**NICO ROSBERG'S SHOCK RETIREMENT** 

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# A class act making a brave decision

### THERE WAS A GREAT DEAL OF DISBELIEF WHEN NICO

Rosberg — crowned as world champion less than a week before — announced his immediate retirement from Formula 1. Why would someone at his peak, driving the best car, give up?

But the more you think about it, the more it makes sense. Rosberg has finally achieved his ambition and done so by vanquishing his career-long rival Lewis Hamilton. It's clear it took a huge amount out of Rosberg, who knows a similar (if not higher) level will be required to repeat the feat. A beaten Hamilton will surely be even more motivated in 2017.

Rosberg also has a young family and, at 31, should have plenty of time left to pursue and enjoy other things. His appearance at the Autosport Awards last Sunday underlined what a class act Rosberg is, and showed that he is someone fully capable of turning his attentions successfully elsewhere.

In this issue we bid farewell to Rosberg, as well as take a look back at an F1 season that produced its fair share of storylines.





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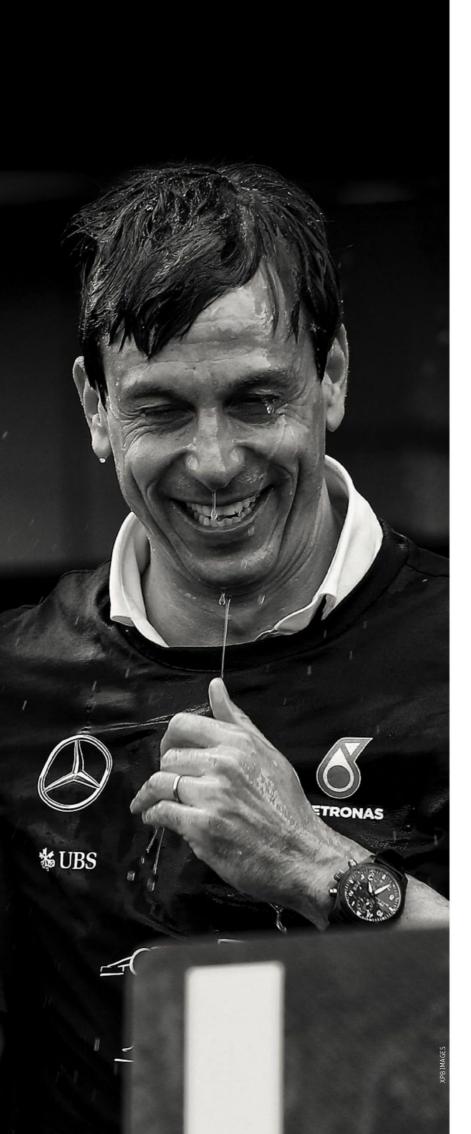


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# NICO ROSBERG RETIRES

"I'm not willing to make that sort of commitment again"





The newly crowned world champion shocked Formula 1 by announcing his immediate retirement from grand prix racing last week. Why?

### By Edd Straw, Editor-in-Chief

**■ @EddStrawF1** 

N

ico Rosberg lined up on the grid for last month's Abu Dhabi Grand Prix knowing it could not only be the crowning glory of his Formula 1 career, but also the end of it. Only those closest to Rosberg had any idea what clinching the world championship would mean, but five days later, at last week's FIA Prize Giving gala in

Vienna, he shocked the world by announcing his immediate retirement from F1 at the age of 31.

This was the rarest of things in the modern world, a seismic F1 news story that was not telegraphed in advance or leaked. When Rosberg took centre stage for what was expected to be the run-of-the-mill world champion press conference after his victory over Mercedes team-mate Lewis Hamilton, he dropped his bombshell.

"It's hard to explain," said Rosberg after declaring his F1 career was over. "Ever since I started when I was six years old, I had a very clear dream and that was to become F1 world champion; now I've achieved that. I've put everything into it for 25 years with the help of everybody around me, with the help of fans and the help of my team, my family and friends, and I have managed to achieve that this year.

"It has been an incredible experience for me, one that I will remember forever.

"At the same time, it has been very tough because the last two years losing to Lewis were extremely difficult for me, which fuelled my motivation in a way that I didn't even know was possible to fight back and to achieve my dream."

The seeds for Rosberg's decision were sown by his victory in the Japanese Grand Prix in October. Significantly, this was the race in which Rosberg took the title out of Hamilton's hands — in the remaining four races, just finishing second to his team-mate would be more than enough to seal the title. And that's exactly what Rosberg did. Come the tense finale in



### COVER STORY/ROSBERG RETIRES





Abu Dhabi, Rosberg even argued that the knowledge of his possible impending retirement helped him through a title decider he described as the toughest race of his career. Not only was the crown at stake, but the whole course of his life, for he is adamant he would not have retired had he failed to win the world championship.

"The thoughts started in Suzuka, when the title became something real that I really could get," said Rosberg. "The funny thing is, with all the mental work and preparation, the thing that

gave me the most clarity before Sunday's race in Abu Dhabi was the thought that, 'Actually, I'm going to win here today, this is going to be my last race, so let's take it all in.' That's the thing that gave me the most clarity before the race and

took away some of that massive pressure.

"Of course, that finished as soon as the lights went off, because after that it was the most intense and crazy and tough race of my life. Then it was just a process on Monday; I didn't know if I had the balls so it took a bit of time [to commit to retirement] but I'm going through with it. I'm feeling great."

Rosberg's reasons were laid out very clearly. And they are easy to understand. While becoming world champion was his starting point, other drivers have gone on to win two, three,



four — even seven in the case of Michael Schumacher — world titles, so he could have gone on. But he made it very clear that the intensity of fighting for the crown, and most significantly the compromises to his family life this entailed, made him unwilling to continue. He paid tribute to wife Vivian, who gave birth to their daughter Alaia in August last year, for her support. His sincerity could not be doubted as the emotion welled up.

"This year was extremely tough because I put everything into it, I didn't leave a stone unturned and pushed like crazy

in all directions, along with everyone who was involved," he said. "This was also my family, [who made] a lot of sacrifices. My wife, for example, every time I was home she understood that I needed to rest, so I never did

### "I'm not interested in coming fourth. I'm a fighter and I want to win"

any nights, I never took care of my little daughter, I never did any difficult things. She was always there to support and to make it as easy as possible, and that is just one example of the commitment we all put into it.

"That's why I'm not willing to make that sort of commitment again for another year. And I'm not interesting in coming fourth. I'm a fighter and I want to win. But I'm not interested to do that again. I don't want to do it again. So I've decided to follow my heart, and my heart has told me to stop there, call it a day and go on to other things.

"It has been wonderful and it just feels right to me, so I'm very excited. My wife is also very excited — she'll have her husband back and I'll be a dad again. Thank you very much for the support of all these years."

The biggest impact of Rosberg's retirement is that Mercedes is left without a driver. Rosberg signed a new two-year deal in July that would have kept him at the team until the end of 2018, but his retirement leaves the reigning world champion team searching for a replacement (see over the page). Rosberg claimed that Mercedes team boss Toto Wolff was the second person to know, and was informed "at the beginning of the week". Long-time rival Hamilton, for those who care about these things, was informed by message.

But this is really about Rosberg and the depths to which he had to dig to win the world championship. While his decision may also be rooted in the fact that, deep down, he will know >>>

### COVER STORY/ROSBERG RETIRES

how difficult it could be to beat Hamilton again, he was frank about the demands that this title fight placed on him. For all those who are questioning his motivations, his sincerity should not be doubted. While Rosberg did not become a faster driver this year, he did become a more rounded and robust one. It's hard to imagine that he would have had the robustness to stand up to the rigours of this year's title fight, and avoid the mistakes of the past, a few years ago. And it was not by luck. This has taken a clear toll on him personally and in his private life.

"This year was the best I could be, definitely, in preparation and everything," explained Rosberg. "I will give you some examples. Since Austin last year [when Hamilton pushed him aside to win the 2015 title], I started to work very closely with a mental trainer and went into meditation and things like that. I've made massive progress as a result, just finding those extra little percentages to perform even better.

"Mental training is difficult because it's something you need to persevere with. It's every day — morning, evening, morning, evening — otherwise there's no point. That person who was supporting me, he has a part in this as well. It's been phenomenal progress for me to improve in that area.

"And another example: I bought a go-kart in the winter and have been just driving and driving, because we don't drive much out there, so I can practise and improve my skill more if I'm driving all the time. I'm as good now [in a kart] as when I was fighting for the championship when I was 14 in go-karts. So that has made a difference as well. I gave it everything, didn't leave a stone unturned and pushed."



What can't be doubted is Rosberg's authenticity. When winning the world championship means everything, who can blame him for not having anything left in the tank to climb that same mountain again? When first confronted with the drivers' championship trophy, he searched immediately for father Keke's name. But while the 1982 world champion continued to race in F1 for another four years, Nico has no interest in carrying on. As 1996 world champion Damon Hill, who expressed surprise at the announcement but not the motivation, put it, "I know the toll of this game".

So where does this leave Rosberg in the pantheon of F1's world champions, of which he is the 33rd? He's among the one-time champions, just like his father, Keke. And while there have been some questions over whether or not he was a worthy world champion, given he wasn't the best overall performer of the season, his career tally of 23 victories — spread over the past five seasons with Mercedes — is only bettered by 11 drivers.

It's right to say that he wasn't the strongest Mercedes driver in 2016 — for more on that read our overview of the F1 season (page 16) — but Rosberg deserves a huge amount of respect for his achievements. He's a seriously good grand prix driver, one who has always had a great turn of speed in him and who has consistently raised his game over the years.

Some observers belittle those who are seen to have to work to achieve success, but that is the wrong way to look at it. The way Rosberg has developed himself into a world champion is an incredible achievement derided only by those who can't grasp just how difficult the process is. >>

## Who will replace

MERCEDES JUNIOR
Pascal Wehrlein is
the logical choice to
replace retiring world
champion Nico Rosberg
in 2017, certainly in
the short term.

Wehrlein did a superb job as a rookie at Manor this year, adapting quickly after three seasons out of single-seater racing, making Q2 five times in what was fundamentally the slowest car on the grid, and also scoring an unlikely point in July's Austrian Grand Prix.

It was Wehrlein's performance in qualifying at the Red Bull Ring – where he put the Manor inside the top 10 in Q1 before qualifying a season's best 12th – that prompted Mercedes team boss Toto Wolff to declare Wehrlein a "special boy".

Fellow Mercedes junior Esteban Ocon somewhat stole Wehrlein's thunder by earning promotion to Mercedes customer team Force India for 2017, after just seven races with Manor, his place confirmed two events before the end of the season. But that was not Mercedes' decision. Force India

simply rates Ocon more highly, after running both and being particularly impressed by Ocon's performance at last season's post-Austrian GP young-driver test.

Mercedes could negotiate to take Ocon back, but that would no doubt require paying compensation to Force India, which signed Ocon to a multi-year agreement ahead of last month's Brazilian Grand Prix.

Wehrlein felt put out by that decision, and with some justification. He drove superbly for Manor before Ocon



# **Rosberg at Mercedes?**

joined the team, and was overall still the better performing of the two after Ocon replaced Rio Haryanto - certainly in qualifying.

The 2015 DTM champion is very highly rated within Mercedes, and Wehrlein knows the team well already, having been its reserve driver and completed seven and a half days of testing with the squad over the past three seasons, plus 2017 Pirelli tyre testing this year.

But Mercedes could decide that he is not yet ready to race for F1's best team, facing all the pressure created by competing at the very front of the grid and defending the constructors' world championship.

In which case it will have to go to market. Should it feel inclined to do so (Mercedes has the budget after all) then Red Bull stars Daniel Ricciardo and Max Verstappen should be top of the list.

Wolff would probably take
Verstappen if he could have a free choice, having spoken on more than one occasion of how highly he rates the Dutch teenager.

Mercedes tried to sign Verstappen before Red Bull pulled out all the stops to sign him up as a rising star of Formula 3 in 2014.

Mercedes wanted Verstappen because it wanted to nurture young talent for its team in the future. That's why it subsequently promoted Wehrlein from the DTM, and signed Ocon after he beat Verstappen to the '14 European F3 crown.

But there's little point investing in young drivers if you deny them the chance to prove their ultimate worth when the opportunity presents itself. Sure, 2017 is a little earlier than expected (Rosberg signed a new two-year deal at July's Hungarian GP), but if Wehrlein is as good as Mercedes thinks he is it shouldn't be a problem, certainly as a necessary stopgap solution at least.

Wehrlein is a
Mercedes junior for
a good reason. If
Mercedes thinks he's
good enough there is
simply no need for the
world champion squad
to dive into the driver
market so late in the



day, and pay over the odds to buy an existing star driver out of his contract.

Mercedes already has Lewis Hamilton on the books, remember.

What happens after that is anyone's guess. Sebastian Vettel, Kimi Raikkonen, Fernando Alonso, Valtteri Bottas, Sergio Perez, Carlos Sainz Jr and Jenson Button (if McLaren-Honda lets its option lapse) are all out of contract at the end of 2017...

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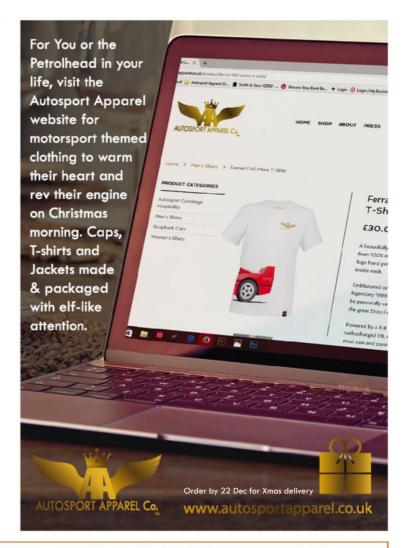




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Personal memories from...

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During his four years with Williams, Rosberg's pace was not in doubt. Fastest lap — and two points — on his debut in the 2006 Bahrain GP proved that, as did his performances relative to rapid team—mate Mark Webber in qualifying, who was fractionally faster overall but only by a small margin. That, coming in a rookie year after winning the inaugural GP2 title, meant his stock was high.

"It was pretty clear," said Williams deputy team principal Claire Williams after the Abu Dhabi GP, when asked about Rosberg's quality. "You know whether certain drivers, when they come to you, are of that kind of material and he was. You have drivers who have won a world championship with fewer wins that you've never heard of and couldn't possibly think could win a world championship. It's a long time in the making, but he is a truly deserved world champion."

But the team's view of Rosberg wasn't quite so glowing when he left after four seasons at the end of 2009. Rosberg, who came close to a move to BMW Sauber before the manufacturer pulled out of F1 and he headed to Mercedes, had bagged two podiums in 70 starts but the team had questioned his consistency. The high points were there, but the errors — and what were seen to be periods of races where his pace was not as strong as it should have been — led to patience being lost.

Rosberg did, however, score 72% of the Williams team's points during that period, clearly leading the team for his final three years alongside first Alex Wurz and then Kazuki Nakajima. And when pitched against the returning Michael Schumacher at Mercedes in 2010 he dominated, showing tremendous consistency, limiting the mistakes and proving able to get the best out of the tyres. While Rosberg unquestionably improved



alongside Schumacher, that did suggest the question marks within Williams were not always well founded.

But still, there were improvements to be made. While his qualifying performances were particularly strong, it was his race performances that Mercedes team principal Ross Brawn publicly stated needed to improve. And Rosberg proved to be a diligent student, as he explained in an interview with Autosport in 2011.

"I've made a lot of progress over the years, especially in everything that's to do with working with my engineer and getting the best out of every system," said Rosberg. "It's not only about the natural driving ability; there's only so much you can do with that. There's so much you can do with rational thought to improve your performance, especially from the electronics. There's a big area of advantage to be had there and I'd say that's the main area I'd improved in."

This very much encapsulated Rosberg's approach. This technical aptitude was picked up by Williams early on (when I first met the 17-year-old Rosberg to ferry him and father Keke to the Autosport Awards, Nico seemed more interested in various London universities than motorsport — he would later turn down the chance to study aeronautical engineering at Imperial), although it was in the Mercedes environment that Rosberg started to maximise this aspect of his game. He learned well, and after two years of Mercedes underachieving it was Rosberg who dominated the 2012 Chinese GP and took the first win for a pukka Silver Arrow in F1 in over half a century.



### Hamilton 'not surprised'

NICO ROSBERG'S CAREER HAS been indelibly linked with Lewis Hamilton, his team-mate and rival in karting and, for his final four seasons, in Formula 1. They also crossed swords in Formula 3, and it was apt that the German's crowning F1 glory came by beating Hamilton to the world championship after losing out in the previous two seasons.

Hamilton, six months older than Rosberg, claimed he wasn't surprised by the decision.

"The sport will miss him and I wish him all the best," said Hamilton. "I'm sure it was a surprise for many people. I'm probably one of the only people that it was not a surprise to, but that's because I've known him for a long, long time.

"This is the first time he's won [over Hamilton] in 18 years, hence why it was not a surprise that he decided to stop. But also, he's got a family to focus on, young children, and F1 takes so much of your time.

"We started out when we were 13 and we'd always talked about being champions. When I joined this team, Nico was there, which was again something we talked about when we were kids. It's going to be very, very strange and it will be sad not to have him in the team next year."

Hamilton did suggest Rosberg was wrong not to defend the drivers' title at least once.

"It's a shame that he's not around to fight to take it back," said Hamilton. "That's his choice and I respect his decision. Go out on top while you can. I have a different viewpoint. I won the championship the past two years and I gave an opportunity each year to have another shot at it for someone.

"That's how I am. I consistently believe in my ability and what I can do each year. So even if I was to win again, most likely I would give another opportunity. I love racing and I love going out there and being challenged by different competitors."

This comment might be interpreted as a little backhanded – suggesting that Rosberg retired because he didn't believe he could defend the title. That perhaps fits with a strained relationship between the pair that will surely return to normal as memories of the intense three-year rivalry for the championship fade.

"My favourite memory would be from when we were in karting, because that was generally a better time," said Hamilton. "A time where it was fun, where there was competition but no animosity, no egos.

"We were just young kids who wanted to race, and that will always remain with me as the best period of time racing against Nico."



### **Dropping the bombshell**

FOR NICO ROSBERG IT MUST have felt like a lifetime. 2016's Formula 1 world champion had something to say - something really quite important - but instead he was having to listen to Jean Todt talking about his dad driving a Peugeot 905.

Todt was welcoming us to Austria, to Vienna and to the FIA's gala: an evening of celebration.

Before that evening came an unforgettable afternoon. "We have," continued the FIA president, "just finished a week of heavy meetings, concluding with a very successful general assembly. But I don't think you came here to hear about that.'

Rosberg sat, patiently, perhaps now thinking to himself: "Damn right... wait until they hear this."

Stage set, Rosberg glanced at the waiting seat but decided to stand. "It's a very special day today," he said.

As he began, there remained a background noise of the general faff that accompanies the start of a press conference.

"Of course, as you know, to receive the trophy this evening, it's going to be amazing."

The collective fiddling with iPhones, rummaging in bags for voice recorders or turning pages in notepads was ending.

"But for another reason as well..." Eyes front. "I want to take the opportunity to announce..." Just in time. "I've decided to end my Formula 1 career."

There was a momentary pause before a woman yelped, and the rest of the room sat and stared.

"Joking," whispered somebody behind me. "He must be joking."

Not a bit of it. For the next five minutes he went on to document the struggle he'd faced and the stress he'd put his family under.

If Rosberg had been looking for shock and awe, he'd found it and delivered it. You sense, however, that wasn't what he was after. What he was looking for was a life. There was a slightly awkward moment when press-conference host Tom Clarkson asked if he'd told team-mate Lewis Hamilton. He had. Sort of.

He'd texted him.

In fairness, he'd been busy celebrating a world title and maintaining the courage to deliver a decision he'd first started thinking about at Suzuka.

Next after Rosberg on stage was WRC champion Sebastien Ogier. He was intrigued.

He said: "I was waiting to come in and someone said, 'Something just happened: Nico Rosberg quit.' 'What?' I said, 'he walked out of the press conference? He didn't like the question? What?'

"It's incredible. But I congratulate him on having the balls to make the decision.'

One man who - apparently wasn't quite so quick to congratulate him was Hamilton.

Following Ogier into a side room, I chanced upon Hamilton. He was making a cup of tea and taking his time about it.

Rosberg walked in.

"You get my message?" Hamilton didn't stop stirring.

Didn't look up.

"Yeah."

Nico moved on. The conversation was over. DAVID EVANS

### ROSBERG IN NUMBERS

11seasons in F1

206

world championship

23

wins

podiums

30

pole positions

60

front rows

20

fastest laps

1594.5

points

11159

laps raced



Even then, there remained questions. Rosberg had outperformed Schumacher over three years at Mercedes, but this was an ageing Schumacher who returned after three years out and whom nobody considered to be the benchmark anymore. While the seven-time world champion's performances were better than they were reckoned to be by those who didn't delve deeply enough (remember, Schumacher was fastest in qualifying in Monaco in 2012 before being relegated to sixth on the grid by a penalty carried over from the previous race), it was still difficult to judge Rosberg's level, particularly as there were days when he was the inferior Mercedes driver.

It was up against Hamilton, a driver with whom his career was always entwined as friends, foes and team-mates, that Rosberg's reputation was made. In 2013 Hamilton had the edge, by a relatively small margin. It was a similar story the following season, when Rosberg took the title down to the wire and lost out, while in 2015 he looked a busted flush and was never really in contention for the championship.

So what made the difference? Granted, Hamilton had more mechanical problems. Wolff said that Hamilton would have won the title but for an engine failure while leading October's



Malaysian GP — and that was true. But where Rosberg really had taken a step was not in speed. For whereas in 2014 Rosberg squandered a series of potentially race-winning opportunities, he took his chances when they were there in '16 and then closed out the title with a quartet of second places.

Rosberg is not, and never has been, the best driver in F1. He was not the best performer in '16 and he has never broken into the top two in Autosport's top 10 of the season. But that's not the point. What makes Rosberg remarkable — special, even — is that capacity to pick himself up and improve himself. And he has done so while being consistently among the top drivers.

He was not always the best in wheel-to-wheel battle, but his 2016 championship victory was a triumph for dedication and self-improvement to maximise a fantastic talent that wasn't quite in the league of a Hamilton. And there's nothing wrong with that. This is what makes him a worthy champion.

So he deserves the chance to head off into the sunset and become the family man he hasn't been managed to be. Few have been able to do that, and all in motorsport should respect his reasons and his right to do so. For no matter what he does, he will always be Nico Rosberg, 2016 Formula 1 world champion.

Rosberg took Mercedes' first F1 victory since the 1950s in Shanghai in 2012

### RETIRING AT THE TOP

It's a bold decision to announce your immediate retirement after winning the F1 world title. Five-time champion Juan Manuel Fangio only contested two world championship races in 1958 before retiring, while Jochen Rindt didn't get to defend his 1970 crown owing to his fatal accident at Monza. Only four drivers had made the call before Nico Rosberg's announcement last week.

#### **KEVIN TURNER**



#### 1958 MIKE HAWTHORN

After the death of his friend and Ferrari team-mate Peter Collins in the German GP at the Nurburgring, Hawthorn pipped Vanwall's Stirling Moss to the 1958 title and announced his retirement. Already suffering from ill health, Hawthorn did not get to enjoy retirement for long, dying in a road accident in January 1959.



### **1973 JACKIE STEWART**

Stewart should have gone out on a high, having decided to retire during his successful 1973 campaign. He clinched his third crown at Monza, with two rounds to go, but the death of his team-mate Francois Cevert in practice for the season finale prompted Stewart to withdraw from what would have been his final GP.



### **1992 NIGEL MANSELL**

Mansell had already retired once before his world title, but was tempted back by Williams. The combination stormed to the 1992 crown, securing the championship as early as Hungary in August. But negotiations with Williams broke down and, at the Italian GP, Mansell announced he was leaving F1 to go to Indycars.



### **1993 ALAIN PROST**

Having taken a sabbatical in 1992, the wily Prost manoeuvred himself into a coveted Williams seat for the following campaign, much to the frustrations of chief rivals Ayrton Senna and Nigel Mansell. Prost comfortably took his fourth title with second in Portugal behind Michael Schumacher, after seven victories.

Debate rages over whether the right Mercedes driver won the world championship — but the reality is both emerged from 2016 with their reputations enhanced

### By Ben Anderson, Grand Prix Editor

**梦** @BenAndersonAuto

ad the 2016
season played
out ever
so slightly
differently,
Nico Rosberg
would be
retiring as
comfortably
Formula 1's most successful driver never
to win a world championship, instead
of its newest world champion.

Statistically, Rosberg is undoubtedly worthy of the accolade. He is winner of 23 grands prix. That's more than Damon Hill, Mika Hakkinen, Kimi Raikkonen, and as many as Nelson Piquet. World champions all, and worthy ones at that.

The third season of V6 hybrid turbo F1 was again dominated by Mercedes, which won 19 out of the 21 races. This created the conditions for the third (and what turned out to be final) instalment of the Lewis Hamilton versus Nico Rosberg rivalry at the head of the pack, as Ferrari over-reached technically and its hopedfor title challenged faltered, while Red Bull buried the hatchet with Renault and became a winning force once more, but only climbed high enough to occasionally threaten Mercedes' hegemony.

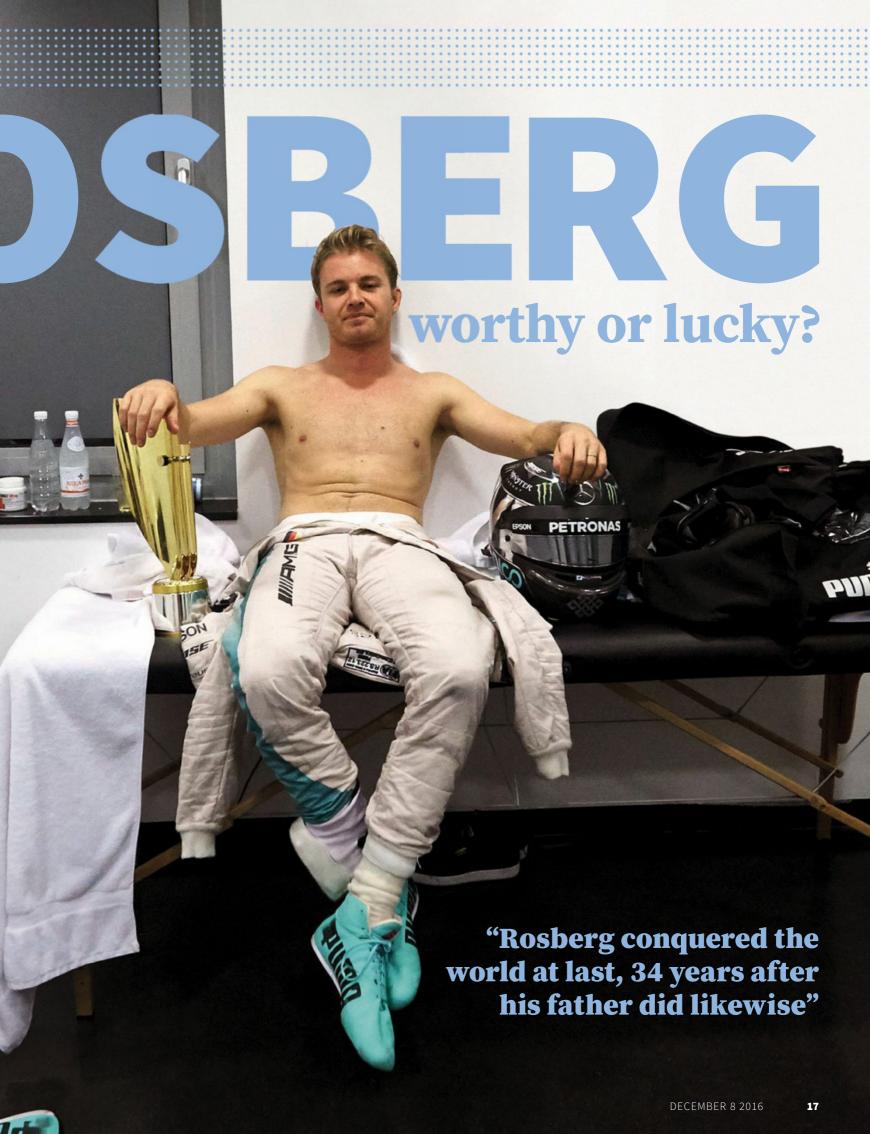
Same old story, except the big difference was that Rosberg conquered the world at last, 34 years after his father Keke did likewise, finally knocking Hamilton from the top of the pile. Once

Weight lifted, Rosberg takes a moment to allow the scale of his achievement to sink in Rosberg did so, clinching the title by a five-point margin in the season finale, debate immediately raged over whether in fact Hamilton was more deserving of making it three in a row (and four in total) than Nico was of breaking his duck.

The Rosberg family has been here before. Keke's world championship victory of 1982 was achieved in somewhat fortuitous circumstances, owing as much to the devastation wrought at Ferrari by Didier Pironi's career-ending accident and Gilles Villeneuve's death, Renault and Brabham-BMW unreliability, and the inconsistency of McLaren's Niki Lauda







and John Watson, as to Keke's brilliance behind the wheel of his Williams.

He won only one race in 16 starts. But his was a virtuoso performance for Frank Williams's team. Derek Daly was Rosberg's team-mate for most of 1982; he managed no better than a handful of fifth places as Rosberg took the crown.

However the circumstances arose, the statistics don't lie. No-one can take away this momentous achievement — from either Keke or Nico Rosberg. But whether either unquestionably deserves to be champion based on their pure performance is a very different question.

Pironi, Watson, Alain Prost, probably then-reigning champion Piquet could all have argued they drove well enough to take the title in 1982. It is also doubtful that Rosberg Jr can be called the absolute best driver on the grid this year, even though he is ultimately its champion.

Nico's battle has been rather different from his father's. For the past three seasons he's duelled exclusively with team-mate Hamilton for the ultimate prize, thanks to the way Mercedes has dominated F1 technically.

Rosberg Jr looked to have blown his best shot in the first of those campaigns, when he led the title race early on before fading in the face of a Hamilton charge during the run-in. The Rosberg camp argued unreliability made the difference in 2014, but in fact each Mercedes driver suffered car failures at crucial times, and it was Hamilton's capacity to overturn qualifying deficits with superior racecraft that made the difference in the end.

Last season Rosberg focused on improving his own racecraft, specifically how to tune his car to perform more consistently through a grand prix distance, to help reduce the sort of pressure under which he cracked regularly in the closing stages of 2014.

This strategy backfired. Rosberg lost his Saturday edge as a consequence, and Hamilton destroyed him in qualifying, scoring pole for 11 of the first 12 races. But for a tyre-blanket error in Spain



# Paddy Lowe: "When unreliability becomes more infrequent, the way it falls will feel more unfair"

Hamilton reckoned it would have been a clean sweep.

The whole thing was over with three races to spare, Rosberg defeated again, and more comprehensively than before, his run of six poles over the final six races of 2015, winning the last three grands prix in succession, coming too late to save the day.

Rosberg could again point to key pieces of misfortune in derailing his title bid — a penalty for colliding with Daniel Ricciardo in Hungary on a weekend when Hamilton went off on the first lap and Rosberg could have won the race — or the throttle damper problem that robbed him of victory in Russia. But in

fact Hamilton outperformed Rosberg for most of last season. That's why Rosberg lost the championship.

This season he didn't lose. He took more pole positions (eight) than in 2015, and won more races (nine) in a single season then ever before. This suggests he finally struck the right balance between qualifying speed and relentless race pace, and thus managed to release Hamilton's grip on F1's championship trophy.

But this picture would look very different had Hamilton not suffered key moments of unreliability in his Mercedes. Rosberg had no terminal technical failures in any qualifying sessions or races this year, though he did receive a grid penalty

# RACE BY RACE



### **Australia**

### 1 Rosberg 2 Hamilton 3 Vettel

Rosberg begins his quest for a first world title with victory, following a bad start by Hamilton and a strategy mistake from Ferrari that loses Vettel the lead. Alonso walks away from a huge crash after his McLaren runs into the rear of Gutierrez. Grosjean gives Haas points on the team's debut with sixth.



### Bahrain

### 1 Rosberg 2 Raikkonen 3 Hamilton

Rosberg benefits from another poor Hamilton getaway to lead into the first corner, and remains unchallenged. Hamilton is T-boned by Bottas before recovering to the podium. Vettel does not make the start after engine failure on the formation lap. Grosjean finishes a brilliant fifth.



### China

### 1 Rosberg 2 Vettel 3 Kvyat

It's three wins from three for Rosberg.
Hamilton finishes a distant seventh, having started from the back of the grid following an engine failure and subsequent change.
Vettel and Raikkonen collide at the start, Ricciardo loses the lead after a puncture and Kvyat scores a second career podium.



for a gearbox change in Austria, after a suspension failure and crash in practice. Hamilton encountered several.

Hamilton's car used one more internal combustion engine, three extra turbos and MGU-Hs, and an extra MGU-K, Energy Store, and Control Electronics system compared to his team-mate.

Even with the setbacks Hamilton suffered in qualifying in China and Russia, and the knock-on effect those had in forcing him to cop multiple grid penalites at Spa while Mercedes rebuilt his pool of usable engines, Hamilton can still point to October's Malaysian GP as the pivotal moment his title defence fell apart through no fault of his own.

