

FORMULA E CAN ANYONE STOP AUDI?

AUTOSPORT

F1 ABU DHABI DUEL

WARNING

**Bottas adds
to Hamilton's
2018 threats**

**HOW
HE BEAT
LEWIS**

**WHY
HE CAN
DO IT AGAIN**



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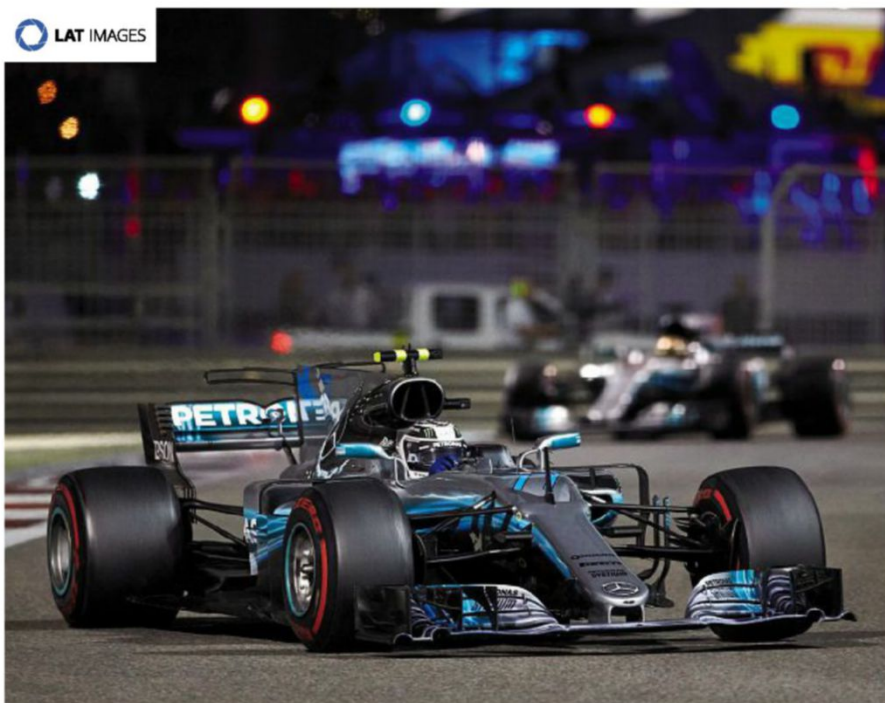
MAKE



TEST



RACE



Has Bottas made a key breakthrough for 2018?

WE WERE QUITE CRITICAL OF VALTTERI BOTTAS

after he failed to win the Brazilian Grand Prix from pole position, but his performance in Abu Dhabi was a fine riposte.

All three of Bottas's Formula 1 wins have come under pressure and last weekend he defeated – for the first time – Mercedes team-mate Lewis Hamilton in a straight fight to take victory. The body language of the #44 Wo8 suggested Hamilton was trying pretty hard to take his 10th win of the year, but Bottas held firm.

The big question now is, can Bottas put together a championship challenge next season? One race does not provide the answer, but the fact that Bottas has managed to bounce back from disappointment and become stronger is Nico Rosberg-esque. The dynamic at Mercedes is clearly different now to when Hamilton and Rosberg were battling each other, but it could be an interesting test for all involved if Bottas provides a sterner internal challenge next year.

One concerning aspect for a neutral fan's perspective from the weekend is Ferrari's lack of competitiveness. Had the title fight gone down to the wire, as it arguably should have done, Sebastian Vettel would not have been able to put up much of a fight to the Silver Arrows. Ferrari is rarely at its best around the Yas Marina circuit (just ask Fernando Alonso!), but that's something else it will need to address if it's to maintain its challenge to Mercedes next season.



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Steven Tee/
LAT Images

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FORMULA 1

Pirelli explains 'confusing'

THE NEW EXPANDED RANGE OF SEVEN dry-weather Formula 1 tyres for 2018 has caused some uproar among fans, with many suggesting the system is now too complicated, especially with extra colours added to the mix.

Pirelli has unveiled seven compounds in a 'rainbow' range – one of the new compounds will be the orange super-hard and will work as an insurance policy in case the other tyre choices prove to be too soft. At the other end of the scale, the pink hyper-soft tyre – named by a social media poll – will be the softest compound.

"We have every year, irrespective of a change of regulations or not, a development," said Pirelli F1 boss Mario Isola. "So when we design a product for the following year we have always to consider the end of the year, not the beginning. The big step was 2016 to 2017, because of the change of regulations. Lap time improvement was quite big; it was in line with the simulations. It was a bit less at the end of the year than what they were expecting, but it was not too different."

Pirelli certainly contributed to, and successfully dealt with, massively increased cornering speeds – lateral load on a single wheel increased from 1100kg to 1500kg in 12 months. But there's little doubt that it erred on the side of caution for 2017, and that its range was not soft enough. The hard tyre was rejected after May's Spanish Grand Prix, where it hardly ran on track, and it was not seen again. That left the

company with just four tyres for the rest of the season: medium, soft, super-soft and ultra-soft. And that provided less flexibility.

One key problem was that at most races the hardest of the three nominated tyres was pretty much surplus to requirements, so teams focused on the two softer compounds, and that reduced strategic variety. On the odd occasion when all three tyres were realistic choices for Sunday we did see drivers trying different things, and that created a little extra entertainment.

Pirelli has been running an intensive test programme this year, with all teams sharing out the days and running 'blind' – in other words, not knowing exactly what Pirelli was giving them. That information was used to first fix the 2018 construction, which had to be homologated by the FIA some months ago, and then the compounds, which have to be homologated by December 1, but in reality had to be fixed before this week's Abu Dhabi test.

Pirelli's goals for 2018 were to go softer, expand the range, create more flexibility, and ensure that at every race all three tyres are realistic race choices, meaning that there will be more strategic options and, potentially, more pitstops. "With three compounds we can create more action, we can create different strategies, real racing," added Isola. "Teams have the opportunity to choose 10 out of the 13 sets available, so they can make their own strategy, they can design the car with a specific approach.



FIA

Todt certain for third FIA presidency

JEAN TODT WILL BE UNCHALLENGED IN next month's FIA presidential election, meaning he is now guaranteed to stay on board for a third term.

The Frenchman announced back in May that he intended to stand for another four-year term, having first taken up the role back in 2009. And with a November 17 deadline for rival candidates to put themselves forward having passed with no-one expressing interest, it is now a formality for Todt to win the election.

The FIA General Assembly will ratify Todt's continued role as president when it meets on December 8.

Todt announced the 11-man team that he had to put forward for election back in May, with the former Peugeot and Ferrari chief saying he had come under pressure to stay on board as president. "A lot of people who voted for me are pushing me to go for another mandate," he said at the time. "It is very important, because if I had a lot of resistance not to go for the election, my decision would be much easier, because I would then decide that I will go."

The next term, which will last for another four years until the end of 2021, will be the final one for Todt, as FIA rules stipulate a maximum of three terms.

Meanwhile, retiring Formula 1 driver Felipe Massa has been put forward by Brazil to be the country's representative on the World Motor Sport Council. Massa is believed to have spoken to Todt about using his expertise to assist the governing body.

Speaking to reporters in Abu Dhabi, Todt said he would be interested in working with Massa in the future and is considering how he can integrate the Brazilian, possibly as a driver ambassador.

Massa (below) told Autosport he is keen to discuss opportunities with Todt. "I have some ideas of what I will do," he said. "I will do some other stuff, maybe coming to a few races to do some different jobs and trying to use my experience. We should have some meetings, some ideas and then we'll see what is going to happen."

JONATHAN NOBLE AND LAWRENCE BARRETTO



seven-tyre 2018 range

If they want to be more aggressive and harder on the tyres they probably have to focus on harder tyres; if they are more gentle on tyres they probably have to focus on softer. But we will give them the choice, and I think this is a big part of the show."

So Pirelli decided to expand its dry range from five to seven. But in effect it's just six. The 2017 hard has become the 2018 super-hard. It's unlikely ever to be used, but it's there just in case car development takes off to such an extent that Pirelli finds it has been too bold. The old medium is the new hard, and the old soft is the new medium. Those three tyres are essentially as used in 2017, but the other four are all new compounds.

The hyper-soft, which is two steps softer than the old ultra, will add a critical edge at races that suit the softest tyres. "For sure we'll use it in Monaco, but it's difficult to say now," said Isola. "The hyper-soft is for street circuits, low-severity circuits. If I had to choose, probably it will be the Red Bull Ring, Montreal, maybe Abu Dhabi."

Now that Pirelli has definitive tyres, this week's Abu Dhabi test, said Isola, "is really important for us because it is the first time we have all 10 cars running after a race in a representative condition on a track

where two days before we just had a race, so we have a reference".

"The system we decided to have for this test is we are supplying 20 sets of tyres for each team. Twelve are defined by us, the same for all the teams, and eight are defined by the team. Nobody chose the super-hard, but all the others are available. We can assess degradation figures and delta lap times on at least five out of the seven compounds."

Regulations insist that for flyaway races teams must choose their compounds 15 weeks before the race concerned. That means that by December 7 Pirelli must tell the teams and the FIA which three compounds will be in play in the Melbourne opener, and by December 15 the teams will tell the FIA how many of each type they want to use that weekend.

The complicated process and effort gone into improving the racing begs the question: is the wave of criticism justified? It is perhaps inevitable that tyre companies struggle to keep everyone happy all of the time. "The final target is to have a better show," said Isola. "Better for spectators, more emotion, more action on track, and we hope with these changes we have achieved the target."

ADAM COOPER

"The final target is a better show, more emotion"



FORMULA1

KUBICA RETURN WITH WILLIAMS RAMPS UP AT TEST

ROBERT KUBICA DROVE a 2017 Williams for the first time during the post-Abu Dhabi Grand Prix Pirelli tyre test at Yas Marina this week.

The Pole, whose F1 career was interrupted by life-threatening injuries from a rally crash in 2011, is favourite to replace Felipe Massa at Williams next season and line up alongside Lance Stroll.

Williams was encouraged by his form when he tested a 2014 F1 car with the team at Silverstone. He ran in a 2017 Renault in Hungary in August, during the in-season test, but Yas Marina gave Williams its first glimpse of his capabilities in current machinery.

Williams chief technical officer Paddy Lowe and performance head Rob Smedley stayed on in Abu Dhabi to follow his progress. Nico Rosberg, who is part of Kubica's management, attended too.

Williams also gave Sergey Sirotkin some track time as the Russian Renault reserve has joined the list of contenders for Massa's seat. Daniil Kvyat is also believed to be in the running, even though he did not drive in Abu Dhabi, as is Williams reserve Paul di Resta, but Pascal Wehrlein is now considered a long shot. It is believed that Kubica, Sirotkin, Kvyat and di Resta are all

working on securing financial packages to aid their respective bids for the seat.

Williams is to hold discussions regarding the identity of its second driver next week in the hope that it can make an announcement before Christmas.

The two-day Pirelli test gave teams an opportunity to run Pirelli's new range of tyres for 2018.

As a result, all the teams gave their race drivers some track time to gather data on the new rubber. McLaren ran two cars to make up for the loss of running from the cancellation of its test in Brazil because of security concerns. This offered junior driver Lando Norris a second chance to drive a 2017 F1 car, following his impressive performance in the Hungaroring in-season test, along with test driver Oliver Turvey.

Sauber gave Charles Leclerc, who is expected to be making his F1 race debut with the team next year, a run. Force India development driver Nikita Mazepin got a full day in the car, leaving Sergio Perez and Esteban Ocon to split the final day.

Toro Rosso echoed that pattern, with Sean Gelael running on Tuesday, before Pierre Gasly and Brendon Hartley shared driving duties on Wednesday.

LAWRENCE BARRETT

DAYTONA24HOURS

Stroll gathers 'fun' superteam

While Alonso is racing at Daytona as a means to an end, the Canadian is having a blast with his mates

F

ernando Alonso's assault on January's Daytona 24 Hours can be viewed as a lead-in to a future bid for honours at Le Mans and the continuation of his quest to win the unofficial triple crown of motorsport. Lance Stroll, the second current Formula 1 racer to sign up for the IMSA SportsCar Championship opener, is going purely for the hell of it.

The Williams driver will race an ORECA-Gibson 07 LMP2 fielded by Jota-run Jackie Chan DC Racing in the US enduro on January 27-28 alongside a group of team-mates in Felix Rosenqvist, Daniel Juncadella and Robin Frijns he knows well. It's all about enjoying

himself in a racing car away from the cauldron of F1.

"Sometimes it's nice to step back and do something that's a bit less high pressure – I'm looking forward to having some fun," said Stroll, who has just completed his maiden F1 season with Williams. "I've got some great team-mates, guys I've worked with before."

"It's also good to do some more racing in the F1 off-season. I've done the event before [in 2016 aboard a Ganassi-run Riley-Ford Daytona Prototype] and really enjoyed myself, so I'm looking forward to going back."

Stroll is good friends with Rosenqvist (below, with Stroll), his team-mate and then mentor in his European Formula 3 Championship campaigns of 2015-16, and Juncadella. Frijns, meanwhile, is part of the Winway management and coaching organisation that works with the other three.

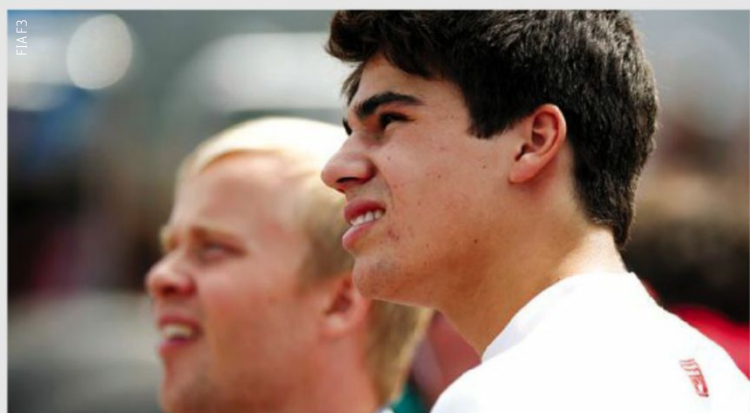
The 19-year-old Canadian also thanked Williams for allowing him permission to do the race and the pre-event test at the start of January. "I really appreciate everyone at Williams supporting me in doing this and giving me permission," added Stroll. "It shows we've got a great relationship."

The deal for Stroll to contest Daytona was forged between his father, Lawrence, and Jota partner David Clark, who have known each other for 30 years. Clark described the line-up confirmed in one of its pair of Daytona entries as "very exciting".

"Lance, Felix, Daniel and Robin are a collection of some of the finest young talents to emerge in recent years," he said. "To have them all in the same car for such an important race like Daytona is a milestone in Jota's history. What Lance has achieved in his short career has been super-impressive and he is clearly a quality racer and has a great future ahead of him. It will be fantastic to have him in the team."

The drivers for the second Chan/DC car are likely to include some of the regulars from the team's 2017 World Endurance Championship campaign, which included a second and third-place finishes overall at the Le Mans 24 Hours in June.

GARY WATKINS





FORMULA 2 The venerable Dallara GP2/11 bowed out in Abu Dhabi last weekend after seven seasons encompassing 158 races. The first race, a GP2 Asia round at Yas Marina in February 2011, was won by the late Jules Bianchi. Appropriately, last Sunday's F2 send-off at the same circuit was won by Bianchi's friend and protege Charles Leclerc. The most wins over the period were taken by Stoffel Vandoorne (11), followed by Stefano Coletti (eight), Leclerc and Jolyon Palmer (seven each), and Romain Grosjean and Artem Markelov (six each). Vandoorne, Leclerc and Pierre Gasly each topped eight qualifying sessions, with Palmer and Sergey Sirotkin next up on four. **Photograph by Mauger/LAT**

FORMULA 1

Leclerc almost there as Sauber delays verdict

SAUBER IS EDGING CLOSER TO finalising its line-up for the 2018 Formula 1 season, with Ferrari protege Charles Leclerc favourite to get a seat.

Team principal Fred Vasseur had suggested an announcement on its drivers would be made last weekend in Abu Dhabi, but that was delayed as discussions continue. The situation is complicated by the fact that Sauber is considering enhancing its partnership with Ferrari. The deal already involved taking a supply of current-spec F1 engines, after running year-old units this year, but that could evolve into Sauber becoming a Ferrari junior team.

Ferrari president Sergio Marchionne is keen for Antonio Giovinazzi to run alongside Formula 2 champion Leclerc, who has taken part in free practice sessions with Sauber recently.

That would end Marcus Ericsson's three-year stint with the Swiss team. Ericsson feels he is the frontrunner to retain a seat at Sauber should Ferrari

not strike a deal to place two drivers at the team. "From what I understand it's talks with Ferrari and how much of a relationship they're going to do with Ferrari and what that will include," he said.

"I know Ferrari is pushing for getting two drivers in the team and that's the main worry for me at the moment, but that's not been decided yet. Otherwise I'm quite hopeful, or quite confident, that I'm going to be one of the drivers."

It is believed that Pascal Wehrlein has drifted to an outsider for the second seat, and could even return to the DTM.

Sauber's closer ties with Ferrari have fuelled rumours of the team's engines being rebranded as Alfa Romeos. Vasseur said such talk was premature for 2018, and that the current talks had not involved an Alfa plan being fast-tracked.

"It could be a part of the discussion but so far it is not a topic," he said. Pushed on whether it was an option for the longer term, Vasseur said: "I am very open..."

LAWRENCE BARRETTO



FORMULA 2

DE VRIES GETS PLUM PREMA SEAT FOR F2

NYCK DE VRIES HAS TAKEN the coveted remaining seat in Prema Racing's 2018 Formula 2 line-up, as the Italian team bids to win a third straight drivers' title in its three-year history in the second-tier series.

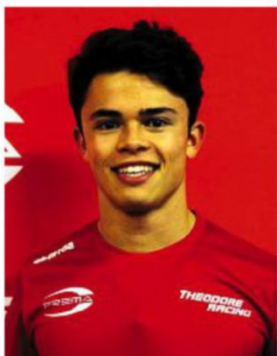
McLaren Formula 1 junior de Vries, who finished seventh in the 2017 F2 standings with one win, joins Sean Gelael at Prema. He has previously received backing from the Jagonya Ayam scheme of Gelael's father Ricardo. The signing of the Dutchman means that for the first time Prema enters a season with two drivers who have at least a year of F2 experience.

"We are delighted to have secured the services of Nyck for the 2018 F2 season," said Prema boss Rene Rosin, whose team has taken Pierre Gasly and Charles Leclerc to the drivers' title in its first two seasons in the series.

During de Vries's first year in F2 he showed impressive speed in qualifying, taking top-four grid spots three times in the opening four races and qualifying second twice over the season. But, as evidenced by his struggles in both F2 races in Abu Dhabi last weekend, he has sometimes struggled with the fragile Pirelli tyres. Prema notably helped Gasly overcome similar problems for his title-winning campaign in 2016.

Two other drivers confirmed on the 2018 F2 grid are Lando Norris and Sergio Sette Camara, who will both race for the returning Carlin squad (see column on p13).

ALEX KALINAUCKAS



DTM

DTM set for UK return, and could be on Brands GP

THE DTM IS POISED TO RETURN TO BRITAIN NEXT year after a four-year absence, with Brands Hatch or Donington Park in line to host an event on an expanded 10-round 2018 schedule.

The German touring car series has not held a round in the UK since 2013, when the Brands Hatch Indy Circuit hosted the last DTM race of its run of eight successive years. But ITR chairman Gerhard Berger is understood to be keen to bring DTM back to the UK as part of a push to reintroduce more classic circuits to the calendar.

Autosport understands that a British round has provisionally been scheduled for the April 21-22 weekend, which would make it the 2018 season opener. It remains unclear whether this would be at Brands Hatch (above) or Donington, which last hosted DTM in 2003, although

any return to Brands would take place on the full Grand Prix Circuit and not the Indy layout.

Italy is also in line for a DTM return for the first time since Adria hosted a race in 2010. Misano is believed to be the favoured venue, and would likely be given an August 11-12 date to coincide with the holidaying season.

Of the eight venues on the 2017 calendar, only Moscow Raceway will be dropped, with Lausitzring set to continue hosting a race despite its sale to automotive testing company DEKRA earlier this year.

The Norisring, Zandvoort, Nurburgring, Red Bull Ring and Hungaroring rounds are all expected to retain their calendar slots. Hockenheim will continue to host two rounds, including the season finale.

ROMAN WITTEMEIER AND JAMIE KLEIN



IMSA SPORTSCAR

Jarvis, Tincknell for Joest IMSA

BRITONS OLIVER JARVