jamun MSA Formula car (below)



Ginetta Junior champion in MSA Formula switch

GINETTA JUNIOR CHAMPION JAMIE CAROLINE WILL switch to MSA Formula with Jamun Racing for 2016.

Having completed tests successfully last year the 17-year-old has decided that the single-seater move is preferable to following his Ginetta title rival Senna Proctor into the Renault UK Clio Cup.

"I'm really looking forward to it," Caroline told *Autosport*. "I think a year in single-seaters is the best thing for an aspiring driver. I'm still young and it would not be a wasted year. Most professional drivers have done years in single-seaters – Jason Plato has, Andy Priaulx has.

"It allows you to get to grips with slicks and it's a benefit later in your career. Clios do not excite me as much and I think this is a good way to try and get my name out there.

"I tested with the team last year and got on really well with them and I loved the car. I also tested with Fortec, but with Jamun it's the only car they run, so they can spend more time on it.

"I've also got the momentum from winning the Ginetta Junior title. I really enjoyed the Ginettas. They were a bit unpredictable but the F4 car does what you want it to do."

The Jamun name returns to MSA Formula this year after the team raced as MBM in 2015 with Jack Barlow and Toby Sowery in partial campaigns.

Team manager James Mundy said: "We have been determined to get Jamie in our car for the 2016 season ever since we first tested him. His raw speed and natural talent are something we haven't seen for some time."

Fortec snaps up Danish karter

Danish karter Nicolai Kjaergaard will drive for Fortec Motorsports in MSA Formula this year.

The 16-year-old has a strong record in the Danish Super Kart series and has also starred in German championships. He will race alongside fellow karting graduates Alex Quinn and Ross Martin in Fortec's line-up in the TOCA support category.

"I feel really at home with Fortec and see the team as playing a key part in my development during the season," he said. "I know it will be a really tough championship but I am looking forward to the challenge ahead and cannot wait to get started."

MSA FORMULA CONFIRMED DRIVERS

Arden	Rafael Martins Luis Leeds Jack Martin Ayrton Simmons
Carlin	James Pull Devlin DeFrancesco Max Fewtrell
Fortec	Alex Quinn Ross Martin Nicolai Kjaergaard
Jamun	Jamie Caroline
JHR	Sennan Fielding Jack Butel



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BRITISH GT

Maserati enters British GT

GT CUP SQUAD EBOR GT WILL FIELD A NEW Maserati GranTurismo MC GT4 in British GT this season for Abbie Eaton and Marcus Hoggarth.

The York-based team has ordered one of the Italian firm's new GT4 machines and expects to take delivery of the car later this month.

Ebor specialises in historic race and rally preparation for Italian cars, and last season also ran Hoggarth – who has prior experience in the Ginetta GT4 Supercup and Pirelli Ferrari Open – to second in the GT Cup's GTC division points alongside BTCC driver Tom Ingram.

Eaton steps up to GT4 having won the Mazda MX-5 Supercup in 2014 and raced a BMW M3 in the GT Cup last year. She took her first GT racing win at Silverstone on the way to fifth in the GT Cup's GTB standings.

Ebor GT head Adrian Snook said: "We've always worked with Italian cars and the GranTurismo MC GT4 is a beautiful machine, so we saw it as the next step.

"GT4 racing is good value compared to GT3 and British GT is the best place to do it by the looks of it as the grid is larger than ever. We chose the Maserati as it's been racing for a while now as a single-make Trophy car, so it's a proven product with plenty of miles of development on it."

Eaton added: "I've been working to get into British GT for a few years so I'm delighted this has come together. The years in the Mazda and the BMW have helped me get used to racing with rear-wheel drive and the power the BMW had means that the GT4 Maserati shouldn't be too alien for me.

"I'm looking forward to racing with Marcus. I met him last year when racing against him in the GT Cup. He's a very switched-on driver and he's very quick and reliable. It's also exciting to bring something different to the grid with the Maserati as it's an exciting car that people will enjoy seeing. I'm feeling very positive about this year."

FF1600

RAVEN AIMS FOR ROAD TO INDY PRIZE

FORMULA FORD

Festival winner James Raven will team up with Cliff Dempsey Racing for an assault on the British Racing and Sports Car Club Formula Ford 1600 National Championship this year.

The 2014 Festival victor completed the full season with CDR, but took a year away to concentrate on schoolwork in '15. He returned for the Festival and the Walter Hayes Trophy last year and was in contention for victory at the WHT before an incident ruled him out.

The 21-year-old has been drawn back by the Mazda Road to Indy prize on offer in the championship this year; the driver who wins the title will get an entry into a shootout to earn a drive in USF2000 for 2017.

"It's make or break for me this year in terms of my racing career," said Raven. "The opportunity to get on the Road to Indy ladder is huge.

"I know the team well and they're one of the best FF1600 outfits there is, with 30-odd years of experience. The aim has to be to win the championship and then go on and win the shootout."

Raven could also contest the James Beckett-run Super Series, which boasts the same prize of an entry into the MRTI shootout.

SPORTSCARS

Moore to race Audi GT3 car in Britcar and LM Cup

MULTIPLE SPORTSCAR champion Nigel Moore is to contest the Michelin GT3 Le Mans Cup and the Britcar Endurance Championship.

Moore will share an Audi R8 LMS ultra GT3 with 16-year-old karting graduate

Phil Hanson. Tockwith Motorsport, Moore's family team, will run the car.

Moore contested the 2009 Le Mans 24 Hours with the Ginetta works team and then won the following season's Formula Palmer Audi title. His

main activity in recent years has been sharing a Toyota GT86 with sister Sarah in the VLN series on the Nurburgring Nordschleife.

Hanson steps up to GT3 after winning the Super One National Junior X30 title

with Tockwith's karting arm.

Tockwith team boss Simon Moore said: "It's great for Nigel to get back racing again as he's worked hard to get back into it and we have the budget to put a proper programme together."

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Factory Peugeot for Silverstone

PEUGEOT UK WILL FIELD A FACTORY entry in this year's Silverstone 24 Hours, with Bradley Philpot leading the driving team.

Philpot will handle one of Peugeot Sport's two 208 GTs in the April 2-3 event under the factory-backed French Team Altran squad.

Philpot's team-mates have yet to be decided, but European Peugeot Sport regulars Stephane Ventaja, Thierry Blaise, Guillaume Roman and Kim Holmgaard are expected to be involved across the two cars.

Philpot won the 208 Peugeot GTi Racing

Experience in 2013 and was rewarded with a 208 GT drive for the Nurburgring 24 Hours. He has not raced competitively since, but took part in last year's Race of Champions.

"I've stayed in contact with Peugeot as an ambassador and when they need a driver they call me," said Philpot.

"I heard that Team Altran was planning to enter so I got straight on the phone. It's exciting as the race is for touring cars only this year so we can fight for the outright victory, and that's appealing for Peugeot UK."



BRITISH GT

Stilp on board Hard's Ginetta G55

TIN-TOP RACERS JORDAN Stilp and William Phillips have joined Team Hard to race a Ginetta G55 in the GT4 class of the British GT Championship.

Stilp, 21, graduates to British GT having raced in the Renault UK Clio Cup and Ginetta GT4 Supercup in recent seasons. He finished third in the 2014 Clio points and took two podium finishes in a part-season last year.

Phillips, 21, has been a regular in the Mini Challenge. He finished fifth in the championship's Gen 3 F56 category last year.

Team Hard boss Tony Gilham said: "I've known Jordan and William for a while now and they are drivers with great potential."

"They are good friends off the track, so there is already a relationship there and they

are both very quick.

"Jordan has already raced the G55 [in the GT4 Supercup], so he brings experience and he will help Will adapt to rear-wheel drive."

"We went down the Ginetta route because the G55 is a tried and tested product. I'm confident we will be fighting for race wins and the GT4 title in the first season."



CLIO CUP

Proctor chooses Pyro

GINETTA JUNIOR RUNNER-UP SENNA Proctor will race for Team BMR in association with Pyro in the Renault UK Clio Cup.

The 17-year-old had originally agreed to race for JHR Developments, but has now signed a multi-year deal with touring car squad BMR. Reigning Clio champion Ashley Sutton also raced under a similar

arrangement for Pyro in 2015.

"I was very honoured to drive for BMR last year in my second season in Ginetta Juniors, but for them to extend their deal with me for the next couple of years is fantastic news," said Proctor. "It's a huge boost to my career as they guide me towards the BTCC. It's an honour to race for such an incredible team."

IN BRIEF



PRICE SECURES SEASON IN CLIOS

Renault UK Clio Cup driver Josh Price will have a full season with the title-winning Team Pyro squad. The 17-year-old completed the final three rounds last year (above). "It would be stupid not to aim for the championship," said Price. "I only did three races last year and they were my first-ever car races. Going out with no pressure makes me more prepared for this year."

BROTHERS IN RENULTS

Tyler Lidsey will join his brother Brett in the Clio Cup Race Series for the new MRM team, headed by former 20Ten Racing mechanic Mike Ritchie. Brett finished fifth in the standings last year, while Tyler was third in the Road Series class.

TOYOTA MR2 MEN AIM FOR FUN CUP

Toyota MR2 team-mates and rivals Anjum Waheed and Gerry Buggy are aiming to enter Fun Cup races, after sampling VW Beetle clones at Donington Park. The duo raced in the MR2 and Nippon Challenge last season. "We both enjoyed the car and will definitely be doing the Spa 25 Hours now and some other races too, depending on our work commitments," said Waheed.

STARTING EARLY AT KNOCKHILL

Knockhill Circuit has seen its youngest-ever driver pass his ARDS test. Michael Macpherson passed the race school course aged just 14 years and 11 months. Macpherson has been racing in Super One karting and is planning to test Formula Ford 1600 cars before joining the Scottish championship in 2017.

RESTORED CAPRI FOR GOODWOOD

The famous ex-Gordon Spice Group 1 Ford Capri will return to racing at the Goodwood Members' Meeting in March. The Autocar-liveried car, chassis CC10, is almost fully rebuilt and new owner Mike Whitaker and former BTCC racer Mike Jordan will race in the Gerry Marshall Trophy. Whitaker, known for historic success in TVRs, bought the car at auction last year and it has been rebuilt by Nigel Reuben. The car once finished fifth at the Spa 24 Hours and second in the Paul Ricard 24 Hours.



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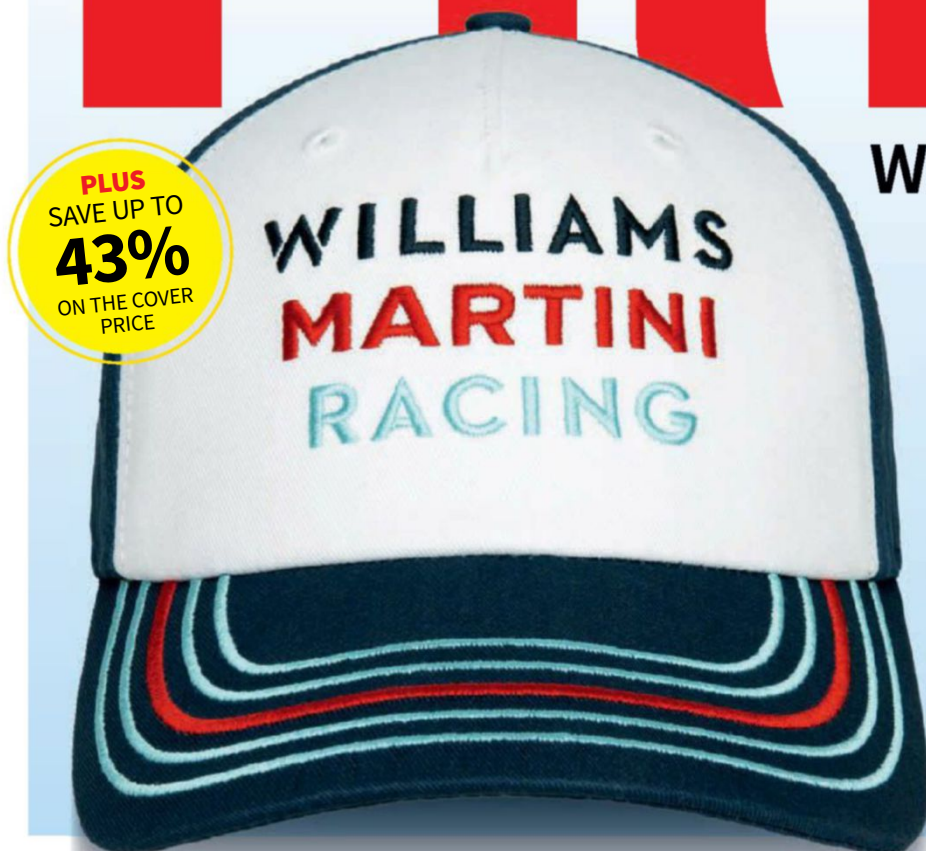
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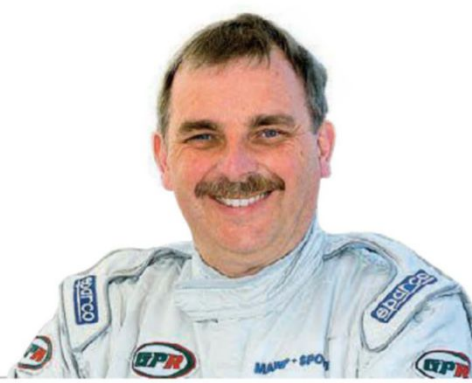


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Invest in your driving to maximise results

By Marcus Pye, the voice of club racing

WITH BRITAIN'S CLUB RACING SEASON JUST A FEW weeks away, February is the time when organised amateurs have their calendars mapped out and have something resembling a racing car – last year's used-up steed refreshed and coming back together. Perhaps even a new acquisition carrying big hopes in the garage or in a pal's workshop.

For those still surveying a kit of parts or frantically scouring *Autosport* or internet sales sites for a switch of horses after toiling over the winter to put a starting budget in place, that would be a luxury.

How many times have I heard of competitors burning the midnight oil in increasing desperation for the final fortnight before their championship opener? Then they set off, knackered, at 0230 on raceday with a 200-mile grind to the circuit and their pride and joy "almost finished".

The latter scenario happens more than you might think, as does one in which the budding Jenson Button, Lewis Hamilton, Susie Wolff or Katherine Legge (or more likely their dad, grandad or associate who shares the far-off 'dream') lashes out on what is perceived to be the perfect car to deliver grandiose aspirations. When they fell in love with the perfect car, the previous October, it sat in Victory Lane at Silverstone. Having not sold its predecessor, and thus been unable to conclude a deal and load it up there and then, they were forced into a late cut-price transaction in which 'it' arrived in January – with second-string engine and minus the tweaky bits.

Every spring I hear of Flash Harrys snapping up race cars for double market value, because they couldn't help themselves, or the vendor heard their supercar coming. I've also seen people with ambitions way beyond ability (but a very understanding partner) remortgage their home to buy last season's championship winner, which they turn into an

also-ran before running out of money after five races. I despair on both counts. While I applaud hard triers, and those who attempt to help young drivers who have demonstrated exceptional promise, the vital reality check is so often missing. Few make it past F4, torpedoed by cost alone.

Most clubmen compete for the hell of it – there is no greater buzz – but they must also cut their cloth to suit. Some achieve remarkable results on a relative shoestring, usually through experience or by being clever engineers. Others squander fortunes on the latest equipment because they can, albeit without apparent improvement. That's their prerogative, yet, with a little focus, their enjoyment could be so much greater. After all, success tastes good.

Winning regularly, at any level, is rarely coincidence. Look closely at any multiple champion, in any sport, and – providing they are not 'duffing up' nobodies with vastly superior kit – see how meticulous preparation and training yields results. You will observe that they perform at an incredibly high level, without making conspicuous mistakes. When an error occasionally creeps in, they minimise its impact on their performance to the point where only data-logging quantifies it.

Yes, a stronger engine may help the average club racer (although personally I'd trade bhp at the top end for torque and driveability every time) and several sets of tyres for the season might not hinder, but before you spend a few thousand on grunt and several more on grip, ask yourself can you make the most of them? If the answer is 'no' or 'probably not', invest a grand or two on quality driver coaching with an ARDS-licensed instructor and improve yourself. Make more of the equipment at your disposal and you'll be amazed at better race results. 🏆



DUNKLEY HOUNDS KING KENNY

Formula 5000 legend Kenny Smith (Lola T332) bagged treble tops at Ruapuna last weekend. Alan Dunkley (T332) qualified second and nosed inside 'The King' into heat one's last corner, but compromised exit speed cost him victory by 0.059s. Dunkley broke in race two but shot from the back to second in Sunday's finale.



MB WHEELS BACKS CLASSIC F3

Long-time racing wheel manufacturer Mike Barnby is to present a set of hand-made rims to the winners of the 1600cc and two-litre classes of the HSCC-run Classic F3 championship in the club's Golden Jubilee year. Barnby, whose own F3 history dates back to 1969 – with a 1000cc Piper – also hopes to rejoin the competition.



CHANDLER TRIO FOR M3 CUP

Runaway BRSCC Mazda MX-5 champion Brian Chandler is to lead a three-strong assault on the 750 Motor Club's inaugural Tegiwa M3 Cup series from his BC Cars Motorsport base.

Among the 20 competitors who have bought kits to convert BMW's 3.2-litre straight-six coupes is Civic Cup regular Adam Shepherd.

WHAT'S ON



BEHIND THE SCENES

Formula E commentary

FOUR-TIME INDYCAR CHAMPION Dario Franchitti is sitting in a tent. The temporary nature of Formula E means for a few days, dozens of huge white shelters appear and house everything from team 'garages' to the media centre. This tent is home to the triple Indianapolis 500 winner and his commentary partner Jack Nicholls.

Dario pops to the grid, leaving Nicholls and *Autosport*. It's broadcast time. The pre-show, which starts 30 minutes before the race, switches between pre-prepared packages and commentary over live/recorded images. Nicholls, who explains that the difference made by not having a permanent commentary booth is negligible, takes charge of threading the pictures together.

Franchitti's grid interviews are recycled quickly – by the time he's back in the commentary booth, 10 minutes before the start, one has already aired.

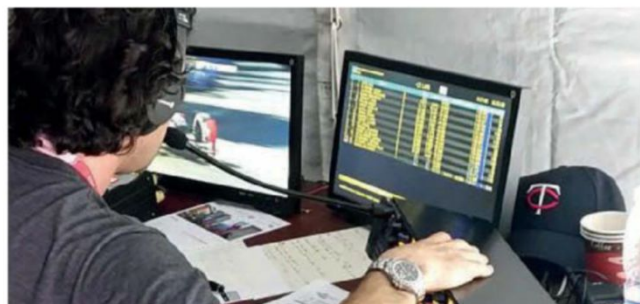
"How many have we done?" he asks Nicholls. "Just you talking to Buemi,"

is the reply. Dario sits in silence as Jack introduces the remaining interviews, to keep the narrative consistent.

"It gives me chance to just observe a bit and get a feel before I go straight in and start talking," Franchitti explains. "It's not meant to appear live, it would just be very weird if I introduced my own interview!"

Nicholls laments a wording mistake (and Dario ribs him) and the duo ramp up the tension ahead of the race start. They have developed a recognisably friendly vibe – a very real relationship

Franchitti talks to Sam Bird as the Brit drives around Buenos Aires



– built on enthusiasm. That's visible in the commentary tent, as exhibited by Franchitti mocking Nicholls simply for mentioning Robin Frijns (a driver he talks about non-stop), joint incredulity when Antonio Felix da Costa retires (everyone thinks he's a dude) and plenty of gesticulation as Franchitti acts out Sam Bird's lurid slides ("we joke about it... one of my things is when I get excited I show it...").

Making the broadcast fun is at the heart of it, but that should not detract from the duo's professionalism. There is great cohesion to their work. It's easy for commentators to trip over each other, and something that occurs throughout the broadcast is Franchitti pointing at things on the timing screen or television monitor to bring it to Nicholls' attention when he's in full flow, to avoid interrupting.

Another example is that, for the first time, Franchitti is using a live feed that enables him to talk to drivers on air during the race. Patching through to

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Nicholls and Franchitti work from a tent



Jerome d'Ambrosio seemingly works, but the trees around the startline cause communication issues. When Franchitti tries race leader Sam Bird under the safety car, it's more successful. "Shall I get Sam?" he asks his producer as Nicholls takes comms. The answer is obvious, but it's taken seriously.

It could have been used for Punta del Este but the nature of the beast (and personal experience of mistimed radio messages) meant Franchitti wanted the system to be near flawless.

"The technology was a bit clunky before and I didn't feel comfortable with that," he says. "The last thing I wanted to do was talk to someone in the braking zone and screw their race up..."

He didn't. It's a nice addition. More excitement follows thanks to the race's fantastic conclusion, and by the end there's a real buzz. At the first break in commentary, Franchitti removes his headphones, turns to Autosport and says: "Tell me that wasn't proper?"

SCOTT MITCHELL

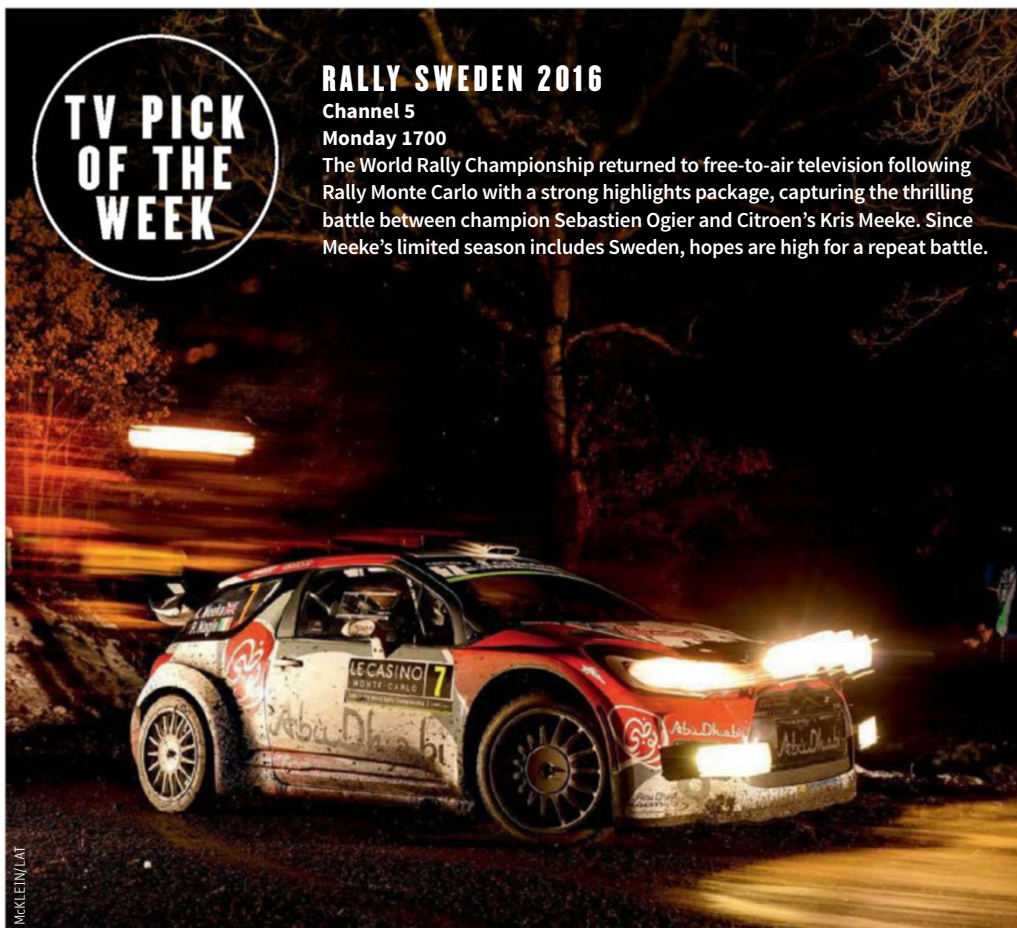


HOT ON THE WEB THIS WEEK

YouTube ICE WORK IF YOU CAN GET IT

Search for: Porsche 911 SCRS snow drifting

Here's an entertaining take on the term 'snow drift' – Patrick Simon appears to be having an absolute hoot in a Rothmans-liveried 911 SC RS on a snow-covered Nurburgring Grand Prix circuit. Not wishing to sound churlish, but how about the Nordschleife next time?



RALLY SWEDEN 2016

Channel 5
Monday 1700

The World Rally Championship returned to free-to-air television following Rally Monte Carlo with a strong highlights package, capturing the thrilling battle between champion Sebastien Ogier and Citroen's Kris Meeke. Since Meeke's limited season includes Sweden, hopes are high for a repeat battle.

INTERNATIONAL MOTORSPORT

TOYOTA RACING SERIES

Rd 5/5
Manfeild,
New Zealand
February 12-14

Lando Norris heads into the championship finale seemingly needing just to turn up to seal the title. Pedro Piquet has slim hopes that the tide will turn in his favour and ensure the championship goes down to the wire, but he's going to need some assistance.

WATCH ON TV
Motors TV, timings to be announced

RALLY SWEDEN

WRC
Rd 2/14
Karlstad, Sweden
February 11-14

Exactly how much competitive action will be involved in this event was unclear as Autosport closed for press, but if and when the cars do get going on what might be not-that-snowy stages expect some spectacular action as Sebastien Ogier chases his third win.

WATCH ON TV
Check listings for revised details

NASCAR SPRINT UNLIMITED

Non-championship
invitational race
Daytona, Florida, USA
February 13

The NASCAR season's curtain-raising event features 25 drivers – all 2015 pole winners, Daytona 500 polesitters, former event winners and last year's 16 Chase qualifiers – and a 75-lap race that is divided into segments. What better way to start the year?

WATCH ON TV
Delayed: Premier Sports, Sunday 0100

ANDROS TROPHY

Rd 7/7
St Die des Vosges, France
February 13

Jean-Baptiste Dubourg and Franck Lagorce go head-to-head for the ice-racing title, with both gunning for their maiden Andros Trophy triumphs. Dubourg has a handy advantage, but he's lost ground in recent rounds, so needs to return to form in his Renault Clio.

WATCH ON TV
Delayed: Motors TV, Saturday 1210, 2030

THE ARCHIVE

The Ferrari GTO of John Surtees (6) and Jim Clark's Aston Martin DB4 GT Zagato (2) lie wrecked at Madgwick Corner during the 1962 Tourist Trophy at Goodwood. Clark had spun while attempting to let Surtees, who could not avoid him, lap him. But that wasn't the end of the damage, as late in the race Robin Benson (Ferrari) slid off and collected both cars.

LAT Photographic



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THE BUCKET LIST

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BATHURST
EXPERIENCE



There's something special about going to a racetrack that's on an island or a mountain.

At the Isle of Man TT, even when there are no bikes tearing up the roads, you remain on the island, and therefore 'at' the race. The same applies to Bathurst – in the town, even hours after the engines are silent, the buzz of the event goes on, in bars, restaurants and hotels, and in the trackside campgrounds.

Then there's the racetrack... sorry, 'Tourist Road', for that is what it was called when opened before WWII. The modern kerbing and pit complex long since gave the game away, not to mention the awe in which the 3.86-mile layout is held around the world.

Mount Panorama has 23 corners. Like all great tracks, they are named, not numbered. The bottom of the track looks easy – three straights make up about half the circuit. The rest: think 'Nordschleife' but with less run-off. Really.

Fans can get close to the action. Rudimentary fences mark the limits of the spectator areas but they can stand within yards as 650-horsepower V8 Supercars hurtle 'across the top'.

While October's 1000km race has long held Australia's attention, the 12 Hour race for GT3 cars every February (see report, page 52) has a growing audience. It provides a fascinating contest as international teams and drivers, not completely familiar with the track, take on the Aussies and Kiwis, who know the Mountain backwards but have to adapt to the thoroughbred sportscars, somewhat more subtle than the brutal V8s, but ever so slightly quicker around Bathurst's swoops and turns.

The races provide a mixture of beer and barbecues on the Mountain and the campgrounds, of corporate catering above the pits – and something for everyone in between.

One more thing: ignore Jeremy Clarkson. It's not 'Bath-Hurst'. Say 'Bath' like Mr Fiennes pronounces 'Ralph' and 'Hssst', nearly like 'Wrist'. Lean on the first syllable. Even Peter Brock got it wrong, at first... 🍷

Fans and tinnies on one of the spectator area banks on the Mountain, where you can get really close to the spectacular action

AT A GLANCE

Where Mount Panorama, Bathurst, 130 miles west of Sydney

When October 6-9 for the Bathurst 1000 – see you on the Mountain!

Cost For the 1000, a Sunday general admission ticket is £48, plus £140 for a four-day grandstand pass. A train trip takes three hours plus and starts at £15

Key tip Think 'Le Mans' or 'Nurburgring', with an Aussie accent. Camping, barbecues and beverages are a part of the experience



AUTOSPORT

Haymarket Consumer Media, Bridge House, 69 London Road, Twickenham TW1 3SP Tel +44 (0) 20 8267 5998
E-mail autosport@haymarket.com Website www.autosport.com
Individual e-mail firstname.surname@haymarket.com

Editorial

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Advertising

Tel +44 (0) 20 8267 5271
E-mail autosport.ads@haymarket.com

Sales Manager **Jonathan Whitehead**
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Advertising Production

Tel +44 (0) 20 8267 5588 Fax +44 (0) 20 8267 5320
Production Controller **Abbey Gunner** abbey.gunner@haymarket.com

Subscriptions

UK 0844 8488817 Overseas +44 (0)1795 592 974
Email autosport@servicehelpline.co.uk
Back issues 0844 8488817
Direct Marketing Executive **Maria Fernandez** +44 (0)20 8267 8254

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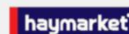
International Director **Alastair Lewis** +44 (0)20 8267 8606
Syndication enquiries **Isla Friend** +44 (0)20 8267 5024

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Group Director **Tim Bulley**
Group Publisher **Stuart Williams**
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