He had it sewn up, but a failure of the big-end bearing on his new engine's crankshaft took 25 points off Hamilton's total. Had he won that race — as he deserved to — this title battle would have headed to the wire in Abu Dhabi with him, not Rosberg, in the driving seat.

Hamilton railed against the injustice of this, suggesting perhaps some "higher power" didn't want him to win the world championship this year. He battled back from a 43-point deficit after May's Spanish GP — where the two Mercedes collided on the first lap following a run of four wins for Rosberg — to lead the title race by 19 heading into the August break.

Hamilton had failed to win any of the

Baku qualifying crash put Hamilton on the back foot; he ended up fifth in the race previous three races coming into Malaysia, allowing Rosberg to regain the initiative, but was set to take back the upper hand after a dominant performance until unreliability struck again.

"It's been very, very unfortunate," says Mercedes technical chief Paddy Lowe, who admits Hamilton's repeated woes have "produced some distortion in this championship".

"There have been 13 significant [Mercedes] power unit issues through the season, and six of them have arisen on Lewis's car. Among those are the six very worst ones — most particularly the engine failure in Malaysia and the two turboassembly failures in qualifying [China and Russia]. As rational people we struggle to understand how out of eight drivers he's had almost 50% of the worst issues.

"In the big picture the absolute reliability has gone to a new level. This is the most reliable car we've ever raced. We've only had one DNF in the season — the one in Malaysia. Last year we had three. So the team overall is doing a great job to improve the reliability year on year.

"When unreliability becomes more infrequent, the way it falls will feel more unfair. If you go back 20 years, when a driver would expect five DNFs per season, it was very unlikely it would fall in a way where one guy would feel hard done by.

"So it falls; life doesn't always hand out chance in an even-handed way."

Lowe is right, but luck swings both ways. Hamilton can also count himself fortunate to survive getting tagged by Valtteri Bottas's Williams at Turn 1 in Bahrain; to have won in Monaco (where a struggling Rosberg also let him past under team instructions) thanks to Red Bull's blundering at Daniel Ricciardo's pitstop; to have survived last-lap contact with Rosberg to win in Austria; to have recovered to the podium from a back-of-the-grid start at Spa; and to have avoided sanction (or a crash) for locking up and running off track at Turn 1 in Mexico.

Nevertheless, in pure performance terms Hamilton was still better than



### Russia

### 1 Rosberg 2 Hamilton 3 Raikkonen

Rosberg dominates to secure his fourth successive win. Hamilton recovers from 10th on the grid and survives a mid-race water-pressure scare to take second. Vettel crashes out on lap one after two clashes with Kvyat. Raikkonen is third, while Magnussen (seventh) scores Renault's first points of 2016.



### **Spain**

### 1 Verstappen 2 Raikkonen 3 Vettel

Verstappen makes F1 history by becoming the youngest driver to win a race at the age of 18 years and 227 days. Hamilton and Rosberg collide on lap one, sending both into the gravel. Ricciardo leads early on but falls out of contention on an inferior strategy before surviving a tyre problem to finish fourth.

1 Rosberg	100
2 Raikkonen	61
3 Hamilton	57
4 Vettel	48
5 Ricciardo	48
6 Verstappen	38



### Monaco

### 1 Hamilton 2 Ricciardo 3 Perez

Hamilton clinches his first win of 2016 after pitstop heartbreak for Ricciardo in a rain-hit grand prix. Ricciardo leads for the majority of the race, but a miscommunication at his stop drops him to second. Perez absorbs pressure from Vettel to take third. Alonso finishes a strong fifth, while the Saubers collide.



Rosberg this season. He took more pole positions (12) than Rosberg, and won 10 races to Rosberg's nine. Over the balance of the season Hamilton was 0.107% faster in qualifying on average, excluding the three races (China, Russia and Belgium) in which Hamilton took no meaningful part due to his engine dramas. That also means he won the intra-team qualifying battle a convincing 12-6, rather than 12-9 as the pure numbers suggest.

Arguably only in Baku (where Hamilton crashed trying to match Rosberg in qualifying), Singapore (Rosberg's most dominant display of the season), and Japan (where Rosberg pipped Hamilton to pole and won) did Rosberg decisively hold the upper hand.

Rosberg qualified ahead in Monaco, Hungary and Germany too. But Hamilton suffered a brief engine problem before his Q3 run in Monaco, while Rosberg grabbed pole in Budapest as most rivals (including Hamilton) were abandoning laps on a rapidly improving track because of Fernando Alonso's spun McLaren-Honda. Rosberg's 0.107s edge at Hockenheim was overturned convincingly by Hamilton in the race.

Rosberg narrowed last year's pace deficit (0.157%) to Hamilton, but he has been behind his team-mate again more often than not. If you consider Monaco and Hungary unrepresentative, the gap increases to 0.144% in Hamilton's favour — a very similar figure to last year.

The strange thing is, Hamilton wasn't able to capitalise on this advantage often enough, and that's where the picture shifts slightly, suggesting he was also an architect in his own downfall, as much as Rosberg was the chief beneficiary of

Hamilton steps from his stricken Mercedes after the engine goes pop, scuppering an almost-certain Malaysian GP win Hamilton's obvious technical misfortune.

This all boils down to race starts, and specifically how each Mercedes driver coped with new rules introduced for 2016, which returned F1 to using single clutches, and (early on at least) limited the communication permitted between teams and drivers before races started.

Hamilton made poor getaways in Australia, Bahrain, Spain, Canada, Italy and Japan, which in all likelihood cost him at least three victories (discounting Spain because the two Mercedes took each other out), and a runner-up spot to Rosberg in Japan. Only in Canada was Hamilton able to recover back to the head of the field after slipping behind Sebastian Vettel's Ferrari off the line.

Mercedes puts these problems down to a blend of inconsistent technology, driver error and the fact that starts are and



### Canada

### 1 Hamilton 2 Vettel 3 Bottas

Hamilton makes another poor start from pole, as Vettel passes both Mercedes to lead. Hamilton and Rosberg bump wheels, with the latter dropping to 10th. Vettel loses track position with an early stop as Hamilton takes control. Bottas uses a one-stopper to finish third, while Rosberg recovers to fifth.



with a crushing victory at F1's inaugural race in Azerbaijan. Hamilton starts 10th, having crashed out in qualifying, and his fightback is hampered by an electrical problem so he finishes fifth. Perez passes Raikkonen on the final lap to snatch third.



### Austria

### 1 Hamilton 2 Verstappen 3 Raikkonen

Rosberg fights back from sixth, following a gearbox change, to take the lead after the final round of stops. But a last-lap collision with Hamilton drops him to fourth. Hamilton survives the impact to take victory, ahead of Verstappen and Raikkonen. Wehrlein scores Manor's first point of the season.







Mixed fortunes: Rosberg celebrates in Oz; Hamilton on top in Germany: Rosberg comes off worst in Austria Merc clash

the grip today, on that bit of track you haven't started on before? Have you got the tyres to the right temperature for that grip? Have you tuned the clutch for the grip you think you're going to get? Will the clutch deliver the torque you've asked it to deliver, which may or may not be the right torque? And does the driver do the right things to make the clutch deliver the torque you asked it to deliver - which again may not be the right torque? "It's a very, very complex sequence

"You need so many things to put

together a good start – from the driver,

to the engine, the clutch, the tyres; what's

for the drivers to get right, and they've made it more and more difficult for us to help them. If it were easy, and they were all perfect, it would be a bit dull wouldn't it? That's not what we want." sort of pre-empting the change."

How many bad starts did Rosberg make this year? They are difficult to recall. He enjoyed a definitive edge in this regard, and on the balance of evidence it seems this advantage was earned by Rosberg rather than bestowed on him by any particular misfortune for Hamilton.

Mercedes non-executive chairman Niki Lauda claims Rosberg "changed" after Hamilton won the championship in 2015. He feels they are even in terms of pure driving ability, but Hamilton previously gained the edge by being more aggressive.

Lauda says Rosberg evened the score by upping his own intensity, and certainly the way he drove in certain wheel-towheel situations - running Hamilton out of room at Turn 1 in Australia, shutting the door and colliding with his main rival

### "The strange thing is, Hamilton wasn't able to capitalise on his pace advantage often enough"

"We've had issues on the team side, where we've not been as consistent as we could have been, and that's contributed to starts that weren't as good as others," Lowe admits. "But overall our startline performance is around the top four teams on average through the year, so I don't feel it's some sort of Achilles heel, or a disaster area. We would like it to be better, but only in the sense that every

in the year with the preparation of the clutch, which we invented some procedures around that made that far more consistent. As we got into the second half of the season we've been in better shape. It's an area we'd love to be a lot better at, but teams have been wrestling with race starts forever.

team would like their starts to be better. "There were particular issues early

always have been very hard to get right.

### **Britain**

1 Hamilton 2 Verstappen 3 Rosberg Hamilton takes victory in a rain-hit event. Rosberg encounters gearbox problems late on, but holds off Verstappen to take second. However, Rosberg is penalised post-race for breaching radio rules, dropping him to third. Ricciardo finishes fourth, while Raikkonen passes Perez to snatch fifth.

If you give Hamilton back the 27 points he most likely lost because of these startline setbacks, he would have headed to Abu Dhabi needing just 10 to clinch the championship, even with his Sepang engine failure factored in.

Mercedes went to extraordinary lengths to make the Wo7's clutch easier to handle, even altering the way the drivers' gloves were sewn, according to team boss Toto Wolff.

Channel 4 F1 analyst Karun Chandhok also reckons Rosberg spent more time than Hamilton practicing starts in pre-season testing, to prepare for the challenge posed by the trickier new clutch.

"Pirelli has all the data, and one of the tyre engineers told me Rosberg did a lot more starts than Lewis," Chandhok says. "Knowing that it was a different type of clutch and new start procedure,

in Spain and Austria (which led Wolff to threaten team orders or benching the drivers if they did it again), and copping penalties for lunges on Max Verstappen (in Germany) and Raikkonen (in Malaysia) - suggests Lauda has a point, even if Rosberg didn't always channel this extra aggression productively.

Hamilton also pointed to Mercedes' decision to swap key members of the two drivers' car crews around ahead of the season, which Wolff says was aimed at defusing a developing rivalry between the two sides of the garage.

"Within the organisation we are very careful that there is no animosity between the two sides, and if we see there is a dynamic that is counter-productive to the spirit of the company we will interfere," says Wolff, who explained the moves were also part of the team's wider



### Hungary

1 Hamilton 2 Rosberg 3 Ricciardo

Hamilton passes Rosberg into the first corner to take the lead and absorbs pressure from his team-mate to take the win and move ahead in the championship for the first time. Rosberg settles for second as Ricciardo just manages to hold off Vettel for the final podium spot.

1	Hamilton	192
2	Rosberg	186
3	Ricciardo	115
4	Raikkonen	114
5	Vettel	110
6	Verstappen	100



### Germany

1 Hamilton 2 Ricciardo 3 Verstappen

Hamilton takes advantage of a poor start from Rosberg to take the lead. He controls the race from there to take victory - his sixth in seven races. Ricciardo and Verstappen take second and third to move Red Bull ahead of Ferrari in the constructors' championship. Rosberg ends up fourth.

strategy for staff development.

"I won't go into too much detail, because I don't want to talk internal things in the media, but it can get very competitive on both sides of the garages. That can have a positive momentum, but if the rivalry gets into animosity it becomes negative for the team spirit. We are one team — we work for the same team, not one individual driver."

Whether this made a significant difference to Hamilton's form we'll never know, at least until he writes his autobiography one day, though Wolff admits Mercedes may need to "consider the drivers' feelings around the psychological side" of such moves.

Certainly the gap in performance between the two drivers narrowed slightly in 2016, which allowed Rosberg to capitalise fully on Hamilton's mistakes and misfortune. It's also true that Hamilton has not been at his best this year, making more errors than usual, giving him less room for manoeuvre amid the technical maladies he's suffered.

Rosberg was still not Hamilton's equal as a driver, but the way he closed out the championship in Abu Dhabi, withstanding the mental strain created by the enormity of the occasion, knowing it would likely be his final race in F1, and dealing with the unique pressure created by Hamilton's go-slow tactics, suggests Rosberg became a tougher nut to crack than he used to be.

Ultimately it all depends on your point of view. Rosberg will feel he has earned this championship through a methodical and diligent process of self-improvement in the face of repeated defeat. He has won 12 of the last 24 grands prix, and will feel that alone is enough to make him a worthy world champion.

Hamilton will argue, with some justification, that all things being equal he has driven well enough relative to Rosberg throughout the past three seasons to have deserved a championship clean-sweep. But sport rarely delivers resounding verdicts one way or another. It is always the accumulation of various consequences

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some controlled, some random.
 Raikkonen, the 2007 world champion, says he can't understand those who doubt Rosberg's worthiness, based on the simple fact that Rosberg scored more points than anyone else this season. Raikkonen should know. His sole title was achieved in fortuitous circumstances too, but few would argue he is a driver not worthy of his crown.

Ricciardo took his sole victory of the year after inheriting the lead in Malaysia Whether Rosberg outperformed Hamilton in 2016 is a matter of genuine debate, but the record books won't care about that. History does not consider luck; the only thing that matters in the end is that Rosberg is champion and Hamilton is not.

But how different the dynamic might have been had Ferrari been able to build on its race-winning campaign of last season and mount a proper title challenge. That was certainly the mission statement issued by team chairman Sergio Marchionne, emboldened by Sebastian Vettel's three race wins in 2015. Marchionne ended up declaring this year's winless campaign a failure for Maranello, as aggressive attempts to overhaul Mercedes backfired.

The SF16-H was a temperamental beast, strong on some circuits, weak on others, with an excessive appetite



### Belgium

### 1 Rosberg 2 Ricciardo 3 Hamilton

Rosberg takes a comfortable victory ahead of Ricciardo in a chaotic race. Verstappen, Vettel and Raikkonen collide at Turn 1, while Hamilton recovers from 21st (due to engine and gearbox penalties) to snatch the final podium position. The race is red-flagged after a frightening crash for Magnussen.



### Italy

### 1 Rosberg 2 Hamilton 3 Vettel

Hamilton has another bad start, gifting Rosberg the lead and ultimately victory. Hamilton drops to sixth, but fights back to take second ahead of Vettel and Raikkonen. Ricciardo snatches fifth late on, while team-mate Verstappen also puts a late pass on Perez for seventh.



Rosberg controls most of the race and resists a late charge from Ricciardo to take victory and reclaim the championship lead. Sainz and Hulkenberg tangle as they try to avoid a slow-starting Verstappen. Hamilton uses undercut to snatch third from Raikkonen. Vettel is fifth after starting from the back.



the constructors' standings to go with two opportunistic race wins.

Verstappen replaced Daniil Kvyat after four grands prix, and immediately began exerting more pressure on team leader Ricciardo. Verstappen took the first of those Red Bull wins on his debut for the team in Spain — narrowly defeating the much-improved Raikkonen after the two Mercs took each other out on the first lap.

The Dutch teenager was a sensation in his second year racing at this level. His drive to third in the sodden Brazilian Grand Prix — finding grip where others couldn't — led to favourable comparisons with F1 greats of the recent past. But

### "The rise of Red Bull came at the expense of Williams"

for gearboxes, and what team boss Maurizio Arrivabene described as an "endemic" problem in hot conditions.

The lack of success on track amid some squandered opportunities (Ferrari could have won in Australia with better strategy) created extra tension within the team, and technical director James Allison fell out with Marchionne before quitting Ferrari mid-season, as the entire project regressed after the outstanding progress made the previous year.

Ferrari was thus leapfrogged by a resurgent Red Bull in F1's competitive order, which helped Mercedes become more dominant this season than in either of the previous two, despite the regulations maturing and Wolff claiming his team was plateauing and getting caught.

Analysis of the pure pace data for each team over the past two seasons shows

Ferrari slipped from 0.703% off Mercedes' pace on average during 2015 to 0.866% this season, while Red Bull improved dramatically from 1.449% adrift in '15 to 0.842% shy this season.

Mercedes pulled further away overall because one rival was replaced by another as its nearest challenger, though Lowe is right to suggest this made it more difficult for Mercedes to recover from setbacks, because there were two teams in close competition to be best-of-the-rest.

But Red Bull's general trend of progression suggests it has become F1's coming force. Better performance and reliability from Renault allowed the former champion team to take the fight to Mercedes in certain races, particularly on the slower-speed street tracks. Overall Red Bull and Ferrari were at a similar level, but Red Bull showed far greater consistency so claimed second place in

Rosberg shut the door on Hamilton in Spain, putting them both in the gravel Verstappen's driving was also controversial, his aggressive brand of racing eventually leading the FIA to clarify the boundaries of acceptability.

Ricciardo's performances were more understated, but the Australian had a small edge overall, and re-emerged as one of F1's elite operators after a difficult 2015 campaign in an inconsistent car. He was unlucky not to win at Monaco, where he qualified on pole, and felt poor Red Bull strategy denied him the win in Spain too, but he finally joined the winner's circle when Hamilton retired in Malaysia.

The rise of Red Bull came at the expense of Williams, which also slipped behind Force India in the battle to be best of the Mercedes customer teams this year. Technical chief Pat Symonds admits the team missed its development targets with the FW38 over the winter, and also struggled to make progress with what >>>



### Malaysia

1 Ricciardo 2 Verstappen 3 Rosberg
Hamilton looks on course for a comfortable victory before his engine expires with
16 laps to go. Ricciardo inherits the lead and absorbs the pressure from team-mate Verstappen to take his sole victory of the season. Rosberg recovers from being hit by Vettel at Turn 1 to take third.



### Japan

1 Rosberg 2 Verstappen 3 Hamilton
Hamilton bogs down at the start, dropping
from second to eighth. The Briton fights
back through the field, but can't find a
way past Verstappen and is forced to
settle for third. Rosberg has a faultless
race from pole to victory. Mercedes
clinches the constructors' championship.

1	Rosberg	313
2	Hamilton	280
3	Ricciardo	212
4	Raikkonen	170
5	Verstappen	165
6	Vettel	165



### **United States**

1 Hamilton 2 Rosberg 3 Ricciardo

Hamilton secures the 50th victory of his F1 career, but Rosberg limits the damage by finishing second. Ricciardo loses out when Mercedes duo get 'free pitstops' under the VSC and finishes third. Verstappen's podium challenge ends with gearbox failure. Alonso bangs wheels with Massa on way to fifth.



limited aerodynamic development did take place during the season.

By contrast Force India continued its strong late-2015 form, developing a tidy car in the Toyota windtunnel in Cologne that worked particularly well on twisty circuits but could also near-enough match Williams on faster tracks. The result was two podiums and a best-ever finish in the constructors' championship.

McLaren-Honda challenged both these

ended the season inside the top 10 in the drivers' standings. The question now is whether Honda can make a big leap forward with its combustion processes over the winter, and vault McLaren back into the fight with F1's biggest guns.

Toro Rosso was also afflicted by engine weaknesses, thanks to using an outdated Ferrari power unit. This decision was made amid Red Bull's public fallout with Renault in 2015, and a longing

from '15 was lost as Red Bull stepped up to take the fight to Mercedes

## Ferrari's momentum

### "F1 has plenty of problems, but it felt as though competitively it was in much ruder health"

teams consistently as the year wore on, despite the Honda engine still carrying a significant power disadvantage to Mercedes. The team made Q3 regularly with Fernando Alonso at the wheel, and ended the second season of its troubled partnership in much better shape, improving from ninth to sixth in the points table.

This year's Honda featured vastly improved Energy Recovery Systems, and was much more reliable (though still not perfect) than last year's power unit, while McLaren's Peter Prodromou-inspired car development continued apace as Alonso

for greater reliability. STR got that, and began the season strongly, but naturally struggled as others developed and its powerplant stood still.

Carlos Sainz Jr was nevertheless excellent, which led the reborn Renault works team to try to snatch him away for 2017, when STR will again use Renault customer engines. Renault's return to works-team status in F1 was troubled to say the least. The French manufacturer's late takeover of the ailing Lotus operation meant it came into the campaign underprepared, with incomplete infrastructure and

an underdeveloped car built around Mercedes' power unit configuration.

Renault thus spent much of the early part of the season fighting Manor and Sauber to avoid wooden-spoon status, but gained strength with experience, and by the end of the year was capable of being in Q2 regularly. Renault felt it lacked a proper reference in its driver line-up, as rookie Jolyon Palmer pushed McLaren reject Kevin Magnussen harder as the season progressed. Attempts were made to sign various drivers for 2017, including Force India's Sergio Perez and Sainz, before Nico Hulkenberg eventually agreed to leave Force India for Enstone.

Renault offered Magnussen a one-year extension, but he disliked its non-committal attitude. Former GP2 champion Palmer thus gratefully took the opportunity to extend his F1 career, realising Renault should make a big leap forward next year with a bespoke chassis designed around the new regulations.

Magnussen felt switching to American newcomer Haas gave him a better shot and more job security. Haas was the major surprise of 2016, finishing ninth in the standings and regularly outperforming more established outfits.

The squad naturally encountered many new-team difficulties, concerning how to make the Pirelli tyres work, how to set up its cars correctly, effective communication, data processing and reliability - particularly with regard to the brakes. But there were some excellent results, including five points finishes for Romain Grosjean (three of those coming in the first four races), a double appearance in Q3 in Japan, and a season's best seventh on the grid for Grosjean in Brazil.

It's unique customer relationship with Ferrari provoked criticism among conventional privateer constructors, but Haas nevertheless proved to be a very effective operation in its debut season, nothing at all like the undercooked budget-cap-inspired outfits of 2010.

Fellow Ferrari engine customer



### Mexico

### 1 Hamilton 2 Rosberg 3 Ricciardo

Hamilton spearheads another Mercedes one-two. Verstappen crosses the line third, but is penalised for gaining an advantage by leaving the track. Vettel is promoted to third in time for the podium, only to be demoted for moving under braking defending against Ricciardo, Ricciardo thus inherits third.



### **Brazil**

### 1 Hamilton 2 Rosberg 3 Verstappen

Hamilton wins a chaotic rain-hit race to force a title decider. Verstappen is third after making up 11 positions in 16 laps in a race that includes two red flags and requires a safety car five times. Nasr scores Sauber's first points to move the team above Manor into 10th in the constructors' standings.



### **Abu Dhabi**

### 1 Hamilton 2 Rosberg 3 Vettel

Hamilton leads from Rosberg, but slows the pace to back him into the pack. Rosberg absorbs pressure from Vettel to win his maiden world championship. A spin on lap one leaves Verstappen last, but he recovers to finish fourth. Massa scores two points in his final race.

1	Rosberg	385
2	Hamilton	380
3	Ricciardo	256
4	Vettel	212
5	Verstappen	204
6	Raikkonen	186

Sauber endured a trying campaign, almost going out of business completely, before investors believed to be connected to driver Marcus Ericsson rescued the team mid-season. Sauber began recruiting new technical staff, Xevi Pujolar joining from Toro Rosso as head of track engineering, while Jorg Zander rejoined the Swiss team as technical director in the wake of Audi's withdrawal from the World Endurance Championship.

Felipe Nasr's points finish in the penultimate race of the season was the icing on Sauber's cake, vaulting it ahead of Manor into 10th in the constructors' championship, and securing an estimated \$13.5million of extra prize money.

This came as a bitter blow to Manor, which was a team transformed this season after the trials and tribulations of 2015. It produced a tidy car allied to a Mercedes engine that was capable of being in Q2 on certain circuits. Mercedes juniors Pascal Wehrlein and Esteban Ocon (who replaced Rio Haryanto mid-season) performed well, with Wehrlein taking what looked to be a crucial point for the team in Austria, and Ocon earning promotion to Force India for 2017.

It was pleasing to see 11 credible outfits on the grid, a far cry from Manor's 'GP2-plus' level of performance in 2015, or the nadir of the field dropping to 18 cars after losing both Caterham and Marussia in the closing races of 2014.



F1 still has plenty of problems, but it felt as though competitively it was in much ruder health this season. Off-track there were the usual confusing shenanigans: a rejigged qualifying format that was hastily dropped after two races, controversy concerning yellow-flag rules in qualifying and the rules of engagement in races, plus debate over whether wet races should continue to start behind the safety car. There were three such races this season, and the answer is

But F1 is listening, it seems. Next year wet races will start from the grid, even if a safety car period is required to clear water from the track first, while new technical regulations should transform the category's image. They will actively encourage teams to find more downforce

no they shouldn't.

rather than further restricting them, give them bigger and better tyres with which to harness that extra performance, and more power from rapidly evolving engine technology that will no longer be so limited in development.

F1, and specifically Bernie Ecclestone, has decided it must prioritise speed above all else. Now grand prix racing will live with the consequences of that choice. As will F1's new owners Liberty Media, which began a buyout of CVC Capital Partners in the early autumn that should be completed in time for the start of the new campaign.

Whether the American media giant has the vision and power to reverse F1's flagging fortunes - fixing its broken financial model (three teams have again requested advance prize-money payments to see them through the winter), supporting the ailing venues on which it depends to race, and boosting its ailing popularity among audiences - remains to be seen.

It certainly feels like F1 is in the process of a big transition, closing the first chapter of a new era - one dominated by hybrid engine technology, the technical brilliance of Mercedes, the statistical elevation of Hamilton within the pantheon of the sport's greatest ever drivers, and capped by the crowning of a brand new world champion, who promptly retired having achieved his life's ambition. 38



transformed: Wehrlein

iousts with McLaren's

Jenson Button in Oz



# Top 10 drivers of 2016

You all know who won the world championship, but the points table tells only part of the story... This is the ranking based on a season of paddock digging, trackside observations and the good old thrill factor

### By Ben Anderson, Grand Prix Editor

**y** @BenAndersonAuto





THIS WAS ANOTHER EXCELLENT CAMPAIGN from Perez, who scored more than 100 points in a season for the first time, and achieved a career-best seventh in the final standings.

His form has been consistently excellent since the middle of last season, when he made a set-up breakthrough with his Force India engineering team at Spa, and he continued in that vein this year.

Team-mate Nico Hulkenberg performed slightly better overall, but Perez pushed him hard. He lost the intra-team qualifying battle 12-9 to Hulkenberg, but in 14 of the 21 events the gap between them was two tenths or less, indicating how far Perez has progressed as a qualifier since his Sauber days.

Qualifying the VJM09 second in Baku – where he also finished on the podium – was outstanding, showing impressive resolve after crashing at the end of final practice.

Perez has matured into a fine all-rounder in grand prix racing. He is rarely spectacular, but has upped his game in qualifying, and added a methodical and self-analytical approach to the tyre-management skills that make him almost metronomic in races.

He is nearly always there to take chances when they present themselves, and was a key component of Force India's best F1 season.





NICO HULKENBERG HAS DRIVEN enigmatically during his time at Force India, showing only sporadic flashes of the form that made him a Ferrari target at the back end of F1's V8 era.

The first five races of this season were pretty underwhelming too, but Hulkenberg came alive following the final major upgrade to the VJM09 after May's Spanish Grand Prix, and there were some outstanding displays – particularly in qualifying, where he enjoyed an

edge over team-mate Sergio Perez.

Hulkenberg qualified a brilliant fifth in Monaco – ahead of Kimi Raikkonen's Ferrari – and probably would have finished on the podium there instead of Perez with a better strategic call by the team.

He was third fastest in mixed conditions in Austria, and his Q3 laps at Austin and Mexico City were stunning, suggesting he found a new gear after agreeing to move to Renault for 2017, though he disagreed with that assessment.

Hulkenberg didn't always achieve the results his pace and performances merited this year – he was eliminated from five races through no fault of his own, and was unlucky not to bag at least one podium.

The championship table suggests Hulkenberg was well beaten by Perez, but that is not a fair reflection of how well Hulkenberg drove. It was close, but he was narrowly the better Force India driver in 2016

# 8 VALTTERI BOTTAS DOWN3

WILLIAMS SLIPPED BACK FROM BEING AMONG the three best teams during the previous two seasons to being only the fifth best this year, and consequently Bottas found it more difficult to hit the same heights.

The FW38 was limited in potential, and its aerodynamic development was troubled, but Bottas made the most of the tools at his disposal.

The peak results were sparse, but Bottas did what he could, scoring points regularly and executing a brilliant strategic podium finish in Canada, beating the Red Bulls, a Mercedes and Kimi Raikkonen's Ferrari.

But Bottas's real strength remained in qualifying, where he pulverised team-mate Felipe Massa 17-4 in the intra-team battle, the largest margin between any driver pairing on the grid this year.

Bottas made Q3 14 times in 21 races, and his average qualifying position across the season was 8.3 – near enough a match for Force India's Nico Hulkenberg (8.29), and better than Sergio Perez (9.4) and Massa (10.5). Pretty decent considering Bottas's car was not definitively among the four best on the grid.

It was a difficult year for Williams, but in his typically understated way Bottas showed again that he is among the most capable and reliable drivers in F1's midfield.





# 7 SEBASTIAN VETTEL ODOWN5

THE HONEYMOON IS MOST DEFINITELY over between Ferrari and Sebastian Vettel, after a brilliant first season together in 2015. There were no more race wins and Vettel also slipped to a distant fourth in the championship, having threatened to steal second from Nico Rosberg the previous year.

The SF16-H was meant to be the car that transformed Ferrari into a title contender, but it performed inconsistently. Vettel initially coped well in the face of adversity, finishing on the podium five times in the first eight races, but he overdrove as Ferrari got sucked back.

He was outqualified by revitalised team-mate Kimi Raikkonen 9-3 over the final 12 races, including the last five consecutively, and there were murmurings of a rift with team boss Maurizio Arrivabene, who suggested Vettel was trying to do too much behind the scenes, rather than focusing on simply driving.

Vettel at least kept his race form up to outscore Raikkonen 116-90 over those final dozen grands prix, adding two more podiums, but he is right when he says this was a season about which Ferrari cannot feel proud.

Neither, for that matter, can Vettel.

# 6 CARLOS SAINZ JR

AMID THE METEORIC RISE OF Max Verstappen it's been all too easy to overlook the form of Carlos Sainz Jr, who enjoyed a terrific second season of his own at this level.

This year's Ferrari-engined
Toro Rosso was much more
reliable than its Renaultmotivated predecessor, which
allowed Sainz to better express
himself. He says his approach did
not change after Verstappen left
for Red Bull four races into 2016,
but the team felt that Sainz came
out of his shell with Verstappen
out of the picture.

He fought with the Ferraris and finished a season's best sixth in his first race without Verstappen in the team in Spain, a result Sainz repeated twice more in the latter part of the year, despite the STR11 fading in competitiveness thanks to stalling aerodynamic progress and no development on its year-old power unit.

Sainz felt battling that disadvantage made him a better driver. He is occasionally a little overaggressive in battle, but showed a tenacity in races that is reminiscent of his hero Fernando Alonso.

He showed again that he is a superb qualifier, making Q3 nine times, and the fact that Red Bull felt the need to renew his contract in June to ward off potential suitors indicates what a hot property Sainz has become in his own right.





# FERNANDO ALONSO OUP2

FERNANDO ALONSO FELT HE DIDN'T DRIVE particularly well for much of 2015, as he struggled to find the motivation to perform at his best amid McLaren-Honda's woeful level of performance and reliability. But even Alonso half-baked was still comfortably among the 10 best drivers on the grid.

This year the car was better, and so was Alonso, who made Q3 eight times in 20 attempts. He finished inside the top 10 in the drivers' championship, destroyed team-mate Jenson Button in qualifying (after a close battle the year before), and scored more than double the points Button managed. And Button is a world champion too, remember.

Alonso finished a superb fifth in tricky conditions in Monaco, where the car really wasn't working at all well on the sensitive Pirelli tyres, and produced brilliant charges from the back row of the grid to finish inside the top seven in Belgium and Malaysia.

There were still a few occasions (Hockenheim and Monza) where he let frustration at McLaren-Honda's ineptitude get the better of him, but in fairness the present car/engine package is a waste of the talents of someone who remains one of the absolute best.

Alonso has made no secret of his dissatisfaction with the slow-going, tyre-saving nature of current Formula 1 racing, but the regulations are changing in a way that should better please him next year.

At 35 he still looks more than capable of fighting with the best, *if* McLaren-Honda can produce a car worthy of his ability.

# 4 NICO ROSBERG DOWN1

NICO ROSBERG FINALLY REALISED HIS LIFE'S ambition by winning the world championship this year. But as wonderful an achievement as that is for a driver who has shown impressive resolve in the face of repeated defeat at Lewis Hamilton's hands, Rosberg must accept that he did not win the title by being out-and-out better than Hamilton.

He was generally slower than his main rival, lost the intra-team qualifying battle 12-9 (12-6 if you discount the sessions Hamilton didn't properly take part in) and won fewer races. But he scored five more points than Hamilton did, and that's the only statistic that really matters in the end.

The unreliability of Hamilton's Mercedes helped Rosberg enormously, but he also helped himself. He was more aggressive in battle, bumping Hamilton aside to ultimately win the season opener in Australia, and he was quicker than Hamilton before mechanical trouble struck in qualifying in Russia.

He was generally superior to Hamilton in getting off the startline under F1's new single-clutch, minimal-communication rules, which proved decisive in overturning qualifying deficits to win in Australia, Bahrain and Italy.

Rosberg drove very well this year, which meant he could capitalise fully whenever Hamilton wasn't at his best. In Baku and Singapore Rosberg was clearly the better driver at the crucial moment. He rose to the occasion brilliantly to take full control of the title race by winning from pole in Japan and to withstand the pressure that created during the run-in.

Rosberg is nothing if not resilient, a living lesson for everyone in the power of self-awareness, the quest for self-improvement, and a pure will to win. He can retire proud of all he has achieved.





### MAX VERSTAPPEN OUP3

MAX VERSTAPPEN IS NOT YET THE absolute best driver in Formula 1, but he most likely will be one day in the not-too-distant future.

In the races he is utterly relentless, capable of turning unfavourable circumstances to his advantage. Like Nigel Mansell or Ayrton Senna, Verstappen is a driver who makes things happen. That makes him exciting to watch, and consequently good news for Formula 1.

Of course history will remember his debut victory for Red Bull in Spain, making him F1's youngest ever race winner, but his most outstanding drives of 2016 came in the wet, in the British and Brazilian grands prix.

The way he carved through the field from 14th to third over the final 16 laps at Interlagos deservedly drew comparisons with the wet-weather wizardry of Senna and Michael Schumacher in their pomp.

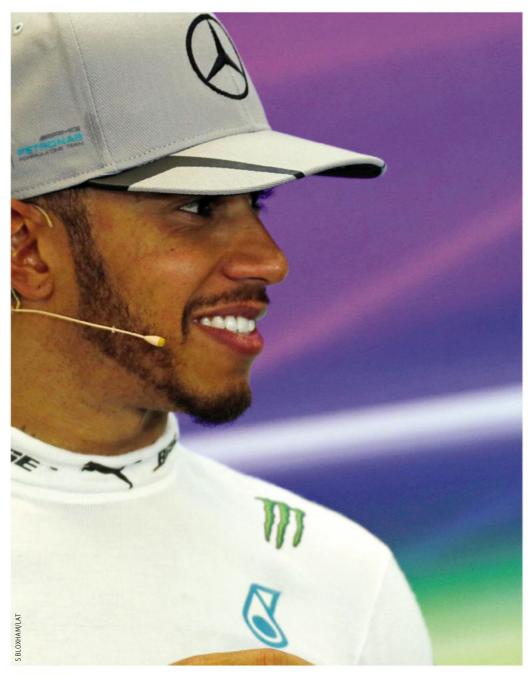
Superb tyre-management skills in the dry also allow Verstappen to make alternative strategies work, a major part of his success in Spain and Austria (where he finished second), and his recovery from last to fourth after a first-corner spin in the Abu Dhabi finale.

There are still some rough edges. Verstappen's particularly aggressive brand of defensive

driving prompted justified criticism from his peers (and a rules clarification from the FIA), and he is often too impulsive when trying to recover from setbacks.

He also needs to improve further in qualifying, though it's interesting to note he beat team-mate Daniel Ricciardo more often than not once he started going his own way on set-up from Malaysia onwards.

Such is the magnitude of his impact already that it's easy to forget Verstappen has only just completed his third season of car racing of any kind. He is naturally still a work in progress, but is showing all the signs of becoming a genuine megastar.





LEWIS HAMILTON COULD MAKE A very convincing case for arguing that he should have won a third consecutive world championship this season.

He had unquestionably the fastest car in the field at his disposal again, and he was again unquestionably the better of the two Mercedes drivers over the balance of the campaign in pure performance terms.

Hamilton was certainly the faster of the two, taking 12 pole positions to Nico Rosberg's eight, despite taking no meaningful part in three qualifying sessions due to engine problems on his Mercedes. He also won 10 races to Rosberg's nine, and scored 17 total podium finishes to Rosberg's 16.

But this ultimately wasn't enough to get the job done. Hamilton missed out by five points this year and, though he can rightly suggest unreliability thwarted his cause, he contributed to his own downfall by making too many mistakes.

Repeated poor starts theoretically cost him two more points than the engine failure he suffered while leading the Malaysian Grand Prix. Hamilton did not cope as well as Rosberg with mandated changes to Mercedes' start procedure and clutch, and paid the price. He also crashed uncharacteristically in Baku qualifying and was nowhere near Rosberg's level in Singapore.

Rosberg taking the title race out of Hamilton's hands in Japan seemed to lift the burden of injustice from Hamilton's shoulders, and the form he showed in closing out the season with four straight wins was vintage Hamilton.

Sadly for him, it was too little too late.



# DANIEL RICCIARDO OUP3

MERCEDES TITLE RIVALS NICO ROSBERG AND Lewis Hamilton topped the championship table again in 2016, and Max Verstappen attracted most of the other headlines with his occasionally dazzling displays of brilliance, but Verstappen's Red Bull team-mate Daniel Ricciardo was the best driver in F1 this year.

After a troubled 2015, when Ricciardo struggled to process Red Bull-Renault's dip in form following his breakout winning campaign of the previous year, the amiable Australian was back to his very best.

Having previously got a little too hung up on world championship ambitions made unrealistic by Red Bull's current competitive standing, Ricciardo refocused on the job at hand this year. The result was a truly



outstanding level of performance, achieved consistently through the campaign.

True, he only won once, a victory inherited when Hamilton's engine blew up in Malaysia, but Ricciardo could easily have won in Spain and Monaco too, had Red Bull completed sharper strategic pit work on his behalf.

Verstappen joining the team from May's Spanish Grand Prix onwards forced Ricciardo to raise his game, and the Australian did just that, beating Verstappen 11-6 in the intrateam qualifying battle and outscoring the Dutch teenager 220 points to 191 in the 17 races they did together.

Race form swung back and forth between the two, but Verstappen might be one of the most instinctively brilliant racers Formula 1 has ever seen. Nevertheless, Ricciardo's more measured approach was at least a match for Verstappen in this respect.

Ricciardo was exceptional in qualifying. Time and again he delivered scintillating laps at the crucial moment in Q3. Before Renault had even introduced its major in-season update Ricciardo was fifth on the grid in Bahrain and a quite brilliant second in China. He kept Verstappen in check with a stupendous final run in Spain, was on pole in Monaco, and on the front row again in Baku and Singapore.

Double world champion Fernando Alonso was certainly impressed, declaring Ricciardo the best driver in F1 right now in an interview with the BBC. On this year's evidence Autosport is inclined to agree.

### THOSE WHO DIDN'1 MAKE THE CUT

Several other drivers could have made it into the top 10, particularly the resurgent **Kimi Raikkonen** and Manor's star rookie **Pascal Wehrlein**.

Raikkonen was underwhelming in 2014 and '15, but much better this year, benefiting from improved communication with his Maranello engineering team. After Ferrari announced his contract renewal at Silverstone, Raikkonen had the measure of Sebastian Vettel in qualifying more often than not, but struggled to translate that form into hard results, and his underwhelming Sunday form over the final 12 races is ultimately why he didn't quite make the cut.

Wehrlein reached impressive peaks in the Mercedes-engined Manor, making Q2 five times in a car that was ostensibly the slowest on the grid at most circuits. He ultimately lost out on a 2017 Force India seat to **Esteban Ocon** – who pushed Wehrlein hard after replacing **Rio Haryanto** mid-season – but Wehrlein's performances certainly merited a promotion, which may yet come following Nico Rosberg's shock retirement.

Jenson Button was occasionally superb, particularly when qualifying and finishing inside the top six in the underpowered McLaren-Honda in Austria. But hanging on to Alonso's coat tails sapped Button's energy, and his form tailed off after announcing his sabbatical ahead of September's Italian GP.

Felipe Massa announced his retirement from F1 at the same race. He started the year strongly, but was ultimately well beaten by Williams team-mate Valtteri Bottas.

Romain Grosjean achieved some extraordinary heights with newcomer Haas, but found it difficult to achieve consistency, while team-mate Esteban Gutierrez reminded F1 of his speed over a single lap but struggled to string together a weekend.

He left Haas unconvinced by his potential, so will be replaced for 2017 by **Kevin Magnussen**, who didn't quite do enough to convince Renault he was worth a long-term deal, with performances that were occasionally brilliant but ultimately inconsistent.

Rookie team-mate **Jolyon Palmer** improved steadily, and after the summer break was the better Renault driver in qualifying, making Q2 five times in the final nine races.

A driver who has benefited enormously from steady self-improvement is Sauber's **Marcus Ericsson**. He didn't achieve the beleaguered Swiss team's standout result, but he was its most impressive driver.

**Felipe Nasr** bagged those two crucial points for Sauber by finishing ninth in his home race in Brazil, but that was a rare bright spot in a disappointing season of struggle for the Brazilian.

Daniil Kvyat endured more disappointment than anyone when Red Bull replaced him with Max Verstappen just four races into the season. Kvyat struggled to process this rejection while trying to mend his reputation at Toro Rosso. His form was patchy, but still enough to convince Red Bull to keep him at Toro Rosso for 2017.

### **THE ULTIMATE REVIEW OF 2016**

Whilst rival F1 annuals come and go, AUTOCOURSE – The World's Leading Grand Prix Annual – is proud to have reached its 66th year of publication as the indisputable leader in its field.

The 21-race Formula 1 World Championship season is covered with its usual meticulous attention to detail. The vastly experienced and much-respected Tony Dodgins and Maurice Hamilton – both long-time paddock insiders – bring you all the drama and intrigue that is Formula 1. Supporting their race commentaries are detailed results spreads that include specially prepared lap charts and tyre strategies.

The 2016 season once more saw the continuing domination of Mercedes-Benz as a championship-winning force, as Lewis Hamilton and Nico Rosberg took their world Championship battle to the final round of a marathon season.

As ever, politics cast a long shadow over the sport, and the many crises that erupted throughout the year are assessed, along with the implications for the future well-being of Formula 1.

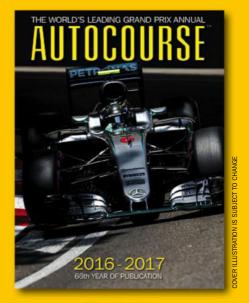
Mark Hughes once more analyses the successes, frustrations and failures of each of the constructors in his Team-by-Team review, which includes key personnel, sponsors and technical specifications of the F1 cars, highlighted by the specially commissioned F1 car illustrations of Adrian Dean

The sport's other leading categories are also given ample coverage, including the single-seat ladder from Formula 3 up to GP2, which showcases the pool of rising talent, all aiming to make their way into Formula 1.

Also described is the continuing rise of Formula E, sports car racing with Audi's battle against Porsche and Toyota for the World Endurance Championship, and the typical door-banging combat that is Touring Cars, in all their respective categories. Veteran scribe Gordon Kirby gives his usual no-holds-barred assessment of the racing year in the United States.

AUTOCOURSE traditionally wraps up the year with the most complete record of results published anywhere in a single volume.

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### THE PANEL





HRISTIAN



ARRIVABENE



MALLYA



CLAIRE



**BOULLIER** 



**FRANZ** 



**GUNTHER STEINER** 



FREDERIC



MONISHA KALTENBORN



# The bosses' top 10

Movers and shakers' verdict on the F1 class of 2016

### By Lawrence Barretto, F1 Reporter

**■** @LawroBarretto

ewis Hamilton has been voted the clear winner of Autosport's Formula 1 team-boss top 10 drivers poll for 2016. In what has become an end-ofseason tradition, we asked all 11 team chiefs to rank their top 10 drivers,

over this year's 21 races. Points are awarded using F1's scoring system of 25 for first place, down to one for 10th. Votes are kept secret, to allow each team boss to offer their honest

based on their on-track performances

Hamilton won 10 races this season, but was hampered by mechanical failures and missed out on the world championship by five points to Mercedes team-mate Nico Rosberg.

opinion of drivers across the grid.

Nonetheless, in our poll he collected a total of 234 points, five more than he achieved last year (from a possible maximum of 275) to retain top spot.

Hamilton finished 51 points clear of runner-up Max Verstappen, who took his maiden win in his first weekend with Red Bull, at the Spanish Grand Prix, and subsequently impressed with a string of eye-catching drives.

Despite winning the world championship, including nine race victories and a run in which he only failed to reach the podium five times, Rosberg was ranked third. #

### HOW THE TEAM CHIEFS VOTED



**234**<sub>PTS</sub> **LEWIS HAMILTON ●** NO CHANGE



183<sub>PTS</sub> **MAX** VERSTAPPEN



**61**<sub>PTS</sub> RAIKKONEN

**FERNANDO** 

**ONO CHANGE** 

**ALONSO** 

**67**<sub>PTS</sub>



176<sub>PTS</sub> NICO **ROSBERG** NO CHANGE



**SERGIO EREZ NOCHANGE** 



133<sub>PTS</sub> **DANIEL** 



 $90_{\text{PTS}}$ **SEBASTIAN** ODOWN3



**25**<sub>PTS</sub>

VALTTERI

**26**<sub>PTS</sub>

### PREVIOUS SEASONS

### 2011

### 1 Sebastian Vettel

- Jenson Button
- Fernando Alonso
- Lewis Hamilton
- 5 Nico Rosberg
- Mark Webber 6
- 7 Paul di Resta Adrian Sutil
- Heikki Kovalainen
- 10 Michael Schumacher

### 2012

### 1 Fernando Alonso

- 2 Sebastian Vettel
- 3 Lewis Hamilton
- Kimi Raikkonen
- Jenson Button
- Mark Webber
- Nico Hulkenberg
- Nico Rosberg
- Sergio Perez 10 Felipe Massa

### 2013

- 1 Sebastian Vettel
- 2 Fernando Alonso
- 3 Kimi Raikkonen
- Lewis Hamilton

8 Mark Webber

10 Felipe Massa

9 Jenson Button

- 5 Nico Rosberg
- Romain Grosjean
- 6 Felipe Massa 7 Nico Hulkenberg 7 Sebastian Vettel
  - 8 Jules Bianchi

2014

9 Jenson Button

1 Lewis Hamilton

2 Fernando Alonso

3 Daniel Ricciardo

4 Valtteri Bottas

5 Nico Rosberg

10 Daniil Kvvat

### 2015

- 1 Lewis Hamilton
- 2 Sebastian Vettel
- 3 Nico Rosberg
- Max Verstappen
- 5 Daniil Kvvat 6 Fernando Alonso
- 7 Valtteri Bottas
- 8 Sergio Perez 9 Daniel Ricciardo
- 10 Kimi Raikkonen





he more time that passes in Formula 1, the more it seems there is simply no stopping Max Verstappen. Here is a driver who fears absolutely nothing and no-one, who shows no

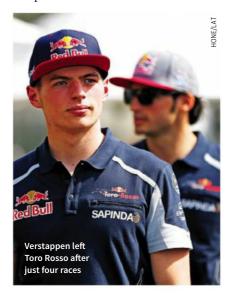
respect for his elders and their prior reputations, who is utterly unmoved by those who criticise what he does. He is the personification of teenage rebellion in F1, shaking the established foundations to their core.

It is breathtaking to behold the way this driver grabs Formula 1 by the scruff of its neck and tries to bend it to his will. He is controversial, occasionally terrifying, but always exciting to watch. If anarchy were an F1 driver, his name would be Max Verstappen.

We saw glimpses of Verstappen's capacity to upset the perceived order of things in 2015, when he delivered impressive underdog results for Toro Rosso as a rookie, augmented by some scintillating overtaking moves. There are always rough edges with rookies, but Verstappen immediately suggested he possessed all the raw ingredients to become an exceptional grand prix driver.

Having marked himself out as one to watch, Verstappen was thrust into the foreground of F1's spotlight this year, as he gained unexpected early-season promotion to Red Bull, became F1's youngest-ever race winner on his debut with the team, and dared the system to rein in the excesses of his aggressive brand of defensive driving.

Verstappen is not only a driver who challenges convention, wows crowds, and delivers superlative performances behind the wheel, he also forces changes in regulations as he goes. The 2016 season didn't belong to him, but there is no doubt that he left an indelible mark. His performances underscored the





suggestion he is F1's biggest rising star, a "force to be reckoned with" as Lewis Hamilton said on more than one occasion.

There was a sense, coming into the campaign, that Verstappen would need to state an emphatic case for his future in F1. He and Toro Rosso team-mate Carlos Sainz Jr knew Red Bull would be watching closely, trying to decide which, if either of them, would be worth promoting to its A-team.

Verstappen displayed a small but crucial edge over the early races of the season, outqualifying Sainz narrowly in Australia, Bahrain and Russia, and outscoring the Spaniard too — although this was exaggerated by Sainz getting wiped out by Sergio Perez's Force India in Bahrain, and picking up heavy damage after a collision between Sebastian Vettel's Ferrari and Daniil Kvyat's Red Bull at Turn 2 in Russia.

Kvyat hit Vettel twice within the space of a few hundred yards in that race, which brought his 23-race stint as a Red Bull driver to an ignominious end. But, in truth, Red Bull was already having doubts. Kvyat failed to escape Q1 in Australia and barely made Q2 in Bahrain, and was not putting team-mate Daniel Ricciardo under any pressure in qualifying. He particularly struggled under braking according to Red Bull motorsport boss Helmut Marko, who felt Kvyat was "not the same fast, straightforward driver" he was in 2015.



Verstappen drove superbly in the wet in Brazil to finish third

Meanwhile, Verstappen's outstanding performances were winning him many admirers within the F1 paddock. At this stage, Ferrari's Kimi Raikkonen was out of contract at the end of the year, while Mercedes, which had courted Verstappen in Formula 3 before he signed his original junior deal with Red Bull, had yet to agree fresh terms with Nico Rosberg.

Keen to carry the fight to a faltering Ferrari in the constructors' title, and aware that rival teams might swoop in to steal Verstappen away, Red Bull decided to "kill two birds with one stone", as team boss Christian Horner put it, swapping Kvyat for Verstappen and re-signing the Dutchman to a long-term contract ahead of May's Spanish GP.



# "Superior tyre management helped him fend off Raikkonen in a massive 32-lap stint to win"

Verstappen's impact was immediate. He outpaced Ricciardo in final practice, Q1, Q2, and the initial runs in Q3, only falling behind when the Australian produced a stunning final lap to put himself third on the grid.

Ricciardo probably should have won that race once the two Mercedes drivers had taken each other out on the first lap, but he was put on a three-stop strategy to cover a charge from Vettel, while Verstappen was able to go several laps longer on his first set of mediums and completed the race on just two pitstops.

Superior tyre management — no doubt aided by Toro Rosso focusing on this specifically during winter testing at the Catalunya circuit — helped Verstappen fend off Raikkonen's Ferrari during a massive 32-lap final stint to win the race.

In terms of results, this was the peak of Verstappen's season, but there were many other highlights as he rapidly adjusted — seemingly without hesitation — to life inside one of F1's top teams.

He crashed twice next time out in Monaco (the undoubted nadir of his campaign), overreaching in his efforts to compensate for not having the latest Renault engine at his disposal, but this was a mere blip.

He superbly held off Rosberg's faster car to finish fourth in Canada, produced another banzai first lap and tyremanagement masterclass (56 laps on a single set of soft tyres!) to finish second in Austria, after the two Mercs collided again, and carried the fight brilliantly to Rosberg's Mercedes in mixed conditions in July's British GP at Silverstone.

But, for the most part, he was shaded by team-mate Ricciardo, who was F1's most outstanding driver across the whole season, and in fact is the one who Fernando Alonso rates as the best on the grid right now.

It took until that Silverstone race for Verstappen to actually outqualify Ricciardo, something he only did twice across their first 11 races together as team-mates. That is nothing to be ashamed of, for Ricciardo is truly an outstanding qualifier, "probably the best in the business", according to Horner.

With a different strategy call in Spain, and sharper work from Red Bull in the >>>

# KVYAT: THE SURVIVOR

DANIIL KWAT LOOKED DOWN AND OUT AFTER May's Spanish Grand Prix. Max Verstappen had just become F1's youngest-ever race winner, driving the very car Kvyat himself had been piloting for the first four races of 2016.

The Russian finished a respectable 10th on his return to Toro Rosso at that race. But with Verstappen winning and new team-mate Carlos Sainz Jr battling Ferraris on his way to a superb top-six finish, this was not a time for celebration.

Normally so eloquent, composed and good-humoured, Kvyat cut a disconsolate figure for much of the rest of the first part of the year.

His mood was not helped by difficulties readjusting to his 'new' environment, working with a car that was not built to his taste, and a new group of young engineers with whom it took time to build trust and understanding.

But there were still glimpses of the driver that so impressed Red Bull in 2014 and '15. He was very fast in Monaco, Baku and Montreal – tracks that place greater emphasis on reactive driving over the finer details of car set-up.

Jenson Button felt Kvyat was unlucky to lose his Red Bull seat, given he'd finished on the podium in China, and Red Bull didn't lose faith in the Bashkortostani, hoping he would use his opportunity at Toro Rosso to refind his best form.

Kvyat's relative form compared to Sainz improved after the August break, a three-week period Kvyat identified as crucial in allowing him to alleviate the mental anguish of his peculiar situation, and focus anew on rescuing his career.

He lifted his game on more conventional tracks, and looked a bit more his old self. But, in truth, there were few outstanding performances. He wasn't helped by Toro Rosso's reversal in form as the season reached its end but, apart from beating Sainz in Japan, Kvyat did not distinguish himself.

He is fortunate to have been given a one-year contract extension despite a disappointing campaign. He is also lucky that Red Bull clearly believes in his latent ability, and that Pierre Gasly's GP2 season was not as outstanding as expected. The lack of pressure on Kvyat from below, coupled with Toro Rosso's desire for stability in its driver line-up heading into the regulatory unknowns of 2017, mean Kvyat has been afforded something rare in Red Bull circles: a stay of execution.

Whether he has a long-term future with Red Bull is unclear, but Kvyat now has to ensure he doesn't squander this second chance.



# F1 REVIEW/MAX VERSTAPPEN

pits in Monaco, Ricciardo could easily have won three races this season, which would have matched his 2014 tally. The Australian got over the frustration of Red Bull's underwhelming 2015 campaign, worked more productively within the limitations of the improved but still deficient Renault power unit, and got back to his best this year.

But Ricciardo readily admitted that Verstappen's arrival at Red Bull forced him to raise his own game. "I always compared quite well to Dany [Kvyat], in testing through to Russia, and I always felt I was driving at my limit until Max came on board," Ricciardo says. "We have both lifted our games. That's part of being an F1 driver. I'm sure even Alonso is still learning.

them to your liking. Where I really turned it on was Malaysia. I changed some things in the car more to my liking, and it seemed to work, so we tried to continue in that way."

Verstappen outqualified Ricciardo at four of the last six races, and it will be interesting to see whether that trend continues into the start of next season, when new rules will dictate a significant technical reset for the teams.

Verstappen's race performances were generally excellent throughout the season, culminating in that magnificent, Senna and Schumacher-esque drive from 14th to third in the closing laps of the sodden Brazilian Grand Prix at Interlagos. If there is one race that summed up Max Verstappen it was this one, dancing the



Ricciardo outscored and outqualified Verstappen overall, but the newcomer is rising fast

# "As Ricciardo put it, it's 'scary' to think how good he may yet become at this rate of progress"

"I knew how hyped Max was, but I'd never seen his data and didn't really know what he was bringing to the table. But I knew he wasn't afraid to give it a go, and I saw already from first practice in Barcelona he was on the limit of the car. I thought, 'OK, this is going to be exciting."

Verstappen rode Ricciardo's coat-tails from the technical standpoint to begin with, following his team-mate's set-up direction while he felt his way around a new environment. But after September's Singapore GP – where Ricciardo finished just half a second behind winner Rosberg as Verstappen finished a distant sixth after a bad start - Verstappen started treading his own path.

"When I jumped in, I took all the settings of Daniel - the brake pedal, the throttle pedal, the steering wheel, all these kinds of settings," he says. "And at one point you start to change incredibly fine line between brilliance and catastrophe.

Had he not somehow saved a huge slide coming up the hill out of the last corner, he would have ended his race in the barriers. Instead, he was feted as a hero, and deservedly so. Mercedes team boss Toto Wolff said Verstappen's driving "redefined physics".

That is the wonderful thing about Verstappen. He is still a rough diamond only 19 years old and yet to mature into the complete package. As Ricciardo put it, it's "scary" to think how good he may yet become if he keeps progressing at this rate.

But there is a dark side to this genius flair and ruthless will to win, and he needs to rein back some of his uglier impulses. He still has a tendency to let frustration affect him when races aren't going to plan. The way he aggressively

swerved towards Raikkonen's Ferrari on Spa's Kemmel Straight, in retaliation for the Finn's earlier refusal to cede position promptly after going off-track to stay ahead, was something even some of his closest supporters agreed crossed the line of acceptability.

Verstappen continually courted controversy for the way he aggressively defended position when under attack from faster cars, eventually leading the FIA to clarify rules designed to prevent dangerous driving in wheelto-wheel combat.

Verstappen was repeatedly criticised for making aggressive defensive moves in the braking zones, but refused to back down - even when 1997 world champion Jacques Villeneuve suggested someone might die if Verstappen did not change his ways.

Raikkonen fell foul of Verstappen's tactic (twice) in Hungary; Verstappen tried it on Rosberg in Germany (although it was the Mercedes driver who actually fell foul of the regulations, for forcing Verstappen wide trying to overtake him), and again while defending from Hamilton at Suzuka.

Ironically, it was Ferrari's Vettel (an outspoken critic of Verstappen's defending) who became the first driver to be penalised under the so-called 'Verstappen rule', implemented in time for October's US Grand Prix at Austin, thanks to a 10-second penalty for his aggressive defence of position from Ricciardo in Mexico.

Verstappen was penalised too in that race, for failing to cede position to Vettel after running off-track and gaining an advantage. Earlier he had tried (twice) to





wrest second place from Rosberg — bouncing off the Mercedes at Turn 1 after the start, and sending one up the inside at Turn 4 later in the race, after steadily reeling in the championship leader.

Wolff felt moved to contact Verstappen's father Jos, urging him to temper his son's aggressive instincts for the sake of the title contenders. This provoked a furious response from Horner, who accused Wolff of "meddling". Wolff and Verstappen said the whole thing was blown out of proportion, and Wolff reiterated his admiration for Verstappen's skills.

That's hardly surprising, because even his rivals can't fail to notice what Verstappen brings to Formula 1. He is exciting to watch, a driver who makes things happen. He is a maverick, a risk-taker. Whether his particular circumstances in a given race are favourable or not, he will do everything in his power to succeed.

"He has all the ingredients that a successful driver needs," reckons Toro Rosso team boss Franz Tost. "He doesn't show respect — he really doesn't care who is on the side of him, or whom he is overtaking, he just concentrates.

"He's convinced he is doing the proper job — he's very self-confident, and he's very selfish. This is what you need to become successful. I'm convinced that if he is in the correct car he can win races and championships."

If Renault gets its act together over the winter, perhaps 2017 will give us the first opportunity to test Tost's theory. The way Max Verstappen has risen through Formula 1 so far, it would take a brave person to bet against him. \*\*

# SAINZ'S STUNNING YEAR

ON THE FACE OF IT, MAX VERSTAPPEN'S in-season promotion to Red Bull looked like bad news for Toro Rosso team-mate Carlos Sainz Jr. It suggested that the Spaniard was the inferior prospect, and greatly reduced his chances of eventually making the grade at Red Bull.

But there was a feeling that the move might actually turn out to be a blessing in disguise – a chance to make his own name in his own right, rather than facing constant comparisons with Verstappen, which were always likely to be unfavourable to Sainz given his greater single-seater experience and more conventional rise through the ranks.

There was a suggestion inside Toro Rosso that Sainz came out of his shell once Verstappen left the team, but Sainz himself insists his approach never changed. What did change was the hitherto woeful reliability record of his car, which gave him a better platform from which to showcase his talents.

Sainz excelled in his second F1 season, more than doubling his points haul from 2015 and finishing a strong 12th in the drivers' championship. He outscored Daniil Kvyat 42 points to four in their 17 races together at Toro Rosso, following the Verstappen seat-swap, and he outqualified the Russian more often than not too.

Sainz found results more difficult to come by as the season wore on, scoring in only two of the final 10 races, not helped by Toro Rosso using a 2015 Ferrari engine frozen in specification, which became easily the weakest on the grid as rivals made progress.

Toro Rosso also overreached trying to make up this deficit aerodynamically, which led to a mid-season backward step with the chassis that took several races to rectify.

Nevertheless, Sainz made Q3 nine times in 21 races, and scored two outstanding top-six finishes towards the end of the season, after



fighting a memorable late battle with his hero Fernando Alonso and the much faster Williams of Felipe Massa at the US Grand Prix, and driving superbly in the wet in Brazil.

Sainz was so consistently excellent that the Spanish press started touting him as a potential replacement for Kimi Raikkonen at Ferrari, while Renault offered Sainz a long-term deal to join its cause at Enstone.

Red Bull acted swiftly, renewing Sainz's contract at Toro Rosso ahead of July's Austrian GP, an unusual move for a team that usually leaves drivers sweating well into the winter months.

Sainz ultimately gave up career stability with a struggling manufacturer team for the chance to prove to Red Bull once and for all that it should not undervalue his talents.

He is backing himself to succeed regardless, and on this evidence he has every right to feel a top drive is simply a matter of biding his time.







he mood at
Maranello was
buoyant ahead of
the 2016 Formula 1
season. Ferrari
was pretty pleased
with its efforts the
previous season
— three wins and
a comfortable second in the constructors'
championship gave it hope for the future.
Credibility in the eyes of its loyal Italian
following had been restored.

But Ferrari president Sergio Marchionne wanted more, and he heaped the pressure on his charges. He demanded a first world title since 2008. The sights were set higher.

At the launch of the new car, team boss Maurizio Arrivabene boldly claimed that Ferrari would fight "until the end for the championship". There was confidence that significant steps had been made with the engine and chassis. After four years of persisting with a pullrod front suspension, Ferrari had finally switched to pushrod; the power unit packaging was tighter, while there were upgrades to the internal combustion engine and turbo. "We have improved across the board; all our hopes are in this car," said technical chief James Allison.

Come the season-opener in Australia, that confidence looked to have been justified. Sebastian Vettel stole the lead and had control of the race, only for Ferrari to strategically relinquish it. The victory was lost, and that was about as good as it got for the team.

As the season progressed, Ferrari fell back from Mercedes. Red Bull, in contrast, made big gains, leaping ahead of Ferrari just before the summer break and pushing clear by the time Abu Dhabi was done and dusted. Car problems, mistakes, set-up setbacks, tyre woes, engine frailties and some plain old bad luck meant Ferrari went nowhere in 2016.

Come the end of the season, it did not have a single victory to its name. It managed nine podiums in the first nine races, but just two more in the remaining 12 and ended the season 70 points behind Red Bull and 367 adrift of champion Mercedes. So where did it go wrong?

# **THE DRIVERS**

Vettel had a poor season by his high standards. For the second time in three years he failed to reach the top step of the podium. He also accumulated 66 fewer points than in 2015.

The pressure started to show, with the German increasingly littering the team-radio airwaves with expletive-laden outbursts. It peaked in Mexico in October, when Vettel turned the air blue as he first slated Max Verstappen before turning on FIA F1 race director Charlie Whiting for not taking action against the teenager. >>>

The first season at Ferrai had gone so well — too well, even. Vettel wasn't a title contender, but he almost pipped Nico Rosberg for second. This year, he was nowhere and the pain was clear.

Arrivabene took the unusual decision to criticise Vettel during the Japanese Grand Prix, saying he had to "earn" his place at Ferrari beyond next year and should stay focused on driving rather than wider team matters. Both parties have since played down those comments, but it seems clear that tension remains.

What didn't help Vettel's cause was team-mate Kimi Raikkonen's improved showing. He earned a contract extension in July and thereafter upped his game, ending the season only 26 points adrift of Vettel. Last year that gap was 128.

Key to this turnaround was Raikkonen generally feeling more comfortable in the team. The new contract confirmed that the squad backed him, while a change in the personnel within his immediate crew was crucial. "There were some changes with the people that I work and they have been very good," he said.

"The guys are very good at what we do and we all work together very well. We understand each other well and we have the same idea how we want to do stuff."

# **TEAM LEADERSHIP**

It is the leadership situation that is really concerning at Ferrari. When Luca di Montezemolo left and the technical department was reshuffled and given a new lease of life with the recruitment of technical chief Allison, things started to look up.

But it's become clear that Arrivabene lacks the experience to lead the team and Marchionne prefers to call the shots rather than using the experience of pure racing people within the team.

When Allison departed in July, Ferrari was in disarray. The team became too impatient — it made bad decisions and did not learn from its mistakes. Marchionne recently said he would not put more money into the team. "I've thrown all the money I'd like to throw at that [the F1 team]," he said. "And we've done this in the past. We need to use that funding better."

Is Marchionne putting too much pressure on staff, leading to mistakes? Last year's lower expectations created a more relaxed atmosphere at Ferrari, helping it excel. That changed as the Ferrari increasingly struggled in 2016.

Pressure is expected if you work for Ferrari — Arrivabene has made that clear several times this year — but maybe that's not the best way to encourage people to deliver. Long-term vision is required to catch Mercedes, finding those last bits of performance to really challenge. It is questionable whether Arrivabene and Marchionne are the ones to make that happen.

# **ALLISON'S DEPARTURE**

Allison is arguably the second-best technical director in the paddock behind Adrian Newey. When he joined Ferrari in 2013 he was given the remit to make changes, and it was those that led to the upturn of '15. But Marchionne and Allison did not agree about the team's longer-term technical strategy.

When Allison's departure was announced, with Mattia Binotto moving over from running the engine department, head of race activities Jock Clear said the team would have to "work hard to cover the gaps". He added: "In the immediate aftermath, you are not going to find losing someone like James Allison, a man of his calibre, is going to go unnoticed in the team.

"Mattia will need help and we have to pull together. There is no suggestion he can step into the role James was doing and cover the background, but Ferrari is committed to pulling together in the areas where James was strong."

Vettel has insisted that Allison's exit will not hurt next year's project. "It's not just about one person, but obviously it wasn't easy for the whole team to digest that James is not here anymore.

"You can imagine he had one of the key roles and an influence, but it didn't impact much on what was going on in terms of looking forward. Back at the factory we had a plan, which we have been following for a long time, for what is going on for next year."

But there has been little evidence in recent months that things are moving forward.

## **THE CAR**

Ferrari took a radical approach with the concept of the SF16-H; it represented a step forward on last year's challenger. But it was not as fast as anticipated, reliability was disappointing and the team was not able to keep up with the development race.

When asked what the weaknesses were, Vettel and Raikkonen consistently said improvements were required in all areas. "What we're missing this year, we're lacking a little bit of downforce compared to our main competitors," said Vettel. "Sometimes we struggle to get the tyres into the [right operating] window."

Arrivabene believes the difficulties were endemic in hot conditions, but reckons the team has found out why. "As in Baku and in Monaco, when the temperature goes up normally we have problems," he said after Ferrari struggled in Mexico qualifying. "We are making an analysis on that and now it's quite clear the reason why. We are working on that."

But while Ferrari claims to know what the problem is, it's unclear as to whether it knows how to fix it.

At the start of the season, Ferrari was in contention for race wins. Australia









Allison's departure won't have helped, but Ferrari's problems were far more endemic

was a missed opportunity, while Ferrari felt that Raikkonen could have won in Bahrain had he not messed up the start. In China the team-mates collided, and in Russia Vettel was involved in another collision at the start. Those instances are the ones Vettel is referring to when he says the team didn't get enough points in the early part of the season.

As the table on the right shows, it was 1.090% quicker (based on a 'supertime' worked out using the fastest single lap by each car at an event, and expressed as a percentage compared to the leading pace) than Red Bull at the first race of the season. Twenty races later, it was 0.016% behind in Abu Dhabi.

Overall, Ferrari was just 0.024% behind, which signifies the closeness of the battle between the two teams, particularly after Monaco when Renault's upgraded power unit gave Red Bull the grunt to fight towards the front.

Of the 21 races, Ferrari was quicker at eight of them, with Red Bull ahead at 12 and they were evenly matched at one. Ferrari was closer to Mercedes at the start of the season than it was at the end, and it struggled particularly during the middle part of the season.

It did manage to arrest that slump during the heart of the European stint, but the team will be frustrated to still be so far adrift of Mercedes. It will hurt even more that Red Bull has sneaked ahead, particularly as its rival is known for its prowess with aerodynamics, and there are sweeping changes to those regulations for next season.







The powerplant was a real strength of last year's SF15-T as the team closed the gap to Mercedes. Ferrari was aggressive with development over the course of the winter, but things started to go wrong at

FERRARI'S 2	016 PACE		
	SUPERTIME (%)	GAPTO MERCEDES (%)	GAP TO RED BULL (%)
Australia	101.000	+1%	-1.090%
Bahrain	100.580	+0.580%	-0.941%
China	100.597	+0.597%	+0.057%
Russia	100.824	+0.824%	-1.052%
Spain	101.357	+1.357%	+0.528%
Monaco	100.945	+0.715%	+0.945%
Canada	100.245	+0.245%	-0.241%
Europe	101.410	+1.410%	0%
Austria	100.565	+0.565%	-0.359%
<b>Great Britain</b>	101.645	+1.645%	+0.446%
Hungary	101.118	+1.118%	+0.745%
Germany	101.048	+1.048%	+0.560%
Belgium	100.156	+0.156%	+0.016%
Italy	101.032	+1.032%	-0.512%
Singapore	100.932	+0.932%	+0.414%
Malaysia	100.790	+0.790%	+0.176%
Japan	100.333	+0.333%	-0.253%
United States	101.192	+1.192%	+0.655%
Mexico	100.854	+0.854%	+0.513%
Brazil	100.944	+0.944%	-0.115%
Abu Dhabi	100.860	+0.860%	+0.016%
Overall	100.877	+0.866%	+0.024%

'Supertime' figures are calculated by taking each car's fastest single lap of a grand prix weekend as a percentage of the best outright lap



the first race when Raikkonen's car caught fire after a turbo problem.

At the following race in Bahrain Vettel failed to start thanks to an electronics issue at low revs during the formation lap that broke a valve and wrecked his engine. It's believed Ferrari turned the power unit down, following concerns over reliability, and never managed to get the most from the unit at any point in the season.

Ferrari used all of its development tokens, but the improvements were disappointing relative to those of its rivals. And in qualifying it was still no match for Mercedes, which was able to employ additional engine modes.

"We were making a very good job since the beginning of the year to where we are now, with the power unit and in general, but we are still not exactly where we want to be," says Vettel.

"Especially [on] Saturday is quite obvious that Mercedes still seems to have a little bit of a trick to be able to squeeze out more than other manufacturers."

# THE STRATEGY

Ferrari got its strategy wrong in Australia, in what was its best chance to win a grand prix all season, when it gave up crucial track positions.

In Singapore it pitted Raikkonen for a third time, effectively losing him a podium finish. In Italy Arrivabene said suggestions that Ferrari chose the wrong strategy made him laugh, despite Vettel and Raikkonen finishing a long way behind Rosberg and Hamilton in third and fourth, opting for a two-stop strategies when each Mercedes only stopped once.

There were more chances, such as in Spain when the two Mercedes took each other out, and in Malaysia when Hamilton's engine expired while he was leading and Rosberg was recovering from first-lap contact. In those instances Ferrari was outclassed by Red Bull, which took advantage by winning both races.

Throughout the first two thirds of the season Ferrari was off the pace strategically and not able to react quickly enough, but it was more aggressive in the final third, as was evidenced in Abu Dhabi when Vettel went deep in his second stint and then took the supersofts tyres that allowed him to attack in the final stages and snatch a podium.

# **CONCLUSION**

Vettel believes Ferrari should have finished higher in the constructors' championship. "Towards the end we found ourselves in a very tight battle with Red Bull, but overall we had a stronger package and we should've finished second," he said.

"Especially in the beginning we dropped too many points and the biggest disappointment was that we didn't fight Mercedes. A lot of things have happened in the background that should make us stronger for next year."

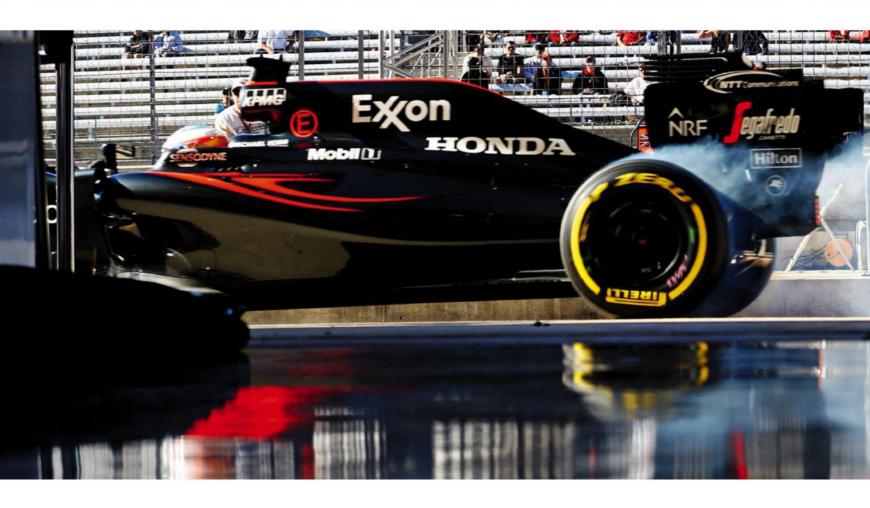
That last point is telling, but whether it will really help Ferrari finally challenge for another title is debatable.

# 1 REVIEW/McLAREN-HONDA REVIVAL Hasegawa's remit is solely the F1 project A TEKNAT.XBINAGES Mobil T



By Lawrence Barretto

**y** @lawrobarretto



onda's return
to Formula 1
in 2015 with
McLaren was
painful. Its
powerplant
lacked power.
Its reliability
was disastrous.

It could not recover energy and deploy it efficiently. Jenson Button said he felt like a "sitting duck" on the straights.

You may argue it could not get any worse. So the Japanese manufacturer's upturn in form this season should not have been a surprise, given its low performance base. But Honda still had to make it happen and, fortunately for both sides of the alliance, it has.

Undeterred by its year of misery — which it anticipated, but only to a certain extent — Honda's engineers ploughed on with their programme of development, instigated by F1 programme boss Yasuhisa Arai, and made gains over the winter.

Focus was placed on the ERS turbine, which was identified as a key weakness of the power unit. Honda knew the turbine was a problem last year, but it simply didn't have the time to update it because it was focusing on other areas first. Plans were already well under way in 2015 for a revised turbine, but Honda couldn't implement those changes until this year.

Last year packaging was the priority,

to fit in with the alliance's 'size-zero' policy, but this sacrificed performance. This year Honda feels it has the best ERS deployment on the grid.

Pre-season testing offered a sense of relief. McLaren completed 2054 laps over eight days, nearly double the mileage from the previous season, completed in two thirds of the time. Its fastest lap was 1.9s off the pace, compared to 2.4s last year.

This coincided with the news that Arai would leave his role as part of the company's "annual organisational changes". He was replaced by Yusuke Hasegawa, who had experience with Honda in F1 through the BAR project.

But the role was different in that his remit was to focus purely on the Formula 1 project, whereas Arai had juggled the F1 role with his place on the Honda board and responsibilities as head of the Sakura motorsport facility.

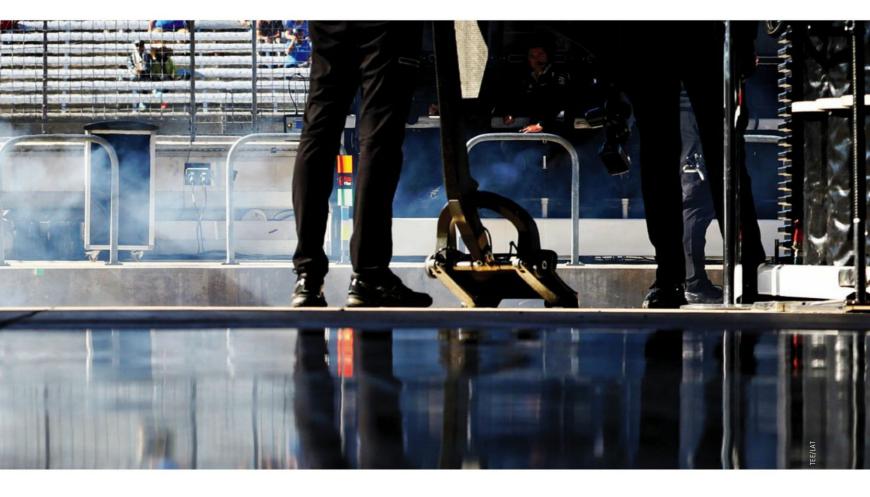
Honda feels that the improved reliability it delivered from pre-season testing onwards is a direct result of the programme Arai put in place and pushed through. The identification of the turbine as the key focus was also under his stewardship.

Hasegawa has since built on that. McLaren believes his appointment accelerated the improvements in communication and has been crucial in the fusing of two very different cultures from top to bottom of both organisational structures. This has had a direct impact on the speed at which the alliance has been able to develop.

This was a reformed partnership, not a brand-new one, but times had changed since Honda was last involved in F1 in 2008. While its engineers had been absent, the way race weekends worked had changed. McLaren was well versed in that routine and Honda was not. So it took time for it to get up to speed.

Even when it came to analysing data, it took time to overcome communication problems. But gradually, over the course of last year and into 2016, everything has become more integrated. This synchronisation breeds confidence, as efficiency is improved.





The two parties have steered clear of sustained public criticism of each other in a way that Red Bull and Renault did not manage, and that continues to be the case — only now there's less frustration to hide. McLaren remains very tough on Honda and that's unlikely to change until the alliance is winning. But the atmosphere has improved dramatically and a happier environment naturally has an impact on output.

Honda remains at the back of the manufacturer pack, and it knows that catching well-resourced rivals Mercedes, Ferrari and Renault will not be easy. It's easy to forget that Honda started from scratch in 2013, three years after Mercedes started developing its powertrain. Mercedes also had the advantage of being involved in F1 at the time and enjoying a decent level of success. In contrast Honda was heading back to F1 after several years out of the sport, while its last project was frustratingly ineffective.

But Honda has done what it does best, knuckling down and working through its problems methodically. Since ERS deployment has become its strength, it has achieved its target of doubling the amount of energy it can recover from the system, following winter developments and a turbo update introduced in Canada in June. This means it is less exposed to running out of electrical energy at the end of long straights.

With the ERS in good shape, Honda turned its attention to the internal-combustion engine. Its first in-season upgrade in that area came at July's British Grand Prix, aimed at improving combustion efficiency and power output. It also recovered some of the exhaust output that was sacrificed when the upgraded turbo was introduced.

A further update followed at Spa in August, for both the turbo and V6 engine, to improve efficiency while also bringing the exhaust output of the latter back up to the pre-Canada level. Performance at Spa proved that McLaren-Honda is able to maintain a favourable rate of acceleration in a straight line compared to the top teams, although it still lacks pure power.

Then came a final update, introduced in Malaysia in October. Critically for Honda, each change it brought to the track worked as anticipated. And while the Malaysia update was focused on reliability, it delivered performance in race conditions because it allowed the team to run a more aggressive engine setting.

Honda's main focus is now on the internal combustion engine (ICE), but Hasegawa admits it needs to develop the other areas in tandem for maximum gain.

"We need to concentrate on the ICE for next year, but if we improve the engine itself, we need to boost the turbine otherwise we cannot perform at

the same level in terms of deployment," he says. "The current output level I don't think we need to further improve, but to keep the same level of output we need to develop the turbine again.

"We still have to do some tests, some trial and error. I hope we understood the direction and the elements to focus on, but it's not easy to combine the elements to realise the improvements on the ICE completely."

The downside of the changes is that the weight of the power unit has increased, which in turn has impacted the chassis. So while the overall package remains strong in slow-speed corners, it struggles in high and medium-speed turns, as was painfully evident at its home race at Suzuka in October. Honda is working on repackaging the turbine and solving the weight issue without compromising on the improved performance it has delivered.

When it comes to ultimate pace, discounting Manor, McLaren-Honda has made the biggest gains from last year to this, based on a supertime worked out using the fastest single lap by each car at each event over the year, and expressed as a percentage. The alliance has improved by 0.748%, closing the gap to Mercedes to 2.206%. There remains a way to go, but it suggests the team is on the right path.

Honda remains hopeful of further closing the gap over the winter, as it >>>



# "Insiders are pleased with progress, but want more"

feels the gains for those at the front are becoming more marginal given the stability in the engine regulations.

Drafting in Hasegawa was a shrewd move, while Honda has continued to recruit well and tweaked its organisation to get the best out of both sides of the alliance. This could have been an even better season had Honda focused fully on its 2016 engine. But switching attention to '17 early, when it became clear what the technical regulations would be, will give it the best possible chance to catch its rival manufacturers.

A bespoke team has been focusing on next year since early 2015, and Honda has already created space in its UK facility to accommodate an additional group, which is expected to be operational in 2018 and will help it gather more data.

Honda and McLaren insiders are pleased with the progress made, which has been better than expected, but they want more and are all too aware of what's needed to be a frontrunner.

"Last year we had to build up the team," says Hasegawa. "There were lots of new engineers who joined the team, so although that was a bad season it was a stage that we had to overcome. We showed a good level of performance this year, but we're not satisfied with the current level. We need to be in higher positions next year."

Honda appears to have made the right steps, it knows the direction in which it wants to develop and the relationship between the two organisations is going from strength to strength. This year has been a key step on its journey to the front. Honda just needs to stay on that trajectory.





## THE THIRD BEST CAR

McLAREN RACING DIRECTOR ERIC BOULLIER SAID in May that his team had the third-best chassis in Formula 1, behind Mercedes and Red Bull, but only on certain circuits. It has since slipped back from the top teams over the following races, but that's a result of a decision to switch focus very early to 2017 at the cost of this season.

The improvement is evident. Last year it was ninth in the constructors' standings, this term it was sixth. Both Fernando Alonso and Jenson Button agreed they could fight for positions this year, whereas in 2015 they spent most of their time defending.

Key to the performance gain has been the power unit, but the chassis has been strong too. McLaren feels it is now a match for any teams under braking and in slow-speed corners, but there is still some way to go with regards to medium and high-speed turns.

The upward trajectory derives from a decision made in May 2014, following a period of restructuring. In years gone by, McLaren has strived to find the 'magic bullet', flitting from one concept to another, delivering good cars and not-so-good ones.

In 2014 McLaren took the strategic decision to start from scratch with a new concept for '15 – only this time it would embrace it, developing it into a strong foundation on which to develop over several seasons.

Its form this year is evidence that this strategy is paying off. Combined with a higher correlation rate (between simulations and reality) – Boullier estimates it's enjoying around 95% success – and an aero department that is flourishing under head of engineering Peter Prodromou, McLaren believes it is making gains on its rivals.

There remains a long way to go, especially given that Mercedes and Red Bull have been developing their aero concepts for several years, but already McLaren has proved it has a chassis capable of challenging at the front in only the second year of its current concept.

Just how good would it be if it had the class-leading engine? "If we had the best engine this year, we would have won races," Boullier says. "We know, as the GPS traces tell us."





# Palmer proves his worth

Jolyon Palmer had a tough rookie season with Renault, but has emerged with the vote of confidence of a new contract for next year

# By Edd Straw, Editor-in-Chief

EDD STRAW: You've secured a drive for next year. Mission accomplished?
Jolyon Palmer: To be back with Renault next year was the aim, and it has been a long, bumpy journey to get there. But in the end I've been happy and the team has been happy with my performances in the second half of the year.

ES: How difficult is it to come through a rookie season like this with an uncompetitive car that is hard to drive, and when you're up against a team-mate like Kevin Magnussen?

JP: It's much harder to make a positive impression when you're running at the back, and we were knocked out in Q1 a lot this year, especially early on. It's a car that's quite difficult to drive, especially on bumpy tracks. Within the team, maybe they see a bit more. But from the outside, it doesn't reflect that well on the drivers.

ES: You've made clear progress through the year. What is it about your approach that made that possible, because the challenges of the first part of the season might have sunk some drivers?

JP: I'm always trying to find ways to improve. Even after a good race, if you've done 70 laps, three pitstops and a start, there's always something you can do better. There's the mindset as well; every race weekend is a new one and what you've done in China or Monaco is irrelevant as long as you don't make those mistakes again. There was a clear difference after Monaco.

**ES:** Monaco, where you crashed out, looked bad. Did that become a trigger to reassessing your approach after a tough start to the year?

JP: I don't think the start of the year was so bad, but Monaco was definitely not a good moment; it was a big crash as well, right at the start of the race. It was a tough weekend even before the race, so it was a time to reflect and make sure I put it behind me, focus on not having a weekend like that again.

ES: Hungary was so close to being a great result, with you being on course for 10th. Although you missed out after a spin, it seemed to be a turning point in terms of understanding the car and getting the best out of it.

JP: If you look at Hungary, I still don't think it looks too bad. I finished 12th, I was ahead of Kev and the pace was the quickest a Renault has been driven this year. I went from 17th to 10th on pace, but the spin was an error. The Silverstone test before that was really positive and I understood the car a little bit more, which helped the team.

ES: And performances relative to your team-mate started to become impressive?

JP: Yeah, Melbourne at the start of the season was good and the next five were tough. Then we were really close, but he kept edging qualifying by hundredths, which was frustrating. Since Hungary we have been ahead in qualifying most of the time and got the most out of race performance. Generally, I've got the best out of the car since.

ES: The Renault looks the hardest car out there to drive. Why is that?

JP: Generally, it's not easy to drive because we are missing some aero and it's not compliant over kerbs and bumps. That makes it more inconsistent. You touch a kerb and have a moment, while other people can run the kerbs harder, be an inch either way and it really doesn't matter. It's harder for us. Some tracks suit us more. Tracks with long straights like Baku and Monza were really difficult, but ones with long, flowing corners like Budapest, Sepang and Suzuka were better. When we've been strong it's more track specific than car specific. We understand the limitations of the car and have to drive around them.

ES: You scored a point with 10th in Malaysia — how big a deal is it for a driver to score for the first time in a



Monaco crash was a low point, but was part of the rookie-year learning process season where you have to fight so hard?

JP: In Melbourne, we were so close.

When I finished 11th within sight of 10th I thought we were on for an alright year. But then it didn't come round for another 15 races. To finally get a point, especially after the spin in Budapest, was nice. It didn't really change anything, but it shows when the chance is there you can get a result.

ES: The story of the second half of the year was uncertainty over your place for 2017, but that didn't seem to affect your performance. How difficult was that?

JP: I just needed to do the best I could.

With every race I was getting stronger.

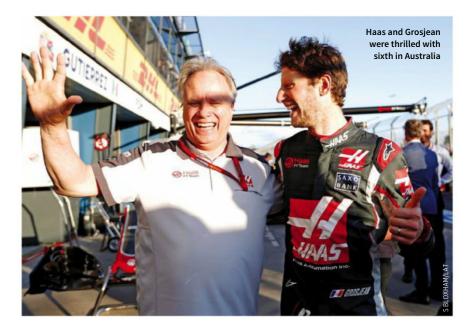
The biggest pressure in that position is qualifying, because we could get through to Q2 but you needed a perfect lap. A poor qualifying reflected on you badly and I felt a bit of pressure there. But race day was better as I seemed to be able to blank it out.

you've proved your worth?

JP: The aim was to be here next year and I'm here because Renault, a manufacturer team, believes I'm a good choice. There are many drivers they could have signed and they chose me. They see all the data, all the analysis, so it's a good feeling to know I'll be back and the team believes in me. \*







onventional wisdom states Formula 1 startup teams in the 21st century are doomed to a lifetime, likely a short one, of fruitless toil at the back. At least, it did until Haas

the back. At least, it did until Haas smashed it out of the park in 2016 by finishing sixth in its debut race in Australia and taking eighth in the constructors' championship, the highest for a genuine newcomer since Sauber was seventh 23 years ago.

But then again, Haas is an unconventional team. Not only does it hail from the land of NASCAR and oval racing, but it also went about things in an unusual way. Owned by machine tools magnate Gene Haas, it was originally conceived as a customer car operation. When mooted rule changes permitting this were dropped, focus switched to a

other teams would be doing it, wouldn't they? It was also not fair to say this was a Ferrari B-team, as Haas had to do its own aero work and design and produce various key components — the so-called 'listed parts' required to qualify as a constructor, including the monocoque survival cell, much of the bodywork and key aero surfaces such as wings, the floor and the diffuser. While the appendix of F1's sporting regulations covering listed parts has been tightened up as a result of criticism, these are detail changes rather than transformative ones that move the goalposts for Haas.

Romain Grosjean's sixth place in Melbourne, aided by the right tyre call to bolt on medium-compound Pirelli tyres during the red flag but underpinned by strong race pace once up there, was backed up by his astonishing fifth place in the next race in Bahrain. Eighth in Russia, seventh at the Red Bull Ring and 10th at Austin took Haas's tally to an impressive 29. But none of those were

# "The Haas was certainly a quick car, probably quicker than its results suggest"

technical partnership model. By aligning itself with Ferrari, which supplies a huge amount of technology Haas would otherwise have to conjure up itself or seek from multiple suppliers, and Italian single-seater specialist Dallara, Haas took every shortcut it could find to make its first season work.

And it was right to do so, despite the grumbling from rivals. This was all completely legal, and if it was so straightforward then presumably many the true measure of how well Haas did, as team principal Gunther Steiner explains.

"For me, Japan was as good as Bahrain," says Steiner. "To get both cars into Q3 on speed at Suzuka is fantastic, so that was my high point. Getting back into Q3 at that stage in the season showed what we could do."

The Haas was certainly a quick car, probably quicker than its results suggest. This is because, inevitably, the Haas team was immature and didn't always >>>



get the best out of it. If you look at performance over the year, only the Manor team was more erratic in terms of its pace relative to the front.

"That is fair," agrees Steiner when the hit-and-miss nature of the season is put to him. "Where we struggled most was to understand the tyres as everybody else does. We have all got the same tyres to deal with."

This was just one area where Haas was on a desperately steep learning curve. Up against teams with, in most cases, decades of continuous experience of Formula 1, it didn't have the knowledge base, the established working practices and, crucially, the wealth of data, of the teams it was up against. This was one of the key reasons why, sometimes, the team's race weekends never really got up and running as troubleshooting problems proved to be too slow.

"There is more than one factor, but that's one of them," says Steiner. "In the beginning, we didn't have the data and we needed to get it. Now we have the

Steiner (I) says team struggled to understand tyres

data to analyse, but we were always a little bit behind. That's why Mercedes always wins, because they see further than us from the top of the wave.

"This is what growth is. Otherwise, why has nobody in the last 20 or 30 years come in and won? Take Toyota, they had everything but came in pretty badly because they didn't know what they didn't know. The only way you learn that is by doing it. F1 is so complicated and sometimes that can be underestimated.

"I don't want to use time as an excuse because we will always be behind. But we've beaten a few people already, and that's pretty good. But the one thing you cannot buy is time."

The Mexican Grand Prix weekend, comfortably Haas's worst of the year to the point where Steiner jokes about having blocked it out of his memory, was the best example. Neither Grosjean nor team-mate Esteban Gutierrez ever looked like getting close to the points there. Grosjean in particular struggled and was slowest in qualifying.

"We lost some downforce after FP1 but we only noticed that on Saturday night," says Grosjean. "That's why the process needs to be faster. It's about when things go wrong, that's when we need to focus on improving the response to the data, the way we analyse it, but that is all just part of being in the first year. There were quite a few instances when we understood what was going wrong and a few others where we weren't quite sure."

On track, the Haas VF-16 was strong on traction — hence the good performance in Bahrain, for example — although ultimately lacked a little downforce. The biggest problem was the brakes, not just the occasional disc failures but the lack of positive feel, which led to the team trying Carbone Industrie brakes in the closing stages of the season in place of Brembo.

"Braking is something I'm very sensitive to," says Grosjean. "I guess





Gutierrez suffered from lots of bad luck during the season, but also made too many errors I have improved with time but I need to be confident on the brakes to make the most of the corner. That's the school of racing I learned from, at ASM/ART [in F3 and GP2] where you had to brake late and have a good braking shape. Until you got to that point, they wouldn't let you change the set-up! It's very effective but when the brakes aren't working, it's hard."

The car was also overweight, a particular problem with the tall Grosjean. But, rightly, the Haas team focused on its 2017 project — a luxury it could afford after banking so many points in the first four races — so updates were relatively sparse. At the Russian Grand Prix in April, a new front wing that focused on improving driveability rather than downforce was introduced, and for the following race in Spain a rear wing that delivered a few more points of downforce



# "The key now is 2017... and there's no reason to expect Haas to be a one-hit wonder"

was added, along with the latest-spec Ferrari engine. The last major package was in Singapore, although it took a few races for the team to understand it.

On the driver front, Grosjean did a very good job. The fact he scored every single one of Haas's points is testament to that and when things were going right, he was the one that nailed the result while Gutierrez, who did have plenty of bad luck, also had a knack for finding ways to throw away promising positions. That explains why Haas opted to bin Gutierrez for 2017 in favour of bringing in Kevin Magnussen from Renault.

Grosjean did have his struggles, particularly when the brakes were misbehaving, and made a few mistakes. Infamously, after stunning everyone in qualifying at Interlagos by putting the Haas seventh, the team's best qualifying spot of the year, he shunted while on his way to the grid. But without a driver of Grosjean's quality to get the most out of the car, it's conceivable Haas would not have managed a single point in 2016.

"They have both done a good job," says Steiner. "I wouldn't say Esteban did a bad job, it was just not as complete as Romain's. Romain has 29 points, Esteban has zero. All in all, we were happy with Esteban as, for a first-year team, he didn't do anything stupid or anything wrong. It's just the experience of Romain paid off. We said from the beginning, we put our trust in him and it was the right thing to do."

The key now is 2017 — as the cliche would have it, the difficult second season. Having had the advantage of knocking back its planned debut from 2015 to this year, it had a good leadtime for its debut season. But with this year's car taking up hardly any time in the windtunnel as the team's focus switched to the major rule changes for '17, there's no reason to expect Haas to be a one-hit wonder.

But, however next year goes, there's no doubt Haas has transformed expectations of what is possible for a startup team in F1. And that can only be good for grand prix racing. Steiner agrees.

"I hope so, because if that expectation changes then maybe somebody else new will come in," he concludes. "F1 needs new people here." \*\*

# ROMAIN GROSJEAN ON...

### THE GAMBLE OF JOINING HAAS

I think about doing things before I do them and when I met Gunther Steiner and Gene Haas and they told me about the project, I knew it would be interesting. I knew Renault would struggle and, at 30, it was maybe time to do something else. Was it a gamble? Yes and no. It's risky to join a new team but I knew the rewards were much higher than the risk.

### **WHAT HAAS ACHIEVED IN 2016**

You would expect some difficult weekends in the first year, but you wouldn't expect sixth and then fifth in the first two races. That was a dream. From China onwards, we started to discover reality as people brought updates. We finished eighth this year and we want to do better than that next year, so we had to switch very early to 2017 and that meant that car didn't have updates. But being in front of Renault, Sauber and Manor and not far off Toro Rosso is good.

### THE HIGH POINTS

The results in Australia and Bahrain and qualifying at Suzuka, which is a very difficult track. I was eighth there and we could have been seventh without a small DRS glitch.

# THE LOW POINTS

After the summer break, it was a disaster for me. We had an engine deficit at Spa, where I was sixth at the beginning but 28km/h slower than Esteban [Gutierrez in the sister car]. At Monza, we broke the gearbox in FP3 and I had to start 17th, in Singapore, we had the front suspension not properly bolted to the car, in Malaysia I had a brake disc failure when I was going to score points, in Japan the clutch didn't work at the starts and Mexico was a disaster with lost downforce.

# **COMPLAINING ON THE RADIO**

You can ask the guys here if anyone has a problem with that, and no-one will say yes. In the heat of the moment, yes, I'm passionate, but radio messages are not for the outside world, they are for my team and for us to improve things. I'm like the captain of a football team, sometimes I give direction. When you are driving at 300km/h, sometimes it doesn't come out the way I would like but it's OK. I wouldn't change anything about the guys I'm working with and I drive with my heart and my guts.



# Mercedes juniors duel at Manor

Pascal Wehrlein looked like a star at Manor early in the year, then Esteban Ocon arrived to trigger a proper battle

By Ben Anderson, Grand Prix Editor

**y** @BenAndersonAuto





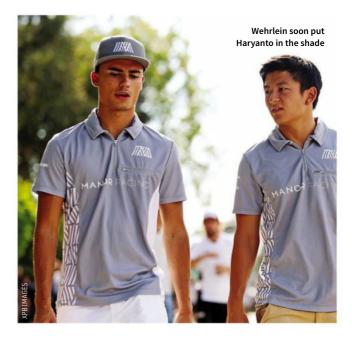
or most of this
Formula 1 season,
the big story from a
driving perspective
at Manor was the
form of Pascal
Wehrlein, the
Mercedes junior
handed the chance
to make his name on the biggest singleseater stage of all after winning the 2015
DTM title for the German manufacturer.

Manor was a team seeking to re-establish itself after the trials of 2014 and '15, and here was an exciting young talent on which it could focus this effort. Wehrlein adjusted quickly after three seasons out of single-seaters (save for the seven days of F1 testing he did for Mercedes and Force India in 2014-15, plus a one-off Formula 3 outing in '13). And although the Manor was generally the slowest car on the grid, Wehrlein

perspective, Rio Haryanto — Wehrlein's team-mate for the first 12 races — only once qualified higher than the back two rows of the grid (17th in Azerbaijan), and his best race result was 15th in Monaco, which was actually one of Haryanto's worst races in performance terms, as he struggled to maintain tyre temperature amid blue flags in tricky conditions.

This all served to make Wehrlein look very handy indeed, and it seemed only a matter of time before he earned a move further up the grid. But that didn't count on fellow Mercedes junior Esteban Ocon parachuting into Manor mid-season.

Haryanto had failed to secure enough funding to finish the campaign, so was replaced during F1's summer break in exchange for a reduction in the cost of Manor's Mercedes customer-engine supply. Mercedes had signed Ocon after he beat Max Verstappen to the 2014 European Formula 3 championship,



# Wehrlein: "When he joined the team of course there was more pressure, but I like pressure"

did exceptional things with it.

He qualified 16th in Bahrain, which would have meant a place in Q2 had the qualifying format not been tweaked ahead of the first race of the season. After that bizarre rule change had been reversed, Wehrlein got within 0.155s of Q2 in Canada, and within a tenth in Germany. In Austria he put Manor inside the top 10 in Q1, qualified 12th, and fended off Esteban Gutierrez's Haas to score an unlikely championship point for Manor in the race, when Sergio Perez retired late on with brake failure.

To put these performances in

and promoted him to the DTM in Wehrlein's wake, following a titlewinning campaign in GP3 in '15.

The French teenager also landed a reserve F1 role with Renault, which included a day of testing after May's Spanish GP, and four free-practice outings at the Spanish, British, Hungarian and German GPs.

Ocon arrived at Manor for the Belgian GP at the end of August, which effectively turned it into a de facto Mercedes junior team, in the Red Bull/ Toro Rosso mould; a place for the German manufacturer to assess its brightest young talents by pitting them against each other head to head.

"For me nothing changed when he [Ocon] joined the team," insists Wehrlein. "I focused on myself and my performance. Of course there was more pressure, but I like pressure. When the chances were there, I had to take them. It doesn't matter who the team-mate is, you have to expect the maximum, and that's what I always try to do.

"I heard many people say since he joined the team I made a big step forward, but I'm not sure if it's like that. Even before he was in the team I scored the point in Austria, and I'd been in Q2 before. Four times more after the summer break too."

What did change for Wehrlein is the fact that Force India chose Ocon when a space opened up in its line-up for 2017. Ocon was one of two drivers on Force India's final shortlist, and Autosport >>>

# Ocon: "Force India believe in me and they think we can achieve great things together"

understands Wehrlein was not the other.

In pure performance terms, Wehrlein has some justification for feeling put out by Force India's decision to overlook him. Discounting Monza, where Ocon's car broke down, Wehrlein was ahead in qualifying six times in the eight races they did together, nearly half a second clear at Spa, 0.629s quicker in Singapore, over half a second ahead in Mexico.

Ocon outqualified Wehrlein by 0.136s in Malaysia, and impressively beat his team-mate in both qualifying and the race on their first visit to Suzuka. But Wehrlein suffered technical problems in final practice in Japan, and was also using an older engine than Ocon, thanks to an offset on component changes created by Haryanto crashing and losing a power unit earlier in the year in Russia.

With a new unit fitted, Wehrlein was back on top in Austin, despite throwing his car into the gravel in FP3, and again in Mexico, where Ocon struggled all weekend with a handling imbalance created by a suspension problem.

Wehrlein was unfortunate that his best performances during this period (making Q2 at Spa, Monza and Mexico City) were undone by failing to finish the races. His car broke down in Italy, he wiped himself out in a first-lap collision with Jenson Button's McLaren at Spa, and was taken out by Gutierrez in Mexico.

The only time Ocon truly wiped the floor with Wehrlein was in Japan — where the French rookie qualified 0.208s ahead and finished 20s clear in the race — and in the wet Brazilian GP, where he narrowly missed out on scoring an extra point for Manor as Wehrlein struggled badly for grip.

But that last performance came after Force India's decision and, as Mercedes boss Toto Wolff says, "it's not a fair conclusion" to suggest Ocon has done the better job simply because he's the one with the Force India contract in his pocket.

"Coming with not a lot of experience halfway through the season was very hard," says Ocon. "Probably my progress was a good point, and I also tested with Force India back in 2015, and the test was great. I remember being P2, just behind the Mercedes [driven by Wehrlein], and it was a hard day — raining, drying.

"It's Force India that has given me the opportunity. Mercedes manages my career, but it's Force India that wants me. Mercedes doesn't have power over Force India. They believe in me; they think we can achieve great things together."

Ultimately that is the reason why Force India has overlooked Wehrlein in favour of Ocon. The Normandy talent impressed the team in testing, and Force India likes his attitude.

It clearly sees Ocon as the driver with greater potential. He can rightly point to the fact that he faced the extra challenge of dropping in to a completely new team mid-season, without the benefit of any testing or prior F1 racing. And in this context his general trend of improvement over the races he did was impressive.

He's tall and wasn't comfortable in the car initially, but began pushing Wehrlein much harder from Malaysia onwards, once Manor made some adjustments that allowed Ocon to "drive naturally".

"The pedals were not far enough away," Ocon explains. "They made a fantastic new part, which gained me 3cm, so I had better throttle control, and I could steer without touching my leg, which was a big advantage!

"I got it in Malaysia, but needed it in Singapore! To be honest, I finished the race there in big pain. It was a mess,





# MANOR'S MIRACLE DENIED

IN PERFORMANCE TERMS, THE MANOR TEAM THAT competed in Formula 1 in 2016 was unrecognisable from the squad that struggled so badly last season.

At the first race of 2015 Manor couldn't even make it out of the garage, as the team spent the whole weekend rebooting computer software and trying to literally restart the cars after a winter of discontent.

Following that season spent treading water under the new ownership of energy magnate Stephen Fitzpatrick, using an outdated car and old Ferrari engines, Manor came into this campaign far better prepared, using a bespoke car built around a Mercedes customer power unit, and a Williams gearbox and rear end.

Bolstered by the experience and engineering talents of racing director Dave Ryan, who joined the team in late 2015, and Pat Fry, who came on board as a consultant at the start of this year, Manor re-emerged as a truly credible F1 outfit.

"It's not a question of anything other than believing in yourselves and having the resource to commit to it properly," explains Ryan. "We've been very lucky this year – we've got a good engine, and a good team owner who's backed us very, very well.

"It's enabled us to build a good car. We've developed massively. We are now a serious team,





and I think we've done a good job."

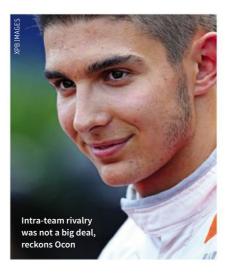
The MRT05 was light on downforce, but with the Mercedes engine was a relative rocketship on the straights, and thus could mix it in the lower midfield on certain tracks – in the right hands and with the softer tyre compounds employed.

Manor showed particularly well in Bahrain, Austria, Belgium, Italy and Mexico. And with talented Mercedes juniors Pascal Wehrlein and Esteban Ocon on board as drivers, the team began pushing Sauber harder on conventional circuits as the season progressed.

"Compared to a Mercedes or a Red Bull we've got a long way to go," Ryan adds. "But we're plenty quick enough compared to where we were, and we're making good progress." Thanks to Wehrlein's point for finishing 10th in July's Austrian Grand Prix, Manor looked set to secure 10th place in the constructors' championship – off the bottom of the table for a second season in the past three, which would have significantly boosted its revenues, and was why so much work went in to rescue the team from administration at the beginning of last year.

But Felipe Nasr's race to ninth in Brazil turned Manor's season on its head, dropping it back to 11th in the standings and costing it \$13.5 million (around a sixth of its budget) in prize money.

For a team that is still building up from humble beginnings, that is a bitter blow to take, and Manor is in the process of seeking fresh investment for 2017.



because with all the tight corners you have to steer a bit more at a 90-degree angle, so it was difficult.

"There was also a kind of a reorganisation in the team, where we work totally different. It's communication, a more traditional way of working, and that also made the difference."

Ocon felt he wasn't really in competition with Wehrlein at Manor, and that Mercedes would ultimately look after both of them, provided they each met realistic expectations in terms of their individual performances.

"I think Mercedes trusts us both," Ocon adds. "I don't think they put us as rivals or anything like that. For sure people look at it that way because it's racing, but that's not my priority.

"I know Pascal is a DTM champion. He's a really strong team-mate — in Singapore I was well off — and I feel like he's been in the Mercedes family forever. It doesn't feel like if one of us does a bad job they'll take us away.

"I focus on performance. I think if you do a good job and keep the people around you satisfied, there will always be talks and opportunities. If you have a shit weekend all the time, people aren't interested! If the performance is there, the chances will be."

Wehrlein did not appear to take Force India's apparent snub well, and it looked as though there was little love lost between the Manor team-mates when they collided during the final race of the season in Abu Dhabi.

But setbacks are part of the game. Wehrlein will have to dust himself down and forge a different path. He should be proud of what he's achieved this season, and deserves the chance to remain on the F1 grid next year.

"These two are extraordinary among a handful of drivers out there that are considered to be in the same league," says Wolff. "From a personal level I like both of them — they are both very different personalities. They are pretty even in the race car, and I think both deserve to have a future in Formula 1."

# Button and Massa bid farewell

Long before Rosberg's exit, two of F1's most popular veterans decided to step down

# By Ben Anderson, Grand Prix Editor

**梦** @BenAndersonAuto

eptember's Italian
Grand Prix at Monza
proved a seminal
moment in the 2016
Formula 1 campaign, as
two of the category's
most successful and
seasoned operators
chose the moment
to announce they would be stepping
back from the sport that has defined
their existence for so long.

For Felipe Massa this is a straightforward farewell to F1. Last month's Abu Dhabi Grand Prix is fully intended to have been his last in single-seater racing's top echelon. Williams will be the final grand prix team he races for, barring some kind of unexpected Nigel Mansell-style comeback further along the road.

For Jenson Button the story is not so simple. Like Massa, the 2009 world

champion wants the opportunity to take a well-earned break from fulltime action, to spend more time with friends and family.

But Button is not so sure that he is ready to part with F1 completely, so has given up his McLaren-Honda race seat to Stoffel Vandoorne for 2017, in exchange for an ambassadorial and reserve-driver role, with an option (on the team's side) to make Button a McLaren-Honda racing driver again in 2018.

Such equivocation is understandable. Button has been racing in F1 for 17 unbroken seasons. For the past two he has been up against a guy he readily admits is the toughest team-mate he's ever faced. Fernando Alonso is a relentless machine and, after two years paired alongside inexperienced drivers, Button has had to dig much deeper to compete with a driver many reckon to be the absolute best on the grid.







Button is not someone who shies away from a challenge, and has generally compared well against Alonso if you analyse the full spread of the 37 races they have contested as team-mates.

But there was a feeling that Alonso was not operating at full capacity in 2015, when the fledgling McLaren-Honda package was at its lowest ebb. The car has been much improved this year, capable of fighting for better results on a broader range of circuits, and Alonso's game seems to have lifted as a result.

As a consequence things have been tougher on Button this season. He has struggled to beat Alonso in qualifying, and been outscored by the Spaniard 15-5.

There have still been some outstanding performances from Button. The way he qualified third in the damp in Austria and finished an excellent sixth in the race was flawless, and he managed to genuinely outdrive Alonso in Germany and Italy.

There have been other occasions where he has near enough matched Alonso in race trim — Spain, Azerbaijan, Japan, for example. But this has taken enormous reserves of effort that Button no longer feels he can call upon so readily.

That is why a man who feels he is driving better than he ever has in his career has made the seemingly odd decision to stop racing in F1 next year.

"Some of the races this year have been the best in my career I think," he says. "Qualifying at Spa [where Button was ninth fastest in Q3] was as good as my pole lap in 2012.

"Every time I get in the car I want to do my best, which is a lot of pressure I put on myself, and one of the reasons why I need a break. I'm going to blow my top otherwise!

"I will always perform to the best of my ability, but putting so much pressure on yourself every other weekend runs you down.

"I feel as though I am performing, but that can't go on forever without a break. I do a lot of physical training, pushing my body, pushing myself mentally, which helps.

"But still, Formula 1 is a very tense sport. There is so much pressure — some of it is from the outside but most of it from within. And I need a step down from that, otherwise I'm going to have a heart attack!"

Had he really wanted to, Button could probably have found another seat for next season. Williams was certainly keen (though not certain of how to fund the deal), and Button's management insisted he had firm offers to join rival squads.

But by choosing to stick with McLaren and step back from racing, he can now try his hand at other forms of motorsport (Super GT and rallycross have been mooted) while not having to say goodbye totally and utterly. He has time to work out what he really wants from life.

This was a smart move for McLaren too, one of Ron Dennis's last great plays before he was shuffled out of the door at the end of a long-running boardroom battle.

McLaren-Honda needed to promote 2015 GP2 champion Stoffel Vandoorne or risk losing one of junior racing's brightest talents to a rival. The option of loaning him to another team was discussed, but McLaren's options were limited, and its exclusive engine deal means it cannot farm out drivers to customers in the way Mercedes or Ferrari can.

By promoting Vandoorne while retaining Button's services, McLaren now has an insurance policy against Alonso walking away when his own contract expires at the end of next season. For now, that remains Button's best hope of returning to F1 in 2018.

Massa harbours no such latent ambitions it seems. Williams made little secret of its desire to shake up its driver line-up for 2017 — witness the courting of Button's services until he made his decision to stick by McLaren-Honda — which meant there was always little chance of Massa being retained.

His management encouraged him to look elsewhere and extend his F1

career and, although Massa spoke during the year about wanting to stay with Williams — or at least elsewhere in  $F_1$  — he now says he was never serious about continuing.

"I never really pushed the team to talk about the future, because I decided I was ready [to retire]," he tells Autosport. "I started to think about it after Budapest [in July], and I decided in Germany 100%."

On whether Williams's desire to sign another driver played a part in this, Massa adds: "Maybe there was a possibility, but I didn't know if I wanted to stay either. It was more or less together, and I think it was the right time to decide."

Massa seemed rejuvenated after leaving Ferrari for Williams at the end of 2013. So maligned in his latter years at Maranello, suddenly he felt wanted again — an experienced, race-winning driver Williams could bank upon as an important reference in the early stages of plotting its recovery from a serious competitive slump.

But three years later times have changed. Valtteri Bottas has become the new reference point, a Williamsnurtured talent who has flourished



Massa (top) has found himself in the shadow of Williams rising star Valtteri Bottas

into the team's top performer. This season has easily been the weakest of Massa's three relative to the young Finn, and the sheer intensity of top-level professional sport means no-one can afford to second-guess themselves.

Button is still working through that process, not totally sure which side he will end up on. He has bought himself more time to ponder, but for Massa this really is goodbye. Formula 1 will remember him fondly. \*\*

# Vandoorne scored on his F1 debut

# THE CHANGING OF THE GUARD

FORMULA 1 STANDS STILL FOR NO-ONE, and as it bids farewell to Jenson Button and Felipe Massa so it welcomes two new young guns into the fold in their stead.

F1 already knows plenty about Stoffel Vandoorne, who has competed in a grand prix for McLaren-Honda, scoring a point for 10th place after an accomplished debut deputising for the injured Fernando Alonso at this year's Bahrain Grand Prix.

The case for Vandoorne's promotion to a full-time race seat was growing ever stronger, to the point where McLaren simply had to act or risk losing his services altogether.

Having dominated GP2 in 2015, then become a race winner with an unfancied team in Japanese Super Formula this year – as well as outqualifying Button and scoring that point in Bahrain – Vandoorne could do no more to convince his employers of his worth. McLaren heeded the call, and Vandoorne now has the chance to show what he can do regularly on the biggest stage of all. His promotion is utterly merited.

Lance Stroll's case is more controversial. The Canadian son of a retail billionaire is already lumbered with the toxic 'pay-driver'



Stoffel Vandoorne



Lance Stroll

tag, despite the fact that he will arrive in F1 next year as the reigning European Formula 3 champion.

This is the competitive justification Williams uses for employing Stroll, but it's no secret his backing is part of the appeal for a team that cannot compete financially with F1's manufacturer-backed big dogs.

Nobody wins a championship like European F3 without some real ability, and Stroll has prepared well by ensconcing himself within the team's HQ and cutting testing laps in a 2014 car. It's up to him to prove the naysayers wrong, and show he belongs in this world for better reasons than the size of his family's bank balance.

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It's tough to get noticed in motorsport, but it's hard to find a better stage to showcase talent than the Pirelli World Challenge.

Due to enter its 28th season in 2017, the World Challenge has marked itself out as one of North America's most popular and competitive championships for both professional and amateur drivers.

Across its three divisions for Grand Touring [GT3, Cup and GT4] and touring car classes, the series boasts one of the richest pools of manufacturer projects anywhere in the world.

As the first sportscar class in America to adopt both the GT3 and GT4 global formats, the World Challenge has enjoyed a greater number of original equipment manufacturer entries than any other category globally. Almost every brand of homologated GT3 car has competed at some stage, and the growing GT4 category shows every sign of being just as popular. Both the World Challenge's GT3 and GT4 classes run in accordance with SRO's Balance of Performance equalisation system.

The Sprint X category was also new for this year. This allows two drivers to share a GT car across a longer race, following the Pro-Am format that has proven successful in Europe.

"We've always had a close relationship with manufacturers," says Greg Gill, CEO of World Challenge organiser, WC Vision.

"We adopted the global standard of GT3 in 2014 and GT4 this year, and given those brands the stage on which to display their products around North America. Manufacturers want a level playing field, and by partnering with SRO we provide that for them.

"We also have great diversity in our customer base – with a good mixture of professional drivers, aspiring career drivers and enthusiastic amateurs who are just starting out in their careers."

Gill was quick to thank the efforts of World Challenge Director of Competition Marcus Haselgrove and his team in engaging and working with the most diverse group of manufactures in the world.

That diversity is marked from the top of the classes to the bottom, with factory involved programmes from premier brands such as McLaren, Cadillac and Bentley in the GT ranks, to efforts from Mazda, BMW, Honda and KIA in the touring car classes.

The mass factory interest means that, whichever category you contest, there's the chance to perform in front of major brands.

The World Challenge is also keen to promote its rising talents, and help them progress through the ranks. A scholarship scheme operates, helping to subsidise successful touring car drivers to make the move up the ladder toward the top classes. A prize package of entry fees is available for each TC class winner.

"We've worked to develop the racing ladder concept," adds Gill. "We have not, and will not, lose sight of the fact that we are predominantly a customer racing championship, and the scholarship is a nice way of giving some value back.

"With this structure we have a place where a novice can come in at the bottom and has a shot at working their way up to become a professional racing driver in one stable environment.

"The TC classes are what the World Challenge was founded upon and they are the place where you can race anything from stock, production cars to full TCR-spec machines for sensible budgets. We may have embraced GT3 and GT4, but TCR is also a big area of growth."

The Pirelli World Challenge already boasts strong media coverage, with races available on live TV across North America and also streamed live across the world.

"We always say the reward for doing a good job is to be able to do a bigger and better one," adds Gill. "We have a committed team and work daily to grow and improve the World Challenge. We recognise that there is a tremendous diversity in what people want to do and achieve, and we'll keep working hard to help build a place where they can fulfil their aims."







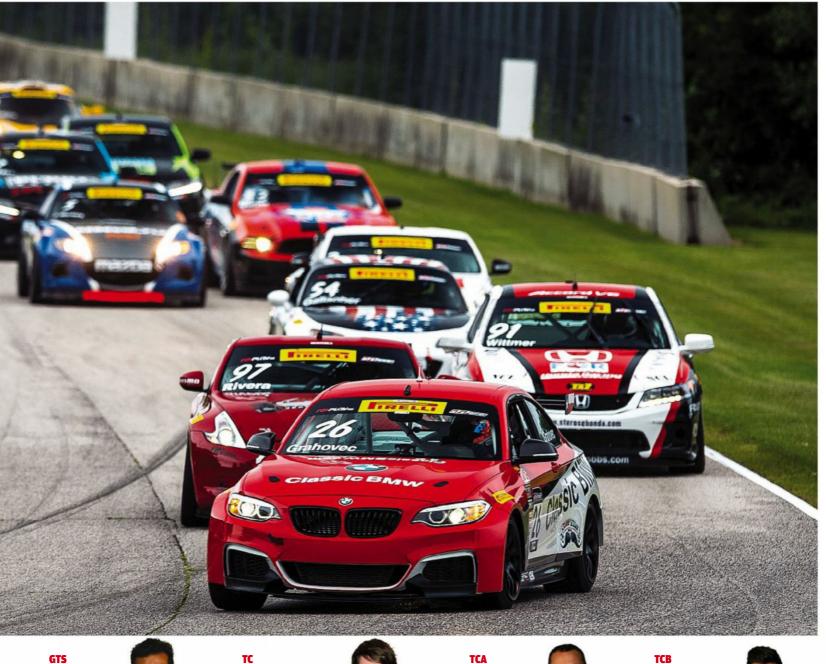


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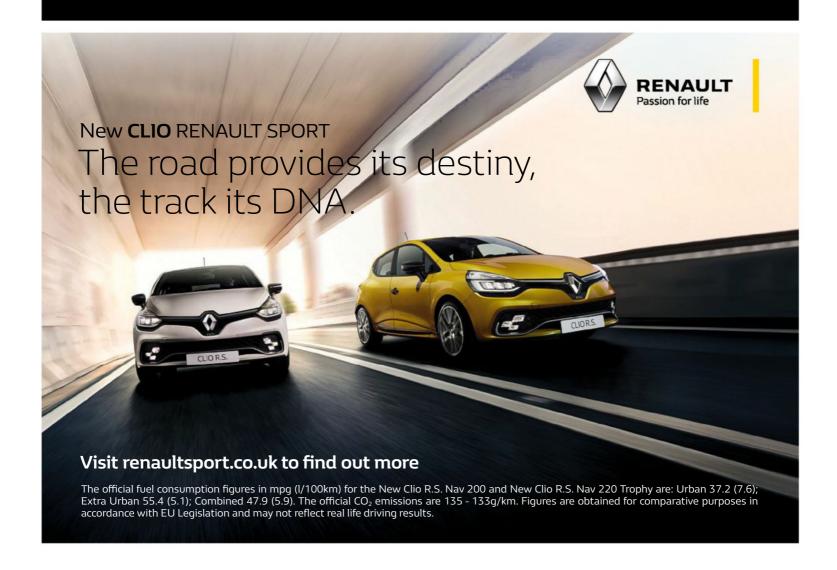










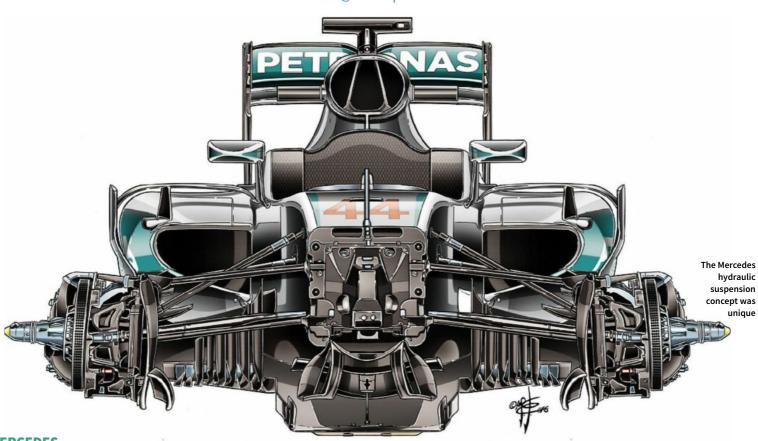


# Gary Anderson's review of the season

Autosport's resident grand prix-winning designer and former technical director runs the rule over the 11 teams that battled it out in 2016

# By Gary Anderson, Technical Expert

**y** @autosport



# **MERCEDES**

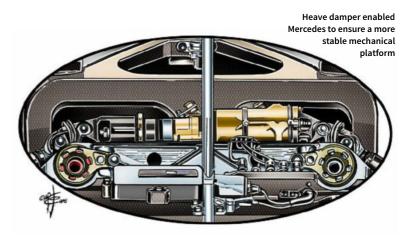
Mercedes completed the total domination of this era of regulations with its most impressive season in terms of results, winning 19 out of 21 races and never being beaten to victory on pure pace. That's hugely impressive, even though you could say that other teams dropped the ball in terms of development.

Usually, you would expect things to close up as a rules package matures. But looking at our 'supertime' figures, calculated by taking each car's fastest single lap of a grand prix weekend as a percentage of the best outright lap, and then averaging it out over a

season, Mercedes is not much less further ahead now than it was for the first year of the 2.4-litre V6 turbo era in 2014.

Then, it had a 0.881% advantage over the next-fastest team, which was Williams. Last year, the gap closed to 0.703%, with Ferrari moving up to second, but this year the advantage was back up to 0.842%, this time over Red Bull. That's hardly a transformation.

The car clearly works very well through a wide range of conditions. It's strong over the kerbs and has a very stable chassis on track, which is partly down to the fully hydraulic front end. The heave damper >>>



(a lateral damper in the front suspension) is used to control the ride height - with a similar system at the rear. Its rivals use springassisted third dampers.

But there is no magic bullet; this level of performance is generated by the whole car. Mercedes also has a very strong aerodynamic package that works well at all circuits, harnessed to the best power unit on the grid.

# **RED BULL**

The 2015 season was a terrible one for Red Bull, as poor results and a deteriorating relationship with Renault led to public ructions between the partners. But Red Bull got its act back together this year, and this has led to an improvement in the chassis on top of the gains made by the Renault (or, as we're supposed to call it, the TAG Heuer) hybrid power unit.

But you have to ask who else with a Renault power unit has achieved respectable results? There isn't anyone. Red Bull is still facing a power shortfall, since the Ferrari package is clearly ahead.

This isn't just a problem in terms of the pure performance of the engine – it also has knock-on effects. In order to minimise the deficiency in top speed you have to trim your downforce levels away from your ideal, so that compounds the disadvantage. And next year that could be an even bigger problem because there's going to be increased downforce and therefore more drag.

Overall, Red Bull did a good job with two wins and 16 podiums and remains best placed to overhaul Mercedes next year.



# **FERRARI**

Heading into the season, Ferrari was the team Mercedes had to fear. It won three races in 2015, made a big step forward and should have been ready to snap at the heels of Mercedes. But it wasn't. All we saw were occasional glimpses of performance, but not enough to win a race, and an awful lot of talk.

The car has seemed to struggle in higher ambient temperatures. It's not clear why but the first place I would look is the diffuser, because the way it produces its downforce will change with temperature. If you have a more sensitive aerodynamic package, you have a problem.

When it gets hotter, you can suffer diffuser stall at a higher rideheight, so it's possible Ferrari's diffuser is too critical to work in a wide range of temperatures. That

means you have to set the overall rideheight higher, so vou don't get down to the point at which it stalls when the rear is pushed down by higher aerodynamic load.

But the fundamental problem seems to be that there is nobody there who is willing and able to take the team by the scruff of their neck, so it's like the 'old' Ferrari that underachieved before Jean Todt came in and built up towards the era of dominance with Michael Schumacher.

A diffuser modification in Hungary (old version far left) aimed to improve consistency with a new flap designed to compress the airflow and accelerate it towards the diffuser footplate Ferrari also lost technical director

James Allison this season, which is a setback. There's a lot of pressure from the top there, so do those at the top of the company think they know more about how to win in F1 than Allison?

Ferrari has gone backwards this year and some big changes will have had to have been made already if it's to make the most of next year's proverbial clean sheet of paper. With higher grip levels, and shorter braking distances because of the increased tyre grip, it's going to put a major strain on the brakes as well as further demands on the aero. Is Ferrari equipped to get on top of all of that?

Sebastian Vettel's performance level was also erratic, so even though Kimi Raikkonen surprised with the consistency of his performances in the second half of the season, there are also question marks there.



When you consider the available resources, you'd have to say Force India is the team of the year by moving up to fourth in the constructors' championship. It's taken a long time and a lot of hard work to get there, but fourth is a fantastic reward for this team.

Going beyond that will require one of the top three to drop the ball in quite a big way, and it will also require serious investment. Force India's strength has been its efficiency – an ability not to waste and to get the most out of everything it does. But to make that next step it is going to need more money to spend on development.



Once the major upgrade package was introduced for the Spanish Grand Prix in May, Force India performed strongly and was able to overhaul Williams

### **WILLIAMS**

This team has been on the slide since jumping up to third in the constructors' championship at the start of 2014. The key problem seems to be that some of the upgrades introduced didn't deliver the anticipated improvement.

The concern is whether the team truly understands the reasons. It seems the front wing, which affects the performance of the entire car aerodynamically, is the area where things were not quite right even though details like the nose shortened by 50mm (below) introduced in Russia, show some good, sound engineering.

But it's a team that doesn't have the same resources as Mercedes, Red Bull or Ferrari, so hanging on to third place in the constructors' championship was always going to be tough. But a strong start next year is now essential.

year is now essential.

## **McLAREN**

McLaren is hard to understand. Fernando Alonso has been driving the wheels off the car and delivered some good results, while Jenson Button often struggled to get the car working the way he wanted it. But, overall, while McLaren improved, it's still a long way off.

The 'blame' for the performance probably goes 75% to the Honda side and 25% to the McLaren side. But remember, by setting such aggressive packaging targets in 2015, McLaren put Honda in a position where it struggled to find its feet. On top of that, while the chassis was strong on certain circuits, it doesn't appear to have the kind of operating window a good, all-round car needs.



complex front wing shows the high level of its aero department

Force India's

McLaren-Honda is going in the right direction, but not as quickly as it should do and there is still a very long way to go.

# **TORO ROSSO**

Toro Rosso had a difficult end to the season. But while that was always going to happen, given it was running the 2015 Ferrari power unit, it did make some trouble for itself by seemingly having accepted it was going to be tough.

Look at the problem you had with the tyres (parts of the car fouling the tyres) in Abu Dhabi, for example. How can you have that

and not understand why? So that is a concern in terms of what it says about the team.

But on the plus side, Toro Rosso produced a car that was strong aerodynamically. Technical director James Key I rate highly because he's got a very clear idea of what a team needs to do to reach its targets.

## HAAS

For a first-year team, Haas did a very good job. It's been a long time since we've seen a new team get anything like these kinds of results and it made the most of the support it got from Ferrari to establish itself as a proper team straight away.

There are clearly many areas where more learning is required. I don't understand how it can have had so many brake-system problems without something serious being wrong, and performance was not as consistent as you would like, but perhaps those things are to be expected.

It'll be interesting to see what happens next year. The first season can, in some ways, be easier than the second, so that will be the true test of Haas. The team claims to have focused on the 2017 car

during this season, so let's see how that actually plays out.

### **RENAULT**

It's hard to evaluate Renault's season. Given the late start — thanks to Renault's delayed takeover, and the need to alter the car to take its engine having been based on the Mercedes — this was always going to be a difficult year. The focus was bound to be on hitting the ground running in 2017.

So the only way we can tell whether Renault has done a good job is by seeing where it is in the early races next year. The RS16 car clearly wasn't a good one. It wasn't the slowest, but it was hard to drive and poor over bumps.

# **SAUBER**

Sauber's year was compromised by its financial problems, until the arrival of new owners turned on the development taps again. But the fact is it still had to rely on the fortuitous circumstances of a wet

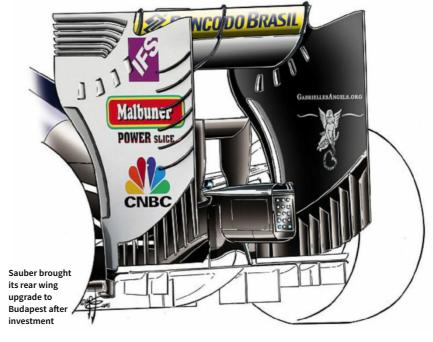
race in Brazil, with Felipe Nasr driving very well to ninth place, to beat Manor in the points.

It's difficult to know how tough it was inside the team, but there never seemed to be an acceptance of where the car was, and on getting the maximum out of it. Sauber should have been able to battle Renault but wasn't able to.

# **MANOR**

The car seemed to be a good, solid package and worked well for the drivers, even if it didn't have the ultimate performance thanks to a lack of downforce. Considering where the team was last year, this was a good step and allowed it to be a genuine rear-of-the-midfield contender for the first time.

That it missed out on 10th place in the constructors' championship is unfortunate, and will surely have a financial impact on the team for next season. That's a shame as Dave Ryan, who came in as team principal, has got it working well.



# How struggling Sauber was saved

It spent the first half of the year focused more on securing long-term survival than points, before Longbow Finance bought the team in July

# By Lawrence Barretto, F1 Reporter





auber was in a bad place at the start of 2016. It had a major cashflow problem and was struggling to attract sponsorship. For four successive months, staff had not been paid on time. Felipe Nasr's and Marcus Ericsson's backers were keeping the team afloat.

Felipe Nasr's and Marcus Ericsson's backers were keeping the team afloat.

There was uncertainty among employees, who had bills to pay and families to feed.

Technical director Mark Smith left on the eve of the season. Head of track engineering Tim Malyon was off a month later. On track, the situation was just as bleak. The C35 that started the season was almost identical to the car that rolled out in testing, was off the pace and the money wasn't there for upgrades.

Team principal Monisha Kaltenborn was pushing for new investment, holding countless meetings with Swiss, Russian and Middle Eastern investors, but progress was slow. Then, in July, Peter Sauber and Kaltenborn gathered staff at the team's Hinwil base and delivered the news they had been so desperate to hear: Sauber was saved.

Longbow Finance, a Swiss-based investment company, had stepped in as the new owner. Details were sketchy, but it was clear a cash injection would be provided. The Sauber company and name remained, with Kaltenborn staying as team principal. However, she and Sauber had to give up their shares, of which they held a third and two-thirds respectively. It brought to an end Peter Sauber's involvement with a team he had brought into Formula 1 in 1993.

"We are thankful that we have new owners who have shown, in such difficult financial times, a trust in us and a willingness to secure the Sauber brand," said Kaltenborn at the time. "It's a relief. I'm grateful they saw the strengths in the team. These people coming in, they are giving the staff security and the motivation is there to work again. You can see it in their body language."



At one point Sauber was relying on Nasr's and Ericsson's backers to keep the team afloat Pascal Picci, president and CEO of Longbow Finance, succeeded Sauber as chairman of Sauber Holding AG. Picci attended a couple of races towards the end of 2016, and is believed to have links with Ericsson's backers.

"Longbow has a long-term plan," says Kaltenborn. "They have come in here and seen the potential of the Sauber group of companies. One part of it is the team and the plan is to stabilise and then grow where





# "The C35 started the season off the pace and the money wasn't there for upgrades"

necessary. The second is to grow our third-party business, offering more projects. A lot of things we couldn't do because we needed to know what the future of the company is like."

So far, Longbow has shown it is willing to invest in the team, with updates that had been sitting on the shelf for months pushed into production soon after the sale was completed. Encouragingly, developments continued while plans for 2017 were put back on course. There is now an expectation that the team's new challenger will be ready in time for pre-season testing.

The team has also gone on a strategic recruitment drive, adding staff in areas where it is weak and short-staffed. This includes new technical director Jorg Zander, who joins from Audi, head of aerodynamics Nicolas Hennel de Beaupreau and race strategist Ruth Buscombe.

Sauber elected early this year to use a year-old Ferrari engine next term, as it would allow the team to develop the 2017 car to the new regulations knowing what engine specification and packaging it would have. Key to making this strategy work will be taking advantage of points-scoring opportunities in the early races before the performance deficit really starts to bite.

The suggestion from inside Sauber is that Longbow is in it for the long haul. Ultimately, Sauber is an investment, so it's in Longbow's interest for it to succeed. That success will take time, as was the case with Mercedes and Red Bull. Small teams can make an impact, too, as Force India has shown.

Outside of F1, there is a push to expand Sauber's third-party business in the form of its state-of-the-art windtunnel, which is rented out to a string of clients. Audi is believed to be one, using the facility for its DTM and Formula E programmes. It has also been used in the past for bobsleigh development, while two-wheel companies have also made enquires. Maximising its use will only serve to strengthen the F1 team, as it will shore up its finances, although the closure of Audi's LMP1 programme will mean there is some business to replace.

The relief was palpable when Sauber scored its first points of the season



Team boss Kaltenborn has confidence in the new owner's longterm commitment in Brazil in November, lifting it above Manor into 10th in the constructors' championship. Had it finished 11th, it would have missed out on the prize money for finishing inside the top 10. In 2015, 10th place earned \$13.5million, rising to \$63.5m for first.

Sauber's new owners will have known that was a realistic possibility when they took over and are believed to have planned accordingly. Fortunately, the team avoided that scenario. It still faces a battle to turn its fortunes around, but Sauber has been here before and survived. There's no reason why it can't do so again.



# Political review

Long-running arguments over money and engines raged on, even as the sport was sold to an American media powerhouse

# By Dieter Rencken, Special Contributor

**梦** @RacingLines

"Safety-car starts in

unwelcome feature"

wet conditions were an

olitics is defined in the dictionary as "the study or practice of the distribution of power and resources within a given community (usually a hierarchically organised group)". That's a particularly apt description when looking back on 2016, for not only did the season begin with power (units) at the top of the agenda, but Formula 1's hierarchy ultimately forced a resolution to the ongoing tug-of-war over engine noise, performance balancing and costs.

This is significant, because it represented a break from FIA president Jean Todt's usual modus operandi, since he prefers to reach a consensus between warring parties. Sometimes it works, sometimes not — but on this occasion it was incumbent upon the Frenchman, working in cahoots with Formula One Management CEO Bernie Ecclestone for a change, to break the stranglehold the manufacturer teams held over F1 through their engine-supply agreements to privateers. It's a sign of the

power those manufacturers were beginning to wield that Todt and Ecclestone had to work together to impose a workable settlement.

The matter dragged on until May, even though a deadline of the end of February was enshrined in

the regulations. Discussions were postponed by a month while the 2017 chassis regulations firmed up, and by a further month while the technical specifications of the '17 power units went back and forth — and yet Mercedes continued to believe it could derail the process by confusing the two components sets, while Ferrari banged on about its veto.

The FIA eventually won through after receiving a World Motor Sport Council mandate, and F1's regulations — including the associated engine supply/cost agreements, which were so important to Todt and Ecclestone — are basically set in stone through to 2020. Although Mercedes continues to air opposition, Ferrari has gone stumm, a welcome by-product, many believe, of its dismal on-track performance.

Voting by F1 Commission members was, though, by e-vote, and this set an unwelcome precedent in that it stifled potential debate during Commission meetings, where independent teams, promoters, technical and commercial partners — all excluded from the hallowed hall of the Strategy Group — at

least had a platform. It cannot be coincidental, either, that the two lowest-ranking teams sought investors during the year.

"The F1 Commission, where all teams are represented, has been rendered redundant to facilitate the passing of the 2016 engine regulations via e-mail voting, a practice which prevents open discussion and now appears to be the favoured method to secure future performance and sporting regulation approvals," is how one (disenfranchised) team boss described the situation.

However, the manifest failings of the Strategy Group process had been exposed once again even before the engine vote. Before the beginnning of the season, in fact. For that is when its members — including six team bosses, as well as representatives from the FIA/FOM — agreed (unanimously, we understand) to adopt "elimination qualifying". It was then fast-tracked through the final stages of regulatory ratification, the F1 Commission and the WMSC.

After warnings from all and sundry — including team strategy engineers, who instantly predicted the farcical scenes that ultimately transpired — it was an unmitigated disaster.

The beginning of a new racing season should arrive on a wave of enthusiasm, but instead the news agenda — including the mainstream one — was dominated by this very public failure. To compound matters, the powers-that-be insisted on

tickling the concept around the edges, rather than gracefully admitting failure and scrapping it post-haste.

Although the matter was quietly put to bed by the third race of the season, regulatory inconsistencies lingered through to the final round. Since agreements were in place to reduce or waive penalties for minor transgressions, this should not have happened. And yet it did. Matters reached a nadir when Nico Rosberg in Hungary set his fastest qualifying lap under double-waved-yellow flags, yet retained pole position.

After that race it was announced that, in future, qualifying would be instantly red-flagged in situations that would previously have merited double-waved yellows. And yet four races later, in Singapore, yellows were out in force during qualifying and Sergio Perez was heavily penalised for a breach.

Certainly, inconsistencies do F1 no favours, particularly when some drivers are docked 10 seconds for "tapping" another, but others are sanctioned half that for nerfing a rival out of the race entirely. Equally, penalties for breaching track







limits were applied elastically, the classic being Lewis Hamilton missing the first corner in Mexico, yet escaping unpenalised. Off, surely, is off?

Safety-car starts under wet conditions were again an unwelcome feature of the season, as arguments raged back and forth over whether Pirelli's wet tyres were suitable only for moderately wet conditions, or whether the specification had been designed around safety-car starts in the first place. It was a chicken-and-egg situation that promoted circular debate.

In the end it was agreed that standing starts — after exploratory laps by the safety car — would become the rule, but only from 2017. Why not immediately, given the haste with which other rule changes are forced through? We also understand that in Abu Dhabi, team bosses agreed on the principles of standing starts after all safety-car phases, but first the proposal needs to pass Strategy Group muster.

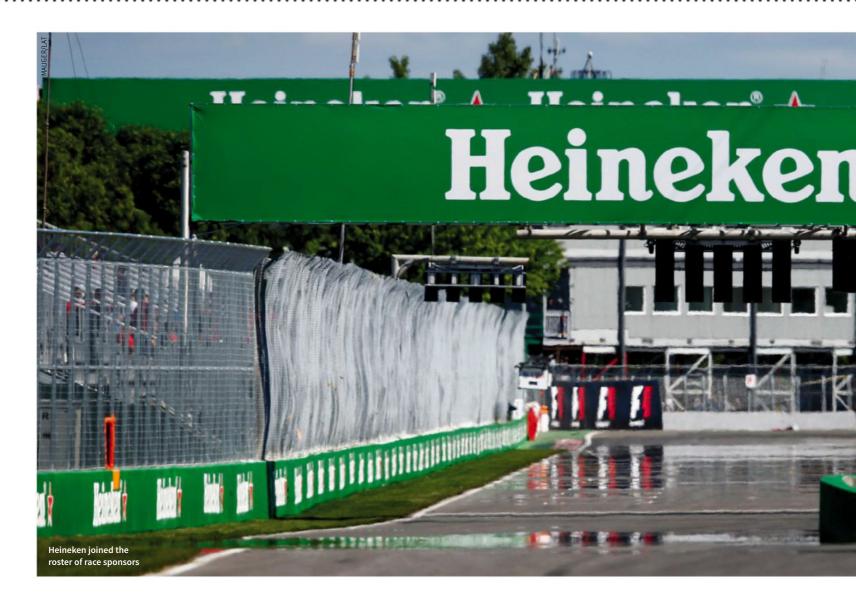
Another idea that went on the backburner after much debate, and in spite of the FIA's determination to introduce

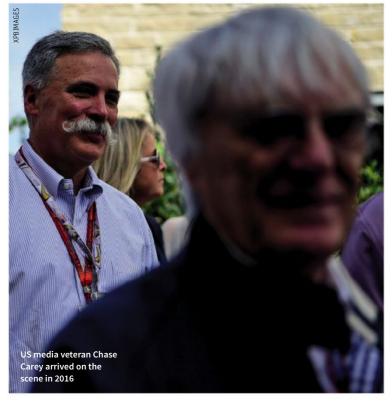
the philosophy in 2017, was any form of cockpit protection, whether the unsightly "halo" or a canopy of some sort. To date, 23 drivers tested the yoke-shaped "halo", with comments ranging from the good through the indifferent to anti, and, while most agree that some form of protection is necessary, the means of protection remains up in the air, so to speak.

While certain factions see the delay as defeat for the FIA, it points to politics at its best. Although the governing body could have forced through a device under its safety mandate, it acted democratically while an improved and more aesthetically agreeable solution can be found. To its credit the FIA unfailingly continued its quest of persuading drivers of the benefits of cockpit protection; virtually all are now in favour.

Forgotten in all this excitement is that F1's regulations expire in 2020, and that the last major change was devised in 2009, though not introduced until 2014. Thus four years remain to frame F1's post-2020 future — a significant date, as team commercial agreements expire then too — yet the >>>

The political scene was dominated by the battle of the 'haves' versus 'have nots'





Strategy Group, whose responsibility it is to steer strategic matters, appears blind to this reality.

Other battles for power played out more publicly. Take the struggle between Lewis Hamilton and... well, choose the party: Mercedes and its executives (variously, including on-air disobedience during the season finale); the media (British and otherwise); the FIA (as evinced by truculence during press conferences); and of course his team-mate. That he escaped meaningful sanction in all instances suggests he runs both F1 and his team, and knows it...

That said, Hamilton managed to retain his place within the team, unlike his former mentor and team boss Ron Dennis, who was unceremoniously placed on gardening leave by fellow shareholders of the McLaren team he once led to great heights.

The sense of insecurity and unease within the sport extended to the negotiations for the new calendar, which continued through to seconds before the final WMSC meeting of the year. A first draft was aired in late September — 2016's 21-round listing was revealed in March last year — while the number of endangered events was at one stage said to be five, potentially making for a 16-race calendar. The final version runs to 20 races, but this uncertainty raises questions about F1's ability to expand globally.

Significantly, that the final calendar avoids a clash with the Le Mans 24 Hours is down to Hockenheim's steadfast refusal to step into the breach caused by Nurburgring's liquidation sale, and a subsequent need to reshuffle dates to prevent yawning gaps in July. It is not any hint of benevolence towards WEC by F1's commercial masters...



# "Liberty Media was just one of several potential suitors"

That point neatly introduces F1's biggest off-track story of the year: the takeover of the sport's commercial rights by Liberty Media Corporation (LMC), a NASDAQ-listed American entity steeped in, as its name implies, media activities and events. It is also an associate of broadcast giants Discovery and Liberty Global, both investors in Formula E.

A deal had long been mooted, and LMC was just one of several potential suitors, but the speed with which it all came together surprised even insiders. The first Stock Purchase Agreement had LMC acquire 18% of F1's shares; after the second, which needs to be completed by June 30 2017, LMC will gain full control in terms of shareholder covenants.

Crucially, F1's present controller, CVC Capital Partners, remains on board as representative of its fund holders, while LMC appointed US media veteran Chase Carey as chairman to oversee the transition. The key date is the end of June or LMC risks losing control, and already there are rumours of massive disputes between Carey and Ecclestone. Folk wonder whether this is Ecclestone's last throw of the dice.

Thus 2016 ends in escalation: having opened with polemics over power units, it closes over power to control F1.

# HOW THE QUALIFYING FARRAGO HAPPENED

F1'S ELIMINATION QUALIFYING fiasco, mercifully scrapped after two races, proves precisely how dysfunctional the Strategy Group – the concept of which lies at the root of all that is so convolutedly wrong in the sport – really is, and why the entire governance should be scrapped forthwith.

The proposal sprang out of promises by Ecclestone to fix what he described as "the worst F1" he had ever seen. The intention was to shake up the grids and, by extension, the action. He proposed (and had it all but approved by Strategy Group members) the concept of one-hour sprint races on Saturday afternoons to decide the grids for the Sunday feature races.

The TV companies squealed, since breaks between qualifying's three sessions provide lucrative advertising streams. But, since Ecclestone had made public undertakings to fix the supposed problem with the spectacle, Plan B – aka "elimination qualifying" – was forced through. It was immediately decried by virtually the entire paddock, including team bosses on the Strategy Group who had voted for it in the first place!

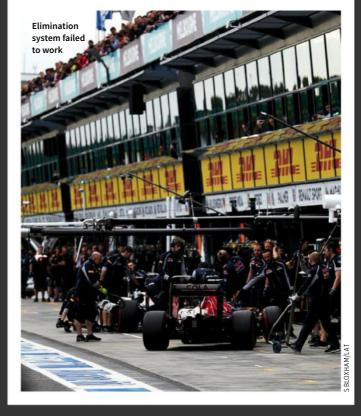
Still, it was too late to U-turn, even though FOM's computer

boffins suggested it would require three months to sort the on-air graphics, so the format went ahead in Melbourne, where it proved every bit as disastrous as predicted. An emergency meeting was called immediately after the race, and those present agreed to revert to the tried-and-trusted format.

However, that decision still had to be ratified by the Strategy Group, the F1 Commission and the World Motor Sport Council. While that was in progress, other ideas arrived on the table, including an aggregate knockout qualifying system (based on drivers running two timed laps), and a hybrid format in which Q1 and Q2 ran to the new procedure while Q3 remained 'sudden death'.

The teams came to their senses and rejected these proposals, so only Bahrain was saddled with elimination qualifying. This time, though, without the saving grace of the thrilling race Australia had (coincidentally) delivered.

Finally, shortly before the Chinese Grand Prix, all 11 teams wrote to Ecclestone, Todt and commercial rights holder CVC Capital Partners "demanding" that F1 revert to the traditional format. Change was effected within a week – proving that it can be done...



# Year in numbers

All the key statistics from the 2016 season

# Compiled by forix.autosport.com

DRI	VERS' STAN	DINGS	5																				
POS	DRIVER	AUS	BRN	PRC	RUS	E	мс	CDN	E	A	GB	н	D	В	1	SGP	MAL	J	USA	MEX	BR	UAE	PTS
1	Rosberg	1st	1st	1st	1st	ret	7th	5th	1st	4th	3rd	2nd	4th	1st	1st	1st	3rd	1st	2nd	2nd	2nd	2nd	385
2	Hamilton	2nd	3rd	7th	2nd	ret	1st	1st	5th	1st	1st	1st	1st	3rd	2nd	3rd	ret	3rd	1st	1st	1st	1st	380
3	Ricciardo	4th	4th	4th	11th	4th	2nd	7th	7th	5th	4th	3rd	2nd	2nd	5th	2nd	1st	6th	3rd	3rd	8th	5th	256
4	Vettel	3rd	DNS	2nd	ret	3rd	4th	2nd	2nd	ret	9th	4th	5th	6th	3rd	5th	ret	4th	4th	5th	5th	3rd	212
5	Verstappen	10th	6th	8th	ret	1st	ret	4th	8th	2nd	2nd	5th	3rd	11th	7th	6th	2nd	2nd	ret	4th	3rd	4th	204
6	Raikkonen	ret	2nd	5th	3rd	2nd	ret	6th	4th	3rd	5th	6th	6th	9th	4th	4th	4th	5th	ret	6th	ret	6th	186
7	Perez	13th	16th	11th	9th	7th	3rd	10th	3rd	17th	6th	11th	10th	5th	8th	8th	6th	7th	8th	10th	4th	8th	101
8	Bottas	8th	9th	10th	4th	5th	12th	3rd	6th	9th	14th	9th	9th	8th	6th	ret	5th	10th	16th	8th	11th	ret	85
9	Hulkenberg	7th	15th	15th	ret	ret	6th	8th	9th	19th	7th	10th	7th	4th	10th	ret	8th	8th	ret	7th	7th	7th	72
10	Alonso	ret	-	12th	6th	ret	5th	11th	ret	18th	13th	7th	12th	7th	14th	7th	7th	16th	5th	13th	10th	10th	54
11	Massa	5th	8th	6th	5th	8th	10th	ret	10th	20th	11th	18th	ret	10th	9th	12th	13th	9th	7th	9th	ret	9th	53
12	Sainz	9th	ret	9th	12th	6th	8th	9th	ret	8th	8th	8th	14th	ret	15th	14th	11th	17th	6th	16th	6th	ret	46
13	Grosjean	6th	5th	19th	8th	ret	13th	14th	13th	7th	ret	14th	13th	13th	11th	DNS	ret	11th	10th	20th	DNS	11th	29
14	Kvyat	DNS	7th	3rd	15th	10th	ret	12th	ret	ret	10th	16th	15th	14th	ret	9th	14th	13th	11th	18th	13th	ret	25
15	Button	14th	ret	13th	10th	9th	9th	ret	11th	6th	12th	ret	8th	ret	12th	ret	9th	18th	9th	12th	16th	ret	21
16	Magnussen	12th	11th	17th	7th	15th	ret	16th	14th	14th	17th	15th	16th	ret	17th	10th	ret	14th	12th	17th	14th	ret	7
17	Nasr	15th	14th	20th	16th	14th	ret	18th	12th	13th	15th	17th	ret	17th	ret	13th	ret	19th	15th	15th	9th	16th	2
18	Palmer	11th	DNS	22nd	13th	13th	ret	ret	15th	12th	ret	12th	19th	15th	ret	15th	10th	12th	13th	14th	ret	17th	1
19	Wehrlein	16th	13th	18th	18th	16th	14th	17th	ret	10th	ret	19th	17th	ret	ret	16th	15th	22nd	17th	ret	15th	14th	1
20	Vandoorne	-	10th	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
21	Gutierrez	ret	ret	14th	17th	11th	11th	13th	16th	11th	16th	13th	11th	12th	13th	11th	ret	20th	ret	19th	ret	12th	0
22	Ericsson	ret	12th	16th	14th	12th	ret	15th	17th	15th	ret	20th	18th	ret	16th	17th	12th	15th	14th	11th	ret	15th	0
23	Ocon	-	-	-	-	-	-	-	-	-	-	-	-	16th	18th	18th	16th	21st	18th	21st	12th	13th	0
24	Haryanto	ret	17th	21st	ret	17th	15th	19th	18th	16th	ret	21st	20th	-	-	-	-	-	-	-	-	-	0

100	ISTRUCTOR	S' STA	ANDIN	GS																			
POS	CONSTRUCTOR	AUS	BRN	PRC	RUS	E	мс	CDN	E	A	GB	н	D	В	1	SGP	MAL	J	USA	MEX	BR	UAE	PTS
1	Mercedes	43	40	31	43	0	31	35	35	37	40	43	37	40	43	40	15	40	43	43	43	43	765
2	Red Bull	12	18	27	0	37	18	18	10	28	30	25	33	18	16	26	43	26	15	27	19	22	468
3	Ferrari	15	18	28	15	33	12	26	30	15	12	20	18	10	27	22	12	22	12	18	10	23	398
4	Force India	6	0	0	2	6	23	5	17	0	14	1	7	22	5	4	12	10	4	7	18	10	173
5	Williams	14	6	9	22	14	1	15	9	2	0	2	2	5	10	0	10	3	6	6	0	2	138
6	McLaren	0	1	0	9	2	12	0	0	8	0	6	4	6	0	6	8	0	12	0	1	1	76
7	Toro Rosso	3	8	6	0	9	4	2	0	4	5	4	0	0	0	2	0	0	8	0	8	0	63
8	Haas	8	10	0	4	0	0	0	0	6	0	0	0	0	0	0	0	0	1	0	0	0	29
9	Renault	0	0	0	6	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	8
10	Sauber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
11	Manor	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

# SUPER GRID (AVERAGE GRID POSITION)





























1267 Ricciardo completed the most racing laps, only one short of a 100% record

3238 Rosberg completed most laps in raceweekend sessions

The red flag appeared four times – twice in the Brazilian GF

33 Rosberg became the 33rd driver to win the world championship

19 Mercedes won 19 out of 21 races – a new record for wins in a season

**21** Rosberg qualified in the top two for every race – but in Austria he didn't start on the front row because of a gearbox-change penalty

**250** Massa's F1 career came to an end after his 250th start in Abu Dhabi

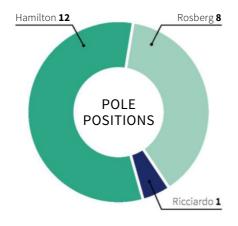
100 Four drivers started their 100th GP: Hulkenberg (Monaco), Perez (Canada), Ricciardo (Germany) and Grosjean (USA)

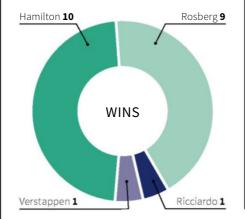
53 Hamilton is now second in the wins list, 38 behind Michael Schumacher

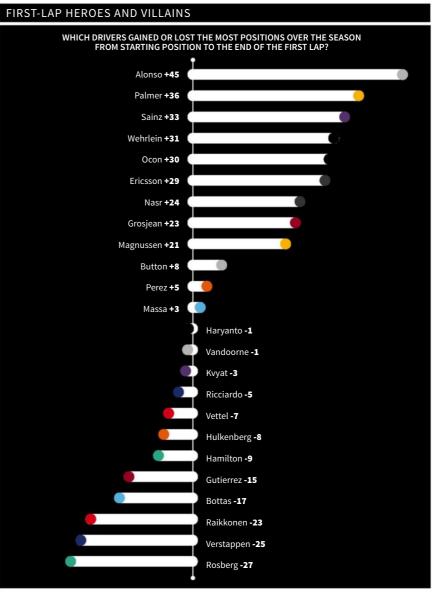
48 Ricciardo made the most pitstops during the season

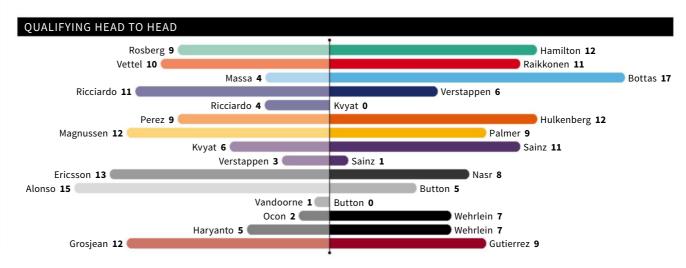
1.92 Williams did a pitstop in 1.92s for Massa in Austria, the fastest of 2016

































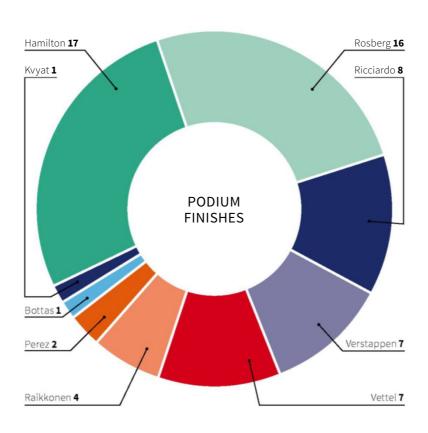


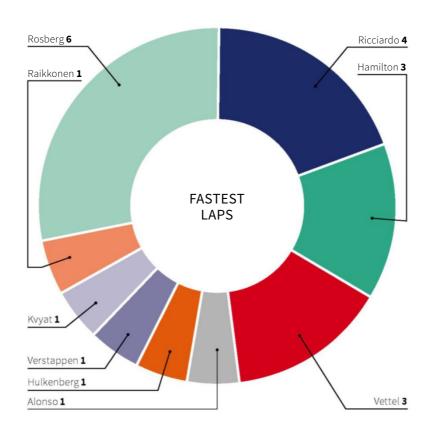


# TEAM PERFORMANCE

Based on taking each car's fastest single lap of each weekend, expressed as a percentage of the overall fastest time, averaged out over the 21-race season



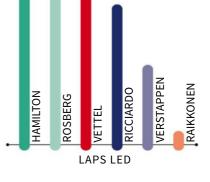




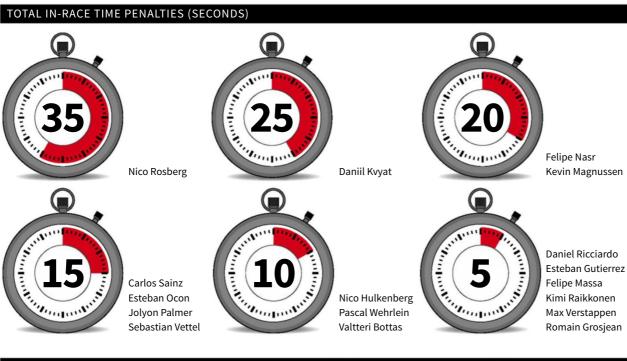
# Hamilton 566 Rosberg 489 Vettel 90 Ricciardo 74 Verstappen 42 Raikkonen 7

# POINTS FINISHES

Ricciardo	20
Rosberg	20
Hamilton	19
Raikkonen	17
Verstappen	17
Vettel	17
Perez	16
Bottas	15
Hulkenberg	14
Massa	13
Sainz	10
Alonso	9
Button	7
Grosjean	5
Kvyat	5
Magnussen	2
Nasr	1
Palmer	1
Vandoorne	1
Wehrlein	1

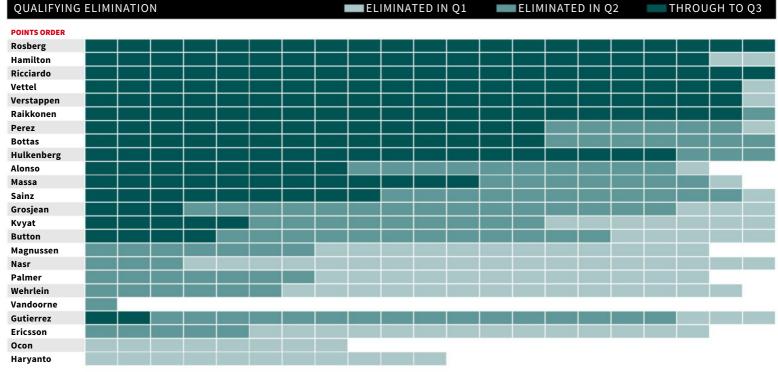


### MOST COMMON RACE POSITION 2nd 4th 6th 8th 10th 14th 16th 20th Raikkonen Ricciardo Vettel **Bottas** Alonso Grosjean Nasr Haryanto Sainz Vandoorne Magnussen 7th 9th 15th 1st Hamilton 11th 13th Ericsson 17th 21st 3rd Perez Massa Rosberg Hulkenberg Button Gutierrez Palmer Wehrlein Ocon Verstappen Kvyat



(TOTAL POSITIONS DRO	PPED)
Fernando Alonso	105
Lewis Hamilton	60
Sebastian Vettel	38
Jenson Button	35
Romain Grosjean	15
Carlos Sainz	13
Marcus Ericsson	13
Rio Haryanto	11
Kevin Magnussen	10
Kimi Raikkonen	10
Sergio Perez	10
Esteban Ocon	8
Esteban Gutierrez	5
Nico Rosberg	5
Pascal Wehrlein	5
Valtteri Bottas	5
Nico Hulkenberg	4
Daniil Kvyat	3
Felipe Nasr	3
Jolyon Palmer	3

**GRID PENALTIES** 





**WORLD RALLY CHAMPIONSHIP** 

# New Hyundai launched

FOR THIERRY NEUVILLE, THE LOGIC WAS entirely clear: the champions have gone, and second in this year's World Rally Championship makes Hyundai favourite for next season as the wraps came off the new i20 Coupe WRC.

But while the world pondered the colour of champion Sebastien Ogier's next set of overalls, his former employer was engaged in last-gasp efforts to breathe new life into its 2017 Polo R WRC programme.

Just hours after the covers were pulled off the i2o Coupe WRC at Monza, Ogier was standing in a room in Vienna putting his hand up for Nico Rosberg's now vacant seat at Mercedes. The FIA's champion's press conference had taken a very different turn following Rosberg's decision to quit. Toto Wolff saw Ogier's hand and smiled: "So, Sebastien Ogier has just put his hand in the air, now we have a completely new and very strong option!"

# Hyundai's new wheels

A strange week in the WRC.

The i20 Coupe WRC is the first of the newgeneration World Rally Cars to be revealed. Covered in scoops and spoilers, it manages the levels of latent aggression FIA president Jean Todt had yearned for. Finally, a World Rally Car to adorn the bedroom walls of the world.

Of all the new cars coming in 2017, the i20 is, however, the least new. There's more carry-over in this car than in most of the others — but that's the only way the Frankfurt-based team could manage.

Team principal Michel Nandan told Autosport: "We had to make it like this. We knew when we were developing the [2016] car, we had the next car in the back of our mind as well."

Nandan sees the opportunity to have tested key parts through this season as a positive going into next year.

"We are heading into a new era for the sport, with the biggest change to the regulations for some time," he added. "It's a great new technical challenge and one that we have tackled with enthusiasm. It's an opportunity to put into practice everything we have learned and experienced in the past three seasons."

Hyundai's Spanish star Dani Sordo is a fan of the car's apparent leanings — in looks at least — towards a race car.



# as VW eyes 2017 Polo privateers

"It's a touring car," he smiled. "I can't imagine it covered in mud."

His colleague Hayden Paddon picked up on that point, adding: "Spain. That's where we're going to see the biggest difference. The asphalt stages in Catalunya are fast, wide and quite like a race track — that's where we're going to see the biggest difference in speed from these cars. And Finland, of course."

"Hyundai

has the best

chance for the

championship"

Paddon is, however, convinced the new car — and new generation — will capture the imagination. And the crowds.

"When we're going through the little villages in the mountains between stages," Paddon said, "passing between

the houses, these cars will really stop people in their tracks. There's no doubt about the fact that they're going to make people look.

"That's something we haven't really had for a while. And that's good, we need that. We need people to wonder what these cars are, we need to attract people — younger people — to the sport and these cars will certainly do that."

# **How much quicker?**

Apart from Ogier's future, the other big question in Italy last week was regarding just how much quicker the new cars will be. In response, engineers fidgeted awkwardly and talked about hydraulic pressure, pre-load and airflow.

Back to Paddon, who squirmed a bit but then did the decent thing and answered the question.

"OK," he said. "I would say it could be as much as a second per kilometre quicker than this year's car in some places. But it depends on the road."

So, that's half a minute quicker through Ouninpohja. Holy smoke, that's moving.

That speed will come from all areas of the car,

including an extra 80bhp under the bonnet (courtesy of a 36mm rather than 33mm restrictor), bigger brakes, improved rear suspension geometry and an active centre differential.

The return to active transmission is new for most of the current drivers, including Neuville.

"I like it," he said. "There's quite a difference with the car, but I feel I've been able to adapt very quickly: it's about bringing the car to you rather than changing your driving to suit the car.

"We have it working very well on the gravel, but maybe there's still a bit more to do on the asphalt. I'm happy though. Hyundai has the best chance for the championship."

# **But what about Volkswagen?**

After being told that the Polo R WRC 2017 was dead, finished, museum-bound, it turns out there may be a chance for it yet.

Francois-Xavier Demaison, the man who built it, said at the Autosport Awards last Sunday night: "We think it's a great car. As long as we have some hope we will try everything."

What VW needs is sufficient private backing for the 2017 season. If it lands that, Volkswagen board member Frank Welsch told *Autoca*r that they could be back in business.

Welsch said: "Lots of teams have been asking to run the [2017] car. At the moment, all I can say is people are interested and we are keeping the possibility open."

As for Ogier's destination for 2017, expect more on that next week.

DAVID EVANS



WEC

# REVISED PORSCHE 919 TEST THIS WEEK

PORSCHE IS CONFIDENT the latest upgrade to its 919 Hybrid concept can be competitive against the newer Toyota TS050 HYBRID in next year's World Endurance Championship.

It believes that it has made significant gains with a 2017 contender that was due to be shaken down this week.

Porsche will go into the season with a major reworking of the second-generation 919 first raced in 2015, which was a complete redesign of the 2014 car. That contrasts with the position of Toyota, which had an all-new car for 2016 and would appear to have bigger gains to make.

Porsche LMP1 team principal Andreas Seidl has revealed that little has been retained for 2017 apart from the monocoque.

"Nearly everything is new around the monocoque and we will do two completely new aero kits [the maximum allowed for next season]," he said. "We are confident that we will make another good step that will enable us to be competitive."

The latest 919 was scheduled to undertake a roll-out at Porsche's Weissach test track this week ahead of its first proper test at the Aragon circuit in Spain next week. Seidl revealed that "70 to 80% of the components will be hitting the road for the first time", and that the full-spec car would test for the first time in February.

GARY WATKINS



WORLD ENDURANCE CHAMPIONSHIP

# Lotterer, Tandy and Bamber in new-look Porsche line-up

PORSCHE'S DECISION TO MAKE WHOLESALE CHANGES to its LMP1 driver line-up for next year's World Endurance Championship was unrelated to Audi's withdrawal. It was looking for a third driver to join the squad alongside newcomers Nick Tandy and Earl Bamber before Andre Lotterer became available on the announcement that its sister marque was quitting the WEC.

That means the decision to drop Marc Lieb and Romain Dumas was taken long before they sealed the WEC title with Neel Jani. Porsche is not discussing why the duo was not retained, although LMP1 team principal Andreas Seidl revealed that Autosport summed up the situation succinctly last week with the line, "the days of a manufacturer retaining drivers based on results rather than the stopwatch is over".

Tandy and Bamber were always at the "front of the queue" to fill any vacancies. Lotterer became Porsche's number one target for the remaining seat upon Audi's withdrawal.

"When there is a driver like Andre available with all his success and the performance he has shown, he was the obvious choice," explained Seidl. "We are very much looking forward to having him on board."

According to Seidl, Bamber has been placed in what will be the #2 Porsche 919 Hybrid next year alongside fellow New Zealander Brendon Hartley and Timo Bernhard, the two drivers who sealed the 2015 WEC title with Mark Webber, who retired at the end of this season. That means Lotterer and Tandy will join Jani in the #1 car.



**FORMULA1** 

# Le Mans and F1 avoid clash

THE LE MANS 24 HOURS WILL NOT clash with an F1 race in 2017 thanks to the renamed Azerbaijan Grand Prix in Baku being put back a week to June 25.

This is as part of a reshuffle of the Formula 1 calendar, which has shrunk from 21 to 20 races owing to the mooted German Grand Prix at Hockenheim dropping off the schedule. This follows a breakdown in talks between circuit promoters and F1 boss Bernie Ecclestone aimed at bringing the event there annually rather than every other year. The Brazilian GP remains on the calendar, although there are still question marks over whether the race will happen. Ecclestone maintains that he is continuing to work on a deal for it to take place.

From the provisional schedule announced in September, Baku's street race has moved back one week to June 25. This also eliminates the logistical and timezone problems the teams

encountered when it followed the Canadian GP this year.

The British GP moves to one week later in July. Singapore was initially pencilled in to run back-to-back with Japan, but it has now swapped with Malaysia to run in mid-September.

The plan to pair Mexico and Brazil has also been abandoned; the United States is now twinned with Mexico again, with Brazil a standalone.

LAWRENCE BARRETTO



FORMULA1

# French GP on for 2018

FORMULA 1 WILL RETURN TO FRANCE after a 10-year hiatus, with a grand prix to take place at the Paul Ricard circuit in 2018.

The head of Provence-Alpes-Cote d'Azur region Christian Estrosi confirmed the race's return during in a press conference on Monday afternoon, after news on the prospective event emerged last week.

Contemporary F1 machinery last took to the track in January of this year, when Ferrari, Red Bull and McLaren participated in a wet-weather tyre test for Pirelli using their 2015 chassis.

The circuit last hosted the French Grand

Prix in 1990, before Magny-Cours took over until 2008, while Paul Ricard was closed for racing between 1999 and the mid-2000s.

France hosted the very first grand prix in 1906, but lost the race just over a century later because of financial difficulties.

It is the second European race to return to the F1 calendar in recent years, following the reintroduction of the Austrian Grand Prix at Spielberg in 2014.

However, the announcement follows the news that Germany has again fallen off the calendar next year (see opposite page).

LAWRENCE BARRETTO

### TOP 3

# French Grand Prix venues

Since it was first held in 1906, the oldest national grand prix has had many homes – and here are the three best



### **CLERMONT-FERRAND**

The twisty, hill-lined circuit in the middle of France had a lot in common with the Nurburgring and held the race four times, in 1965, '69-'70 and '72. But it lost the GP to Paul Ricard



### **ROUEN**

Held the French GP five times, first in 1952 and for the last time in '68. Honda driver Jo Schlesser's fatal accident ultimately heralded the end of F1 here, but the track continued to operate until 1994.



### **MONTLHERY**

Located to the south of Paris, this was France's first permanent circuit. It first held the French GP in 1925, the race in which Antonio Ascari was killed, and hosted it for the eighth and last time in '37.

# IN THE HEADLINES



# **PIRELLI COMPLETES TEST PROGRAMME**

Pirelli completed its 2017 Formula 1 tyre development programme on the Tuesday after the Abu Dhabi Grand Prix. It tested approximately 96 different prototype tyres, with Mercedes, Red Bull and Ferrari running cars.

# **RED BULL LANDS EXXONMOBIL DEAL**

Red Bull has announced an agreement with McLaren's long-time F1 fuel and lubricant supplier ExxonMobil for 2017. The deal involves the company, through its Mobil 1 and Esso brands, becoming the team's official fuel, lubricant and oil partner, replacing Total.

### TCR NOW NOT SUPPORTING MONACO GP

The TCR International Series will not race on the Monaco Grand Prix support bill, despite announcing last week it would do so. The Automobile Club de Monaco has issued a statement describing the claim as "untruth".

# **GORDON TO RACE IN DAYTONA 24**

NASCAR legend Jeff Gordon will return to the Daytona 24 Hours for the first time in 10 years this January with Cadillac's new Daytona Prototype international racer. Gordon will share the LMP2-based DPi-V.R machine with Jordan and Ricky Taylor and Max Angelelli.

# WTCC CONSIDERS JOKER LAPS

The World Touring Car Championship is investigating the introduction of rallycross-style joker laps, whereby drivers have to use a longer version of the track once a race. The FIA World Motor Sport Council has approved further enquiry, with safety controls the primary focus.

# **LATIFI TOPS GP2 POST-SEASON TEST**

Nicholas Latifi topped the three-day post-season test in Abu Dhabi for the DAMS team. Latifi set the fastest time of 1m48.929s, with Trident driver Raffaele Marciello second fastest, 0.008s slower, with his first-day time.

# **RUSSELL FASTEST IN GP3 TESTING**

George Russell (below) topped the post-season GP3 test in Abu Dhabi, after running on two of the three days. He set a best time of 1m55.364s on the final morning of running, beating fellow ART Grand Prix driver Nirei Fukuzumi's day-one best by 0.115s.



# **Hamilton could learn** a lot from Rosberg

Fame, money, talent, best car – Lewis Hamilton has got everything and more. Unfortunately he's still showing a total lack of maturity, which is a shame.

Maybe he could take a leaf out of Nico Rosberg's book and have more humility, approachability, respect for the media and humour. I fear there's no chance it will happen.

Nico, we will miss you. Delighted you are the new world champion.

**Salvador Valiente** Rutland

# **Stick Lewis in a Manor**

There is much discussion about punishment for Lewis Hamilton over his behaviour in Abu Dhabi. I would like to see Mercedes give him the opportunity to show that he is one of the greatest of all time. Exchange him for one year with Pascal Wehrlein in the Manor and let us see just how good he is.

Every good wish for the future Nico, you are a good bloke and we'll miss you.

David Denham-Smith Woodhall Spa, Lincolnshire

# Horner called it correctly

Christian Horner is spot on and the majority of the letter writers in your last issue are wrong. Formula 1 is also an individual sport as well as a team sport, or otherwise what is the purpose of a drivers' world championship?

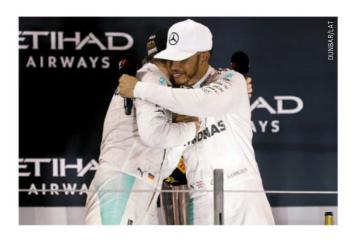
Bearing in mind that the object of any competition is to win, as David Coulthard said, it is perfectly acceptable to drive in a manner, either fast or slow, that will achieve that aim. We should already know that Lewis is the faster driver, so disappearing over the horizon would prove no point whatsoever.

Bearing in mind that whatever the result of this race Mercedes would win the drivers' championship and had already won the constructors' title, there was no need for team orders and, before the race, they were both told that they could race. Was it the realisation that they might not get their German champion that made them interfere?

**Dave Hollom** Byemail

# Hamilton did a brilliant job

The criticism that has been poured on to Lewis Hamilton after the Abu Dhabi Grand Prix has appalled me. Lewis did a brilliant job in both securing pole and winning the race at the slowest possible speed to further his goal of winning a



Opinion's still split on the merits of Rosberg and Hamilton post-Abu Dhabi showdown

fourth world championship. Mercedes' reaction, while predictable, was not only an attempt to predefine the race result and the championship, but would have been unnecessary had they provided the reigning champion with the same level of reliability as his team-mate.

**Andrew Dale** Swindon

# F1 driver is ruthless shock

So there's a surprise. A three-time world champion who is ruthless and selfish and will do anything within the rules to win a fourth. Didn't see that coming. At least Toto Wolff didn't seem to.

Mercedes wanted a one-two and Lewis Hamilton wanted a one-four, so there was always going to be conflict. Let the drivers do what they do best. If you want an easier life, put a mid-grid GP2 driver in the second seat.

John Simons **Bexhill on Sea** 

# **Remember Senna and Schuey**

Unfortunately for Lewis, he simply didn't go slow enough early enough to let Max Verstappen get ahead. At least he made it interesting. I'd much rather have 30 laps of tension at 95% pace than watch the Mercedes cars disappear into the distance yet again.

Anybody who criticises him for trying to win the world championship should remind themselves of the tactics Senna and Schumacher employed in the pursuit of the title. He didn't hit Rosberg, he merely invited him to try to overtake, a challenge the 'champion' was clearly incapable of.

**Steve Morris** Walthamstow

# HAVE YOUR SAY, GET IN TOUCH

Autosport editorial Bridge House 69 London Road Twickenham TW13SP



autosport@ havmarket.com







# Fantasy F1 2016

It shouldn't only be in the realms of a daydream that the dominance of one team can be quelled. It just needs others to up their game

# By Ben Anderson, Grand Prix Editor

**梦** @BenAndersonAuto

# THE APPEALS WERE EXPENSIVE AND ARDUOUS, BUT

in the end Mercedes lost — again. After being thrown out of the 2015 Formula 1 World Championship for contravening the FIA's new 'anti-dominance' regulations, Mercedes tried desperately to get itself reinstated for 2016.

To no avail. The Wo7 was deemed potentially even more superior than its predecessor during pre-season testing, and despite much legal wrangling Mercedes was banned from Formula 1 for another year ahead of the first race in Australia.

We simply can't afford to have one team running away with the championship year after year, announced FIA president Jean Todt. This is bad for the sport. It's why people prefer to watch videos of cats being cute on the internet, or going for Sunday strolls in the park, instead of watching grand prix racing.

Unfortunately these new regulations, designed to increase F1's appeal by closing up the competitive order, had already backfired in 2015. Removing Mercedes from the championship for being too strong in '14 actually allowed Ferrari to dominate to an even greater extent. Many argued that Ferrari should

now be thrown out too, but the FIA discovered an old covenant that allowed it a season's exemption. Known as 'Enzo's Law', it granted Ferrari immunity based on its historical contribution to the championship since its inception.

# "The rules designed to close up the order had already backfired"

Mercedes was paying a price for lacking permanence in F1. But the FIA told Ferrari president Sergio Marchionne in no uncertain terms, another year like 2015 and F1 would no longer hold a place for the Prancing Horse either...

It wasn't looking good when Ferrari won the first four races in succession, but some solid scoring by Red Bull's Daniel Ricciardo (who took a brilliant pole in China), coupled with misfortune for reigning champ Sebastian Vettel in Bahrain (engine failure) and Russia (eliminated by Daniil Kvyat's Red Bull), helped keep the title race close.

Kimi Raikkonen assumed an early lead thanks to victory in Bahrain, and overcoming Valtteri Bottas's polesitting Williams at Sochi. Just as the clamour for abolishing Ferrari's presence in this championship reached fever pitch, Red Bull broke the spell with victory in Spain, Max Verstappen fending off Raikkonen to become F1's youngest-ever race winner on his Red Bull debut.

Ricciardo felt he would have won that race with better strategy, but made amends with a dominant display from pole in Monaco, claiming the championship lead as Raikkonen crashed out early on. Vettel hit back with wins in Canada and Baku, but suffered a blowout while leading in Austria, then an underwhelming race to seventh (after a grid penalty) in the wet British Grand Prix, where Verstappen claimed his third win of the year (and second in successive races) with a virtuoso display.

At the midway point in the season the championship was finely poised, with the top four drivers covered by just 21 points. Then Ricciardo went on a crucial winning spree, taking victories in Hungary, Germany (despite being passed around the outside by Verstappen at Turn 1) and Belgium, where Verstappen collided with the Ferraris after a poor start from pole.

Ferrari broke a five-race losing streak with a one-two in September's Italian GP, but Ricciardo won again in Singapore and Malaysia (after a close race with Verstappen) to stretch his championship lead to 61 points with just five races remaining.

After a quiet race to fourth in Japan — where Verstappen beat Vettel to victory — Ricciardo's eighth win of the year in the US GP put the title within his reach. The Australian sealed the deal in bizarre fashion, inheriting victory in Mexico when Verstappen was penalised for going off the circuit and gaining an advantage

while racing Vettel for the win, then Vettel was penalised for defending second too aggressively from Ricciardo.

The final two races were effectively rendered dead rubbers as F1 hailed a new champion, though Verstappen sealed the constructors' title for

Red Bull with a brilliant drive to victory in atrocious conditions in Brazil. Vettel signed the season off with a consolation victory for Ferrari in Abu Dhabi (his sixth of the year and Ferrari's eighth), but rued a campaign beset by poor reliability and difficulty extracting performance from an inconsistent car.

The German can at least be satisfied that Ferrari won't be kicked out of next year's championship for being too dominant, having lost the constructors' battle to Red Bull by 83 points.

But, daydreaming aside, would this season really have been any better without Mercedes? Sure, four different drivers would have won races, and the constructors' championship would have been much, much closer, but F1 would also have lacked the tense title decider we saw in Abu Dhabi — the final chapter of Lewis Hamilton's and Nico Rosberg's bitter rivalry.

But there would have been no dominance by a single entity. F1 2016 would have featured two teams duking it out for victory at almost every race. That's what the naysayers want, isn't it? And if Red Bull's current rate of progress continues amid favourable real-life regulation changes, perhaps this dream may finally come true in 2017.

# AUTOSPORT Awards 2016

standing ovation for newly retired F1 world champion Nico Rosberg was a fitting way to start the 35th Autosport Awards. Rosberg was the undoubted star of an incredible champion-filled event, reminding everyone of the class and grace that will be missed from the F1 grid in 2017.

As well as conceding that Damon Hill could be the president of their newly founded 'world champion sons of world champion fathers' club, Rosberg spoke of his need to overtake 'Mad Max' Verstappen in the Abu Dhabi finale. "It was probably the most intense moment of my career," he said.

Rosberg also presented the Mercedes team with the Racing Car of the Year gong, while Force India boss Vijay Mallya,

retiring stars Felipe Massa and Mark Webber, British F1 legend Nigel Mansell, and World Endurance champions Neel Jani and Marc Lieb also appeared on stage. Renault F1 driver Jolyon Palmer and this season's Manor rivals Pascal Wehrlein and Esteban Ocon talked about their 2017 prospects.

Williams chief technical officer Pat Symonds presented the second Autosport Williams Engineer of the Future Award to Sam O'Neill, and Mercedes tech supremo Paddy Lowe picked up a John Bolster Award.

The climax of the evening was once again the McLaren Autosport BRDC Award. After a sensational season that included three title successes, Lando Norris became the 28th winner. We wish him the best of luck in 2017 and hope to see him back again very soon.











"This is the most prestigious motorsport event of the year"



















1996 world champion Damon Hill handed Rosberg the award The German withstood a spirited fightback from Hamilton in the final four races of the season, and absorbed intense pressure during the season finale in Abu Dhabi – as Hamilton tried to back him into the following pack – to win the title.

"My mental approach helped me in the end, to keep my head down and do what I needed to do to bring it home," he said. "That last race was crazy, it was horrible. I lost the championship at least three times during that race in my head!"

"I want to dedicate this to Mercedes and Manor for all their support"

Pascal Wehrlein

ROOKIE OF THE YEAR

# **Pascal Wehrlein**

PASCAL WEHRLEIN TOPPED AN IMPRESSIVE debut year with the Rookie of the Year title, voted for by Autosport readers.

The German stepped up from a testing role with Mercedes to a race seat with Manor, having won the DTM championship for Mercedes in 2015, and was impressive, scoring Manor's sole point of the season with 10th place in Austria.

Wehrlein also made it into the second phase of qualifying four times during the second half of the season.

"It feels amazing to win this award," he said. "It's been a hard year for us, many ups and downs. There have been many highlights, such as making Q2 and scoring a point in Austria, but there have also been some very difficult races. It's great to be recognised. I want to dedicate this to Mercedes and Manor for all their support."

Given his strong links with Mercedes, Wehrlein has emerged as a potential candidate to replace Nico Rosberg, following the world champion's retirement. "One season in F1 is not a lot but I feel ready for the job and confident," said Wehrlein, who was presented with his award by Porsche's World Endurance champions, Neel Jani and Marc Lieb.

Once pushed by presenter Steve Rider, Wehrlein – who was making his first appearance at the Autosport Awards – made his case: "I'm sure Toto [Wolff]'s phone is overheating after Friday. I've done the most days with the 2017 tyres and it's very important to have that experience."

















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BRITISH COMPETITION DRIVER OF THE YEAR

# **Lewis Hamilton**

LEWIS HAMILTON MAY HAVE MISSED OUT ON the Formula 1 world title by five points, but he continued his success in this category as he won your vote for the fourth successive year.

Hamilton was unable to attend, but his brother Nicolas came to the stage to collect it on his behalf. "Has he hit the ski slopes yet?" asked compere Steve Rider. "He might have," replied Nicolas. "I think he'll have some fun, chill out and hopefully come back and win that fourth world title.

"It has been an up-and-down season for him but he showed good character and came back fighting." Hamilton's race victory in Abu Dhabi took his

tally to 53 on the all-time winners' list, behind only Michael Schumacher on 91.



# **Lando Norris**

THANKS TO A COMMON MISCONCEPTION surrounding the Awards, being named Club Driver of the Year is, at first, a bitter-sweet moment if the driver in question also happens to be in the running for the McLaren Autosport BRDC Award. Lando Norris described his first of two gongs on Sunday night as "an honour", but also confessed: "I was happy in the moment and just after I was like... is this a good or a bad thing?"

The Club category included a quartet of drivers on the BTCC support bill – Porsche Carrera Cup GB winner Dan Cammish, British F4 champion Max Fewtrell and runner-up Sennan Fielding, and Renault UK Clio Cup title winner Ant Whorton-Eales – plus BRDC British F3 runner-up Ricky Collard.

Norris, whose impressive hat-trick of single-

seater success came overseas this season, admitted the win came as a surprise.

"There was some tough competition," he said. "Dan dominated the Carrera Cup, for example, and all the other drivers have done very well in their respective championships."





























RIDER OF THE YEAR

# **Marc Marquez**



MOTOGP CHAMPION MARC MARQUEZ HAS BEEN named the inaugural Rider of the Year at the Autosport Awards. The new category was open to riders competing in MotoGP, Moto2 and Moto3 in 2016.

Marquez sealed his third MotoGP title in four seasons with three races to spare. He won five races and claimed seven pole positions, and paired that speed with a new-found consistency. By the time he wrapped up the championship at Motegi, he was the only rider across the three classes to score points in every round.

Honda Thanks Day at Motegi, but fellow Honda world champion Freddie Spencer was on hand to receive the award from Isle of Man TT legend John McGuinness.

JOHN BOLSTER AWARD

# **Paddy Lowe**

THE MERCEDES FORMULA 1 WINNING MACHINE rolled on relentlessly as the team's technical chief Paddy Lowe picked up a special John Bolster Award for technical achievement.

Lowe has worked in F1 for almost 30 years, forming an integral part of world championshipwinning teams at Williams, McLaren and latterly Mercedes, which has dominated the top echelon of single-seater racing for the past three seasons under Lowe's technical leadership.

He received his gong from Williams co-founder

# "The technical excellence we apply is incredible to see. That's so rewarding"

Patrick Head, who praised Lowe's key contribution to Williams's success with the active-ride F1 cars of 1992 and '93, which powered Nigel Mansell and Alain Prost to world championship titles.

Lowe joined McLaren in 1993 and rose to become technical director, before joining Mercedes in 2013, helping it to become F1's dominant force.

"The first point to acknowledge is the great records we've set; the great design team, fantastic pitwall team, and those who exploit that car on the track," said Lowe, who is now out of contract but does not plan to step back from his current role with Mercedes. "It's a tremendous team that has secured all those records.

"It's very satisfying to see the standard that's now been reached in F1. The technical excellence we apply is incredible to see. That's so rewarding."



- AUTOSPOR Awards 2016









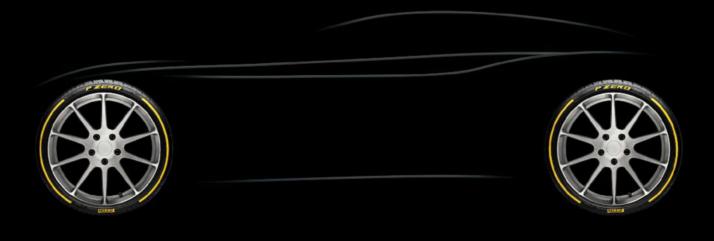






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# PIONEERING AND **ENGINEERING AWARD**

# **Frederic Sausset**

FREDERIC SAUSSET ACHIEVED THE SEEMINGLY impossible in the Le Mans 24 Hours this year. Not because he contested the event at the wheel of an LMP2 car in only his second year of racing, but because he is a quadruple amputee.

The Frenchman's receipt of the 2016 Pioneering and Innovation Award reflects the hurdles he had to overcome to drive in the most important endurance race in the world. He devised and developed his own set of controls, which could then could be quickly removed to allow his team-mates to take their turn in the cockpit.

Sausset admitted "intense pride" at being honoured at the Autosport Awards, and also hopes it will help open doors for other disabled drivers.

"This award is important for the future, because it will show to other disabled people that it is possible to drive a racing car," he said. "This is a dream for me, but I also hope that my receiving this trophy alongside so many big names from the world of motorsport will help other people with disabilities to fulfil their dreams."



RACING CAR OF THE YEAR PRESENTED BY





THE MERCEDES FORMULA 1 TEAM CLAIMED Autosport's Racing Car of the Year award for the third year in succession.

Mercedes has dominated the V6 hybrid-turbo era of Formula 1, building a family of superb cars that have delivered Lewis Hamilton the 2014 and '15 drivers' titles, and Nico Rosberg this year's crown.

The team has also taken a clean sweep of constructors' championships in that period, triumphing by a margin of close to 300 points each time, as well as winning 51 of the 59 grands prix held, taking 56 of the 59 available pole positions, and leading 84% of the racing laps.

The W07 was even more dominant than its predecessors, winning 19 of 21 grands prix this year and only missing pole position once, as Mercedes

wrapped up the constructors' championship with four races to spare. Newly crowned drivers' champion Rosberg presented the award to Mercedes engineering director Aldo Costa, along with five of his senior engineering colleagues.

"It was such a dominant season really - even better than last year," said Costa. "The pace gap was not as big as two years ago, but we were much more consistent."

"It was such a dominant season really - even better than last year"

Also Costa















RALLY CAR OF THE YEAR

# Volkswagen Polo R WRC

REGARDLESS OF WHAT WENT ON IN ANY Wolfsburg boardroom last month, the book was about to be closed on this year's Volkswagen Polo R WRC. The current car had run its course.

This year was the worst in Volkswagen Motorsport's World Rally Car history. The squad only managed nine wins from 13 starts. In each of the previous two years it had won all but one of the 13 rallies, and before that had taken 10 wins in the Polo's maiden season in 2013.

That the Volkswagen didn't win more often this year is largely due to the fact that Sebastien Ogier was forced to sweep the stages all season long. The Polo remained the benchmark, even surviving the odd hiccup, such as a trio of driveshaft failures on a Welsh Friday.

Off the back of a fourth world title in four years, the Polo completed a hat-trick of Autosport Awards on Sunday and the team's technical director Francois-Xavier Demaison was on hand to collect the trophy on behalf of the team.





RALLY DRIVER OF THE YEAR

# **Sebastien Ogier**

WORLD TITLES ARE NOTHING NEW TO SEBASTIEN Ogier. And nor are Autosport Awards. He's got four of each now. But this year was arguably his best yet.

As leader of the World Rally Championship, Ogier has run at the front of the field on the first two days of every event this season. That's meant day after day of sweeping a line clean for the benefit of his rivals. At the top of the season, Ogier laughed at the suggestion he could get close in places like Mexico, Sardinia and Australia; the podiums he scored on those rallies were like wins elsewhere. Ogier collected his fourth title with two rallies to spare.

Unable to collect the Award on Sunday, he thanked Autosport readers, saying: "This award really means a lot to me because it comes from the readers, and for them to understand and reward how hard we worked this year is fantastic."

















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The Autosport Williams Engineer of the Future Award, which gives the winner a two-year placement at the iconic grand prix team, was created in 2015. Williams chief technical officer Pat Symonds, Williams HR director Nicola Slater, former Jaguar F1 team boss Tony Purnell, former Ford chief technical officer Richard Parry-Jones and Autosport editor-in-chief Edd Straw decided the winner based on two days of assessments.



ROLL OF HONOUR

2015 Lizzie Thompson

2016 Sam O'Neill



Back row (L-R): Oliver Cartlidge, Jonathan Fernandez Hee, Robert Beynon. Front row (L-R): Mark Ascott, Sam O'Neill

AUTOSPORT WILLIAMS ENGINEER OF THE FUTURE

# Sam O'Neill

SAM O'NEILL, CURRENTLY STUDYING AERONAUTICAL Engineering at Imperial College London, is the second winner of the Autosport Williams Engineer of the Future Award. "I'm totally shocked," he said after being presented with the award by Pat Symonds.

"To be honest, I really didn't think I was going to win! The other four finalists were incredible and when you see people like that you realise there are a lot of good engineers out there. I'm incredibly honoured to win this.

"I've always done aero, which is why I really wanted to win this award. Getting to do some design work, seeing different parts of the Williams

# "There's more to learn and Pat Symonds is the ideal person to learn from"

Sam O'Neill

team, is what I feel I need to become a complete engineer. There's more to learn and Pat Symonds is the ideal person to learn it from."

The other finalists were University of Bath trio Mark Ascott, Robert Beynon and Oliver Cartlidge, and Oxford Brookes student Jonathan Fernandez Hee.



















# Congratulations Lando Norris

McLAREN AUTOSPORT BRDC AWARD WINNER 2016

# Thank you

McLaren, Autosport and the BRDC gratefully acknowledge the support of the following: Arai, Grand Prix Racewear, HRX, McLaren Automotive, McLaren GT, Mercedes-Benz, MotorSport Vision, Pirelli, Silverstone Circuit, Timing Solutions Ltd

# The McLaren Autosport BRDC Award judging panel:

David Brabham, Andrew Kirkaldy, Scott Mitchell, Jason Plato, Ian Titchmarsh, Kevin Turner, Mark Williams

Chairman of the judges:

Derek Warwick









McLAREN AUTOSPORT BRDC AWARD WINNER 2016

# **Lando Norris**

"WE'VE GOT A FUTURE FORMULA 1 DRIVER AND A FUTURE world champion standing right here beside me tonight and I think that's pretty cool," said Derek Warwick as Lando Norris collected his McLaren Autosport BRDC Award last Sunday night. The BRDC president, and chairman of the judging panel, was gushing with enthusiasm for the latest young driver to pick up the gong, the prize Formula 1 test that comes with it - and, for the first time, a McLaren F1

"It definitely means a lot, what he said," says Norris. "My dream is to be a champion in Formula 1, and someone who knows so much and goes to so many F1 races makes you trust and believe in the things he says."

simulator role and young-driver-programme status.

Norris started the season by winning the New Zealandbased Toyota Racing Series, held across January and February. He then moved into a dual Formula Renault Eurocup and Northern European Cup campaign, winning 11 races across the two championships on his way to both titles.

The 17-year-old also won four of the 11 BRDC British Formula 3 races he contested this season, then made his FIA Formula 3 debut at the end of the year in the European championship's Hockenheim finale, before charging from 26th on the grid to 11th in the Macau Grand Prix.





That impressive range of categories over one year on his CV is not lost on Norris's critics, but neither is it lost on him. Norris doesn't pretend he has not been given opportunities by his privileged upbringing, but that does not mean he should be written off as a pay-to-play driver.

"He came in with everybody saying that he's done a million miles in testing, raced in four championships, tested F3 cars, that he's a guy who needs his miles – but he didn't get miles in the GT, or the DTM, or the F2 car," says Warwick. "This was the moment to stand up and prove to the world he can compete with the best."

To do so was "definitely satisfying", says Norris.

"You hear what people say how I'm only good because I've done X amount of testing or I have the best equipment," he adds. "To come into this, it says something a bit more about me. It shows I'm kind of a good driver..."

More than that, says Warwick: "He was stunning, outrageous and unbelievable in all three disciplines, over two days. Every now and again someone comes along that's different. Lando is special."

# LANDO'S 2016

Formula Renault Eurocup champion with Josef Kaufmann Racing 5 wins, 12 podiums,

6 poles

AUTOSPOR<sup>-</sup> Awards 2016

> Formula Renault NEC champion with Josef Kaufmann Racing 6 wins, 11 podiums,

**Toyota Racing Series** champion with M2 Competition

6 wins, 11 podiums, 8 poles

10 poles

8th in BRDC British Formula 3 (11 races) with Carlin

4 wins, 8 podiums, 4 poles European F3 debut and Macau GP with Carlin

# **ROLL OF HONOUR**

1989 David Coulthard

1990 Gareth Rees

1991 Oliver Gavin

1992 Dario Franchitti

1993 Ralph Firman Jr

1994 Jamie Davies

1995 Jonny Kane

1996 Darren Turner

1997 Andrew Kirkaldy

1998 Jenson Button

1999 Gary Paffett

2000 Anthony Davidson

2001 Steven Kane

2002 Jamie Green

2003 Alex Lloyd

2004 Paul di Resta

2005 Oliver Jarvis

2006 Oliver Turvey

2007 Stefan Wilson

2008 Alexander Sims

2009 Dean Smith

2010 Lewis Williamson 2011 Oliver Rowland

2012 Jake Dennis

2013 Matt Parry

2014 George Russell

2015 Will Palmer

2016 Lando Norris

# THE VANQUISHED FINALISTS

# **RICKY COLLARD**

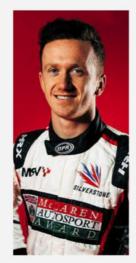
The son of British Touring Car racer Rob stepped up to BRDC British Formula 3, winning five races and narrowly missing out on the title in a final-round shootout.

### **SENNAN FIELDING**

Cash-strapped Fielding and single-seater minnow JHR took the fight to the big guns in British Formula 4; he finished second and won more races than any other driver.

### **TOBY SOWERY**

After a bit-part 2015 season, Sowery returned to full-time competition in the BRDC British Formula 4 Championship. A mid-season change of form and a late surge earned him third in the points.









































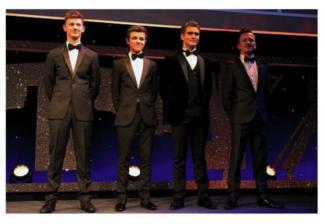






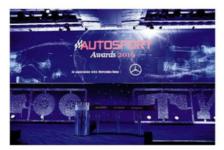




















# Thank you

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# The McLaren Autosport BRDC Award judging panel

David Brabham, Andrew Kirkaldy, Scott Mitchell, Jason Plato, Ian Titchmarsh, Kevin Turner, Mark Williams **Chairman of the judges:** Derek Warwick

# Williams and Autosport would like to thank

Kat Greenfield, Danny Reid, Olly Webb, Unilever & the Williams Conference Centre

The Autosport Williams Engineer of the Future judging panel Richard Parry-Jones, Tony Purnell, Nicola Salter, Edd Straw

Chairman of the judges: Pat Symonds

# On behalf of Grand Prix Trust we would like to thank

Lewis Hamilton, Nico Rosberg & Toto Wolff for signing the table centres, Amalgam for producing the limitededition table centre sculptures and Mercedes-Benz for supplying the Mercedes-Benz C-Class Coupé 4MATIC

**Autosport would like to thank** Mirage Parties for the production of the 2016 Autosport Awards. For further information on Mirage Parties, log on to www.mirageparties.co.uk

# Autosport would also like to thank

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# AUSTRALIAN SUPERCARS HOMEBUSH (AUS) DECEMBER 3-4 ROUND 14/14

THE RED BULL HOLDEN TEAM split the final wins of the Supercar season in Sydney and, in spite of six-time champion Jamie Whincup winning the Saturday race, all the talk was about incoming title victor Shane van Gisbergen.

While Whincup was dominating the opening race the New Zealander was mounting a rearguard action, following a clash with Mark Winterbottom that earned him a drivethrough penalty. Van Gisbergen fought back to fifth place, which is what he needed to seal the title a race early, but then kept

battling, eventually taking third.

On Sunday, free of any points considerations, SVG dominated, taking the lead early on the way to his eighth win of the year.

While the Triple Eight-run
Holdens won both races, they had
to fight to do so. In its final race as
a works team, the Holden Racing
Team signed off in style, with Garth
Tander taking second in both races,
on Sunday doing so from pole (his
first in four years). Team-mate
James Courtney was in contention
too, but brake problems dropped
him places in both races.

David Reynolds gave Erebus Motorsport its first podium of the season on Sunday, while Scott McLaughlin secured third in the championship in his GRM Volvo, overtaking Craig Lowndes, who experienced a tough weekend.

Best of the Nissan drivers was Rick Kelly, although electrical problems set him back, and out of contention, in Sunday's race. PHIL BRANAGAN

### RESULTS

### Race 1 1 Jamie Whincup (Holden

Commodore) 74 laps in 1h55m51.3313s; 2 Garth Tander (Holden) +6.8393s; 3 Shane van Gisbergen (Holden); 4 Scott McLaughlin (Volvo S60); 5 James Courtney (Holden); 6 Rick Kelly (Nissan Altima). Race 2 1 van Gisbergen 73 laps in 1h59m59.1235s; 2 Tander +1.0246s; 3 David Reynolds (Holden); 4 Whincup; 5 McLaughlin; 6 Courtney. Points 1 van Gisbergen 3368; 2 Whincup 3168; 3 McLaughlin 2806; 4 Craig Lowndes 2770; 5 Will Davison 2589; 6 Mark

# Moore and Moore success at Fuji

### ASIAN LE MANS SERIES FUJI (J) DECEMBER 4 ROUND 2/4

THE SWISS RACE PERFORMANCE team took the glory in Japan with its open-top ORECA-Judd in the hands of Brit Struan Moore, Renault Sport Trophy Amateur champion Fabian Schiller and Giorgio Maggi.

Zhuhai winner Ho-Pin Tung led the first stint in the Eurasia-run DC Racing ORECA, with Maggi in pursuit. But when Schiller took over he passed Thomas Laurent — in for Tung — for the lead. Moore then completed the job, while Gustavo

Race Performance car

passes snow-peaked

**Mount Fuii** 

Menezes overcame electrical problems for second in the Eurasia DC car. Andrea Pizzitola claimed pole in the Algarve Pro Racing Ligier, which finished third after penalties for pitstop infringements.

Another Moore — the unrelated Nigel — took LMP3 spoils with Phil Hanson in Tockwith Motorsport's Ligier. Charlie Robertson ran as high as third overall early on in the PRT Racing Ginetta, but it was another of the Yorkshire marque's cars — the ARC Bratislava machine of Mike Simpson, Darren Burke and Miro Konopka — that challenged the Tockwith duo for the win.

Single-seater star Matthieu

Vaxiviere anchored the GT-winning DH Racing Ferrari, with the Alessandro Pier Guidi-led BBT Ferrari second. Matt Griffin, in another Ferrari, plus the Lamborghini in which Yuhi Sekiguchi was the star, also fought for the lead, but Griffin's car lost time with a clash. The Lambo lost out for third in a late race with the Philipp Eng/Ollie Millroy-crewed AAI BMW. The other M6 of Tom Blomqvist non-started due to a holed fuel tank.

### RESULTS

1 Struan Moore/Fabian Schiller/Giorgio Maggi (ORECA-Judd 03R) 138 laps in 4h00m25.179s; 2 Ho-Pin Tung/Gustavo Menezes/Thomas Laurent (O-Nissan 03R) -1 lap; 3 Andrea Pizzitola/Andrea Roda/Michael Munemann (Ligier-Nissan JSP2); 4 Jonathan Hirschi/Mark Patterson/Tacksung Kim (L-Judd JSP2); 5 Matthieu Vaxiviere/Michele Rugolo/Stephane Lemeret (Ferrari 488 GT3); 6 Nigel Moore/Phil Hanson (L-N JSP3). LMP3 1 Moore/Hanson; 2 Mike Simpson/Darren Burke/ Miro Konopka (Ginetta LMP3); 3 James Winslow/ David Cheng/Hiroki Yoshida (L JSP3). GT 1 Vaxiviere/Rugolo/Lemeret; 2 Alessandro Pier Guidi/Davide Rizzo/Anthony Liu (Ferrari); 3 Philipp Eng/Ollie Millrov/Jun San Chen (BMW M6 GT3).

# IN BRIEF

### **ANDROS TROPHY**

Ice-racing leviathan Jean-Philippe Dayraut leads the points after sharing the honours with Jean-Baptiste Dubourg in the first round at Val Thorens. Benjamin Riviere collected the hefty points for qualifying and superpole on Saturday in his Mini, but failed to finish the final, dropping to third for the day. Dayraut took the honours in his new BMW M2 from the Renault Clio of Dubourg. On Sunday Dubourg topped qualifying and won the final, but missed out in superpole. Dayraut headed superpole and finished third in the final behind the Mazda of Franck Lagorce. That enabled Dayraut to snatch an overall third on the day from Mazda driver Adrien Tambay, with Lagorce second.

### **DUNLOP V8 SUPERCARS**

Jack Le Brocq won both races at Homebush but Garry Jacobson won the title. Both Prodrive Ford drivers overcame a series of challenges, including a multi-car pile-up in the second race. James Golding, Bryce Fullwood and Todd Hazelwood were on the podium, as Jacobson took the title with two fifth places.

### LAMBORGHINI SUPER TROFEO

Ex-Formula Ford Festival winner Dennis Lind won the wet Lamborghini World Final and the European Super Trofeo at the Ricardo Tormo circuit near Valencia. The Dane (below) finished second to Vito Postiglione in the first race of the World Final, and overtook Loris Spinelli late in race two to take the overall honours. Pro-Am spoils went to Andrea Fontana and Lorenzo Veglia. Lind had already taken the Super Trofeo title with victory in Friday's first race from Postiglione. Race two was won by Spinelli from Postiglione. Remarkably, MotoGP star Andrea Dovizioso took Pro-Am honours in the second race.



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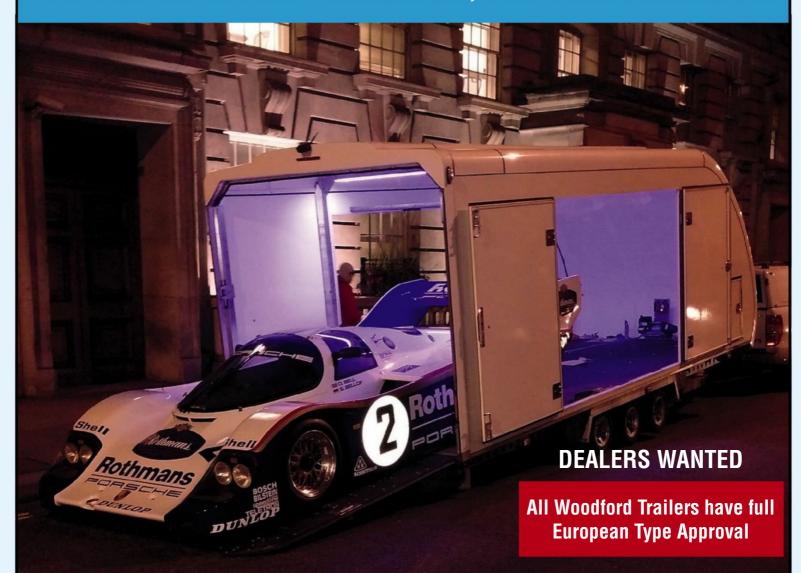




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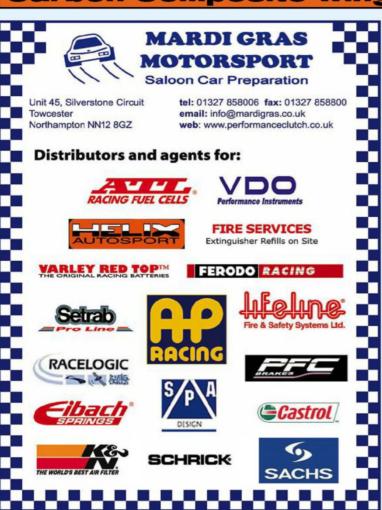
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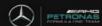


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The Henry Surtees Foundation would like to extend special thanks to all those who made this year's Henry Surtees Challenge such a success including Club 100 for providing the karts and back-up as well as Steve Rider and Haymarket Media Group for their support. We really appreciate the sponsors for their generosity; the prizes were exceptional and will greatly enhance the careers of the talented drivers that participated.

#### Prizes were awarded as follows:

- A Renault Clio Cup test experience and a Carlin test day experience including simulator and test drive in an F4 British Championship car. Plus a full kit of Puma race clothing - race suit, three pairs of gloves, two pairs of racing boots, one pair of running shoes and one pair of lifestyle shoes, donated by Puma SE awarded to Callum **Bradshaw**
- A tour of the Red Bull racing facility in Milton Keynes for two people, with half day simulator experience and evaluation by an F1 race engineer, an Arai GP-6S helmet in white finish, donated by Arai, plus Puma race clothing two sets of gloves and underwear, one pair of racing shoes, one pair of running shoes and one pair lifestyle shoes, donated by Puma SE was awarded to Michael Crees
- A Ginetta test day experience in the G40 GT5 challenge car with potential to drive a G55 GT4, a full website package with online branding and three month social media package, donated by 5G Creative, plus one pair of racing shoes, one pair of running shoes and one pair of lifestyle shoes donated by Puma SE was awarded to Piers Prior
- A factory tour for two people of at Ferrari, including the Road Car and Racing Departments, plus the Ferrari Museum was awarded to Ben Barnicoat
- A two hour training session at iZone Driver Performance, donated by Andy Priaulx was awarded to Charlie Turner
- BRDC British Formula 3 test, donated by Hillspeed and a supply of Teng Tools to the value of £1,000, donated by Teng was awarded to Ross Martin
- A full motorsport fitness assessment donated by Porsche Human Performance plus a pair of custom-fit driver communication earpieces, including a comprehensive hearing test donated by Hearing Electronics Limited was awarded to Ben Green









































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## Ligier to build two club sports-racers

FRENCH SPORTSCAR GIANT LIGIER will launch a new range of club-racing machines for 2018, with development led by Radical Cars founder Phil Abbott.

Ligier parent company Onroak Automotive has begun work on two new carbon-fibre-tubbed models, which are designed to act as a stepping stone into LMP3 and LMP2 machinery.

The entry-level model is expected to be powered by a 200bhp engine, while the target for the larger-chassis design is 400bhp. Configurations have yet to be decided, but it is understood that either a 1.6-litre turbo or a two-litre naturally aspirated unit is most likely.

Ligier's expansion has come about after both Phil and Amanda Abbott joined the company recently, having departed Radical.

The Abbotts will now oversee the design and development of the new club-racing Ligier range, and Phil Abbott went as far as saying he hoped that the brand could spawn single-make series in the same way as Radical.

"This is a tremendously exciting opportunity, and to work with a company like Onroak is amazing," he said. "I hit an impasse at Radical where I couldn't see any steps forward and decided I needed a change. That's when I got talking to [Onroak president] Jacques Nicolet and this concept came about.

"We've already begun work on two new models and, while they won't be for sale until 2018, they'll be out testing early next year. Our job is to plug the gap below LMP3 level.

"I took Radical as far as I could, and seeing Onroak's facilities I know there's scope to create something truly special here."

#### Seven teams to run Ginetta G57s

At least seven of Ginetta's new G57-P2 racers will head to Dubai in January to



Radical founder Phil Abbott will oversee development of the new Ligier cars contest the pilot race for the new 24H Proto Series, with four British GT teams among those running them, including sports-prototype convert HHC Motorsport. The former BRDC Formula 4 champion team is joined by long-time Ginetta customers Optimum and Century Motorsport, together with Simpson Motorsport, CWS, Atech Racing Dubai and Graff Racing.

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BRITISH GT

## **Motorbase exits GTs for BTCC push**

MOTORBASE PERFORMANCE WILL withdraw from the British GT Championship next season to concentrate on a three-car British Touring Car Championship operation.

The Kent-based team has run Aston Martins in the series since 2014, but had a difficult season this year. Ross Wylie and Phil Dryburgh took their Vantage to 11th in the drivers' standings, with Motorbase eighth in the teams' rankings. It previously ran Porsches, carrying Michael Caine and Daniele Perfetti to the 2012 title.

Motorbase has now put its two Astons up for

sale. But team principal David Bartrum said that while the squad would withdraw from its GT commitments — which also include the Blancpain series — it was not turning its back on sportscar racing completely.

"It's by no means the end of sportscar racing for Motorbase, but I feel that it's the right time for us to regroup and to put all of our efforts into building on last season's BTCC success," he said.

The operation won the Independents teams' title in 2016 with Mat Jackson and Andrew Jordan in its Ford Focuses. Jordan was also

crowned Independents drivers' champion, but has since left the team for WSR.

Motorbase got its third licence on loan from Welch Motorsport, which will not be taking part in the BTCC next season.

Bartrum added: "These are really exciting times for Motorbase. We have a fantastic new title sponsor behind us that will be revealed soon, as well as the backing of some of our long-standing partners. That has enabled us to push forward our plans to bring the third Focus out on track for our 2017 campaign."

#### SPORTSCAR

### Veteran Reid to race Polish Arrinera GT

LE MANS PODIUM finisher and 15-time British Touring Car Championship race winner Anthony Reid is targeting a dual assault in Britain and South Africa with the new Polish-built GT3-spec Arrinera Hussarya GT next year.

Reid will drive the car in the UK, although the team is yet to confirm which championship it will compete in. The car would be eligible for the GT Cup and Britcar.

"I've had four outings

in the car and I'm very impressed with the potential," said Reid. "I think the key thing is the quality of personnel involved in the project. The Polish engineers have very high skill levels."

Reid will be 60 years old in 2017 and will automatically be graded a bronze-level driver as a result

"For the right team it could be a lethal combination if you have a platinum and a bronze," he added.



RENAULT UK CLIO CUP

## Coates to stay in Clios with Ciceley

RENAULT UK CLIO CUP RACE WINNER Max Coates will again compete in the series with Ciceley Motorsport next year.

The 22-year-old finished third in the standings this season, taking one win.

"We will be going into our second season with a team we know and we've got a good chance to fight for the championship," he said. "It's massively exciting. We built up a really good relationship over the season."

Coates said he surprised himself with how quickly he got on the pace in his rookie season after switching from Ginettas.

"Making an announcement this early will help that and I go into the season with a proper budget," he said. "I've got everything I need to be able to win; now it comes down to me."



#### **BATHURST 12 HOURS**

## **Onslow-Cole targets Bathurst seat**

BRITISH TOURING CAR CHAMPIONSHIP race winner Tom Onslow-Cole is targeting a drive in the Bathurst 12 Hours next year after testing a GT<sub>3</sub> car on the Australian circuit.

Onslow-Cole has been competing in GTs since leaving touring cars at the end of 2013, and got the chance to drive the BMW M6 GT3 for the first time last week as he targets a deal with the Macsport team.

"I want to do the Bathurst 12 Hours; it's been an iconic track for me from around eight years old and the early PlayStation games," he said. "The team wants to do it, I want to do it. But the deal is never that simple! The team is working and trying to get me over there to do the race. It was pretty awesome! The track is so quick through the mountain section and the aero of the GT car was incredible."

Onslow-Cole is yet to announce his main plans for 2017, but is close to a deal to compete in a GT championship full-time.



#### MAZDAMX-5 SUPERCUP

### **Roberts swaps Compact for MX-5**

TWO-TIME BMW COMPACT CUP champion Steve Roberts will race in the Mazda MX-5 Supercup in 2017 after taking a year off to decide his future.

Roberts spent the past year evaluating his 2017 plans, and decided that after achieving two titles in the Compact Cup it was time for a fresh challenge.

"I'd done the series since 2012, the year before it became a championship, and I then won it in '13 and '15," he said. "I'd basically ticked all the boxes in it and I wasn't really hungry to return."

Roberts made his decision after speaking to Brian Chandler, who won the Supercup in 2015, and Compact Cup coordinator Paul McErlean. "Compact Cup is one of the best championships in the country, which I continue to be very supportive of," he said. "I needed to find a series with a similar ethos, high quality of drivers and tight controls. Mazda Supercup fits that bill."

#### **IN BRIEF**



#### **CLASSIC AND FOS DATE CHANGES**

A change of date for the British Grand Prix has led to both the Silverstone Classic and Goodwood Festival of Speed switching to different weekends. The Classic (above) will now run from July 28-30, a week later than originally planned. The Festival of Speed will also move back a week, with new dates of June 29-July 2.

#### **COLLARD SAMPLES BMW DTM MACHINERY**

McLaren Autosport BRDC Award finalist Ricky Collard sampled BMW DTM machinery for the first time last week in a test at Jerez. BRDC British Formula 3 Championship runner-up Collard said: "It was a fantastic experience, something very special. The car has more downforce than I'm used to from the British F3 car; it was another step up from what I've been doing before."

#### **MILNER TO GINETTA GT5 CHALLENGE**

Junior Saloon Car champion Katie Milner has ordered a Ginetta G40 as she plans an assault on the Ginetta GT5 Challenge in 2017. Milner will run under the family Merlin International team and plans to treat her debut season in the category as a learning curve. "We felt the GT5 Challenge was the right fit," she said. "It's lower powered but there's still plenty to learn, like rear-wheel drive."

#### **DORLIN SET FOR CLIO CUP SWITCH**

Michelin Clio Cup Series champion James Dorlin has tested the latest-spec Renault UK Clio Cup car ahead of an expected move into the series next season. Dorlin, 17, tested with Westbourne Motorsport – with which he clinched his 2016 title – in one of its fourth-generation Clios at Donington Park at the end of October, and has since tested the series' media car at Snetterton as his prize for winning the secondary series.

#### **MERCEDES-AMG GT4 CAR REVEALED**

Mercedes is the latest manufacturer to develop a GT4 car. The new Mercedes-AMG GT R is the basis for the new racer, which was unveiled (below) at Mercedes' end-of-season celebration last weekend. The company's latest GT3 challenger will appear in British GT next year.





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# Rosberg and Sausset star on awards night

By Marcus Pye, the voice of club racing



#### THE TOTAL CLASS OF NICO ROSBERG AND THE

indomitable Frederic Sausset lit up London's historic Grosvenor House Hotel's Great Room during Sunday's 2016 Autosport Awards.

Everybody among the 1400-strong throng of motorsport greats, industry figures and guests clung to the gracious and sincere words of the newly crowned and retired Formula 1 world champion and the French Le Mans hero's moving contribution to a memorable evening.

I've attended all but two of the 35 annual celebrations, started amid pioneering machinery at the Science Museum in Kensington, two miles from the current venue, a Park Lane landmark since 1929. I missed 2000's to compete in an HSR race at Daytona (I was hammering round the banking in Gordon Medenica's Chevron B6 — long back with Nick Thompson in the UK — as Anthony Davidson received the 12th McLaren Autosport BRDC Award) and couldn't make last year's.

Being seated between erudite veterans of the sport in good company guaranteed interesting repartee. Grahame White (a racing ringmaster since 1962, when he joined the BARC staff at its then nearby HQ, and fresh from steering the Historic Sports Car Club through its 50th Anniversary season), Donington Park's MD Christopher Tate and Ford Performance's Mike Norton — talking DFV and FF1600 to Formula 4 — filled the interludes between Steve Rider's sharp and apposite on-stage banter with award honourees.

As ever, I met people I'd not seen in a while, starting with James Hunt's son Freddie. BTCC ace Rob Collard and I reminisced about me riding shotgun in his National Hot Rod at Earls Court long before his MABA finalist lad Ricky

made his bow. The Scottish contingent was out in force, so socialising with Dario and Marino Franchitti, Hugh McCaig, John Clark OBE and Calum Lockie was delightful.

The Autosport Awards always brings a welcome catch-up with Andy Priaulx, whose dominant 1995 British Hillclimb Championship season I was privileged to report on. Well I recall BMW GB's marketing guru Peter Walker (retiring after 30-plus years' service, he told me on Sunday) asking on a Donington test day who I'd put on his 'shortlist' having secured a touring car budget. My only suggestion, Guernsey's finest, proved a good investment gauged by one European and three successive world titles. More than a decade later, Ford WEC racer Andy is seeking an F4 deal for his lad Sebastian, Ginetta Junior Winter Series champion after his first full season in cars. Thus the sport's cycle continues.

Brief interludes with veteran commentator Neville Hay — for whom I lap-charted at Thruxton in the '70s — three-time BTCC champ Matt Neal (whose lads are both racing next season), BRDC president Derek Warwick (clearly blown away by MABA winner Lando Norris's potential) and Porsche 935 tamer John Fitzpatrick added to the occasion. Chats with my first Autosport editor Quentin Spurring, who took me on in 1977, and current incumbent Kevin Turner rounded out the event most pleasantly.

At the end of it, though, with taxis waiting in the chill night air, I opted for a bracing half-hour walk to the sanctuary of the Blakemore Hyde Park Hotel in Bayswater — more suited to a hack's stipend — better to reflect on, and appreciate, the legacies of this evolving magazine's founder Gregor Grant and his recently fallen compatriot Peter Foubister, whose spirit and passion made the Awards what it is.



#### **NEW SERIES SPLITS F2**

French historic promoter Peter Auto's first single-seater series, for 1967-78 Formula 2 cars, is set to run at its Spa, Dijon, Monza, Hungaroring and Paul Ricard CER events in 2017. Euro F2 is bound to dilute the HSCC's FIA-affiliated F2 championship. "There are barely enough [active] cars for one series," said boss Grahame White.

#### **F1 CHANGES HIT HISTORICS**

Changes to the 2017 Formula 1 calendar, including the British Grand Prix's date, have hit the historic season's schedule. Putting Silverstone's race back a week from July 8-9 to July 15-16 has forced Goodwood to switch its landmark 25th Festival of Speed event to June 29-July 2. The FoS now clashes, therefore, with the HSCC's Legends of Brands Hatch Superprix, at which the 50th anniversary of the first Formula Ford race will be celebrated to the day, and the inaugural GP de France Historique. Silverstone Classic promoter Goose now finds its massive showpiece bumped a week to July 28-30, precluding many stars from the pro-celebrity HRDC Academy Austin A30/A35 race as they will be at Snetterton for the British Touring Car Championship.



#### **TILLEY PLANS TITLE TILT**

Teenager Benn Tilley, who finished a brilliant fourth in this year's HSCC Historic Formula Ford championship, is seeking support for an all-out title assault in 2017, the category's 50th anniversary season. The Stamford College motorsport engineering student will again race Amanda Hadfield's Merlyn Mk20.

# WHAT'S ON

## Jeff Gordon: His Dream, Drive and Destiny

IT'S THE MOMENT EVERY NASCAR fan has been waiting for. OK, a driver retiring and releasing a book is relatively common. But not one of this magnitude.

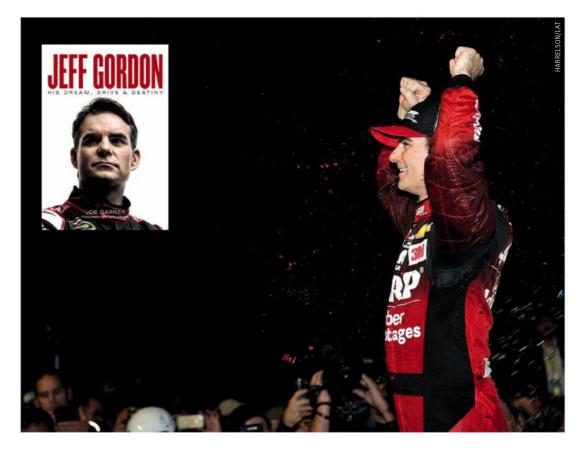
Jeff Gordon is one of a select group of NASCAR racers in that his name has become virtually synonymous with the sport, such was the level of success he attained over more than two decades.

When the California-born youngster arrived on the scene in late 1992 — making his debut in Richard Petty's last ever race — he was, at 21, younger than most NASCAR debutants. But as soon as he got in a competitive car, he was winning races and challenging established notions of what a NASCAR driver should be.

Gordon arrived on the scene at a time when the sport was undergoing a major cultural change. From its origins as a grassroots southern racing series, it was embracing a corporate and businesslike approach. Gordon epitomised that shift in attitude and appearance, a baby-faced pretender who always thanked the sponsors and was working on his fitness and his car to an unprecedented level.

Up until now, Gordon's life and career hasn't been committed to paper. But, thanks to many painstaking hours with five-time New York Times bestselling author Joe Garner, that story is being told in compelling detail.





"It's been a crazy year in transition [to retirement] but it's gone pretty well," says Gordon. "It's been really good.

"I purposely waited until I retired from driving so that the book would encompass my entire career.

"It's a lot of things that haven't been told, things from my parents that I didn't even know myself, the early days and how everything started. But there are also things that haven't been discussed as much before, and also my final year and how that went — we really get into that in the book. I'm really proud of it."

The result is a tell-all and comprehensive look at the stories behind one of NASCAR's most popular drivers. Obviously, the

The four-time NASCAR champion reveals all for the first time in his new book

championships, race wins and glory play a major part, but there's no shying away from the difficult parts of his life and career.

The author — Garner — believes the book is a chance to get to know the real Jeff Gordon, the man behind the racing.

"Racing is what Jeff did, it's not who he is," says Garner. "As he embarks on the next chapter of his life, it's finally time to let people know who Jeff Gordon really is.

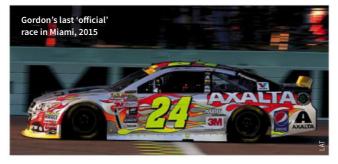
"He put nothing off-limits and encouraged the people to speak honestly. Jeff speaks candidly, sometimes brutally so, about his childhood, his much publicised divorce, those he competed against, his family, and life after racing."

And the result is fantastic. A neverbefore seen level of detail into one of the most interesting characters in the sport. Not just the PR-spun quotes, but the sincere thoughts of a man who has encountered as many lows as highs in his career and life.

Sit back, relax, and enjoy a full-on emersion into the life and thoughts of a NASCAR legend.

Jeff Gordon: His Dream, Drive and Destiny is out now. ISBN: 1603803963.



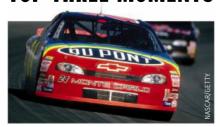


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### **TOP THREE MOMENTS**



What can you say about Gordon's 1998 season? In 33 races he scored 13 wins and only five finishes outside the top 10.
Add in 20 straight top-10s to finish the year en route to a second title in a row, and you've got unrivalled NASCAR dominance. The Dupont-liveried Hendrick Motorsports Chevrolet was a class apart. Crew-chiefed by Ray Evernham, they steamrollered the opposition – NASCAR's golden boy was untouchable.



THE FIRST TITLE: 1995
Believe it or not, Gordon's first title in 1995 wasn't a popular one In the NASCAR world. The year before, the late Dale Earnhardt – comfortably the most popular driver in the sport at that point – had just matched Richard Petty's then unbeaten mantle of seven championships. Gordon halted Earnhardt's run with seven wins and 23 top 10s, giving the Chevrolet Monte Carlo its first title in the process.



THE FIFTH BRICK: 2014
Many of Jeff's records have fallen over the years, but one that will surely stand for many to come is his record at Indianapolis. He won NASCAR's first race at the circuit in 1994 in an emotional encounter, and in 2014 he completed the quintuple, 20 years after the first win. The 1994 victory was particularly special to Jeff since he gave up his Indycar aspirations to compete in NASCAR.

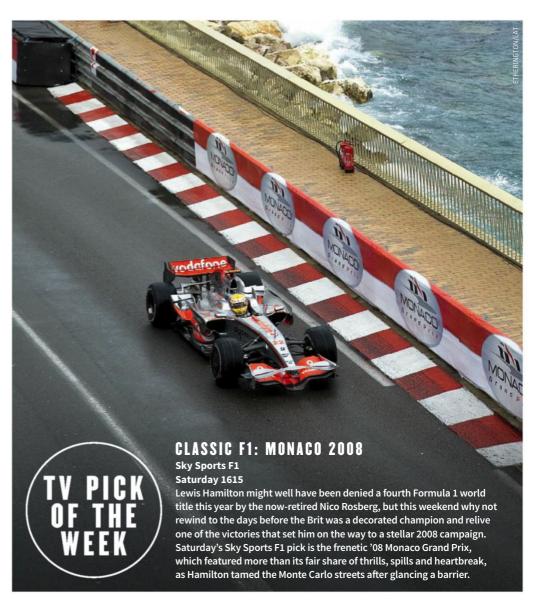


#### HOT ON THE WEB THIS WEEK

You TIME NICO'S NIGHT WITH THE STARS

Search for Nico Rosberg – International Racing Driver of the Year – Autosport Awards 2016

Having received a standing ovation at the Autosport Awards, the 2016 Formula 1 world champion, and the sport's most surprising retiree, receives this magazine's accolade from Damon Hill – a fellow member of a *very* exclusive club.



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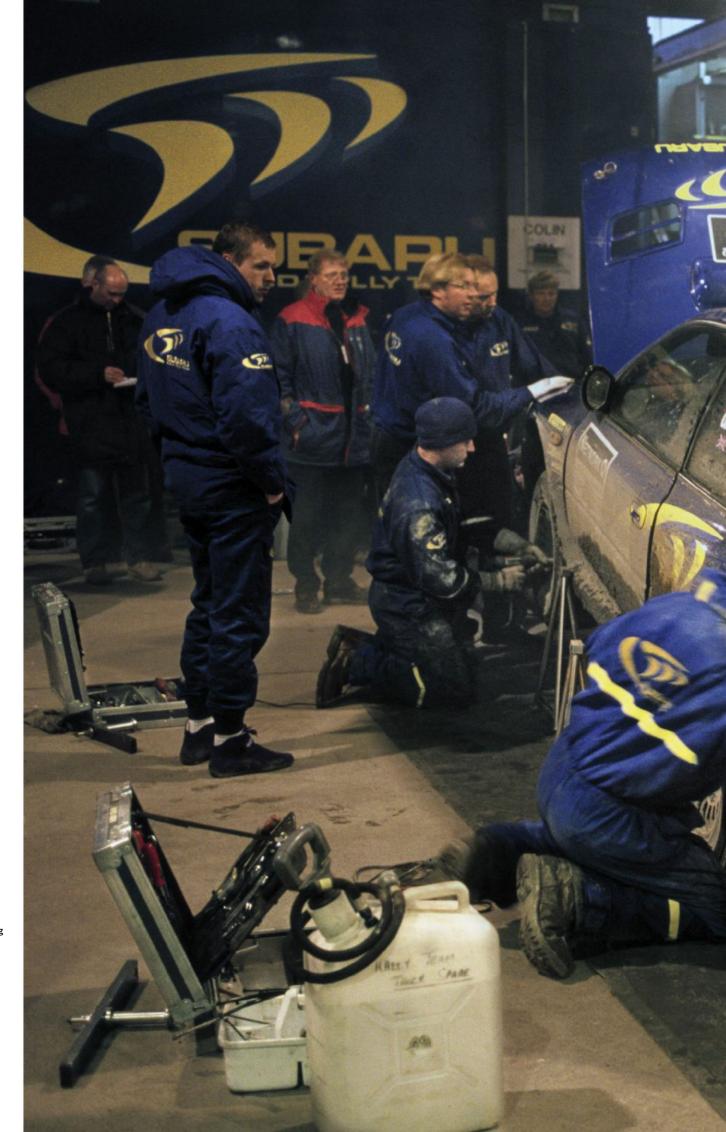
December 8-10

#### ANDROS TROPHY

**Rd 2/7** Andorra

December 9-10





#### THE ARCHIVE

Colin McRae watches as the Subaru service crew goes to work on his Impreza WRC during the 1998 Rally GB.
McRae and co-driver Nicky Grist retired on SS19 with engine problems, on what was their final outing for Subaru before switching to Ford.

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F ALL THE BUDDING SINGLE-SEATER DRIVERS competing in FIA Formula 4 series across the world, it's unlikely that many have raced a Proton Satria. That's just one of the ways in which British F4 champion Max Fewtrell stands out.

The 17-year-old took part in a handful of races in the Malaysian machine at the end of last year after several seasons of karting, originally in Asia

and later in Europe. Fewtrell managed to claim a couple of podiums in the Pre-2005 Production Touring Car series, but admits the tin-top experience wasn't particularly helpful.

"I raced a Proton thing, which was not very fun!" he says. "It was a different world and wasn't hugely beneficial – it was mainly so I got signatures to race in the MRF Challenge."

Fewtrell carried out his maiden single-seater campaign in the Indian-organised MRF series last winter, in preparation for a full assault on British F4. He was 10th in the standings but says the result was not important: "The main reason we did it was to learn how a race weekend works, so when I got to Brands Hatch [for F4] I wouldn't be completely clueless."

He certainly wasn't clueless in Kent as he picked up second in his very first race after joining the leading Carlin team. And that was just the first of many rostrum visits in 2016. He claimed an impressive 16 podiums this season (the next best was 11) on the way to the title, despite only taking three wins.

"The key for me was the consistency - there's 30 races and 30 opportunities to score points and maximise my haul because of how close it was," says Fewtrell. "You want to win the most races as a racing driver, but you've got to take what you've been given.

"To get the championship was the goal and to take it after such a close fight [with the more experienced Sennan Fielding] was really rewarding. To take the win [in the final race] was a great way to do it."

Now Fewtrell is eyeing a Formula Renault Eurocup challenge, and if he can continue to combine speed with consistency - and his ability to learn quickly - then he'll certainly be one to watch in the competitive series. # STEPHEN LICKORISH



CV

Age

2015

1st in British F4 2016

with Carlin 3 wins, 16

podiums, 1 pole

10th in MRF Challenge

2009-15 Karting



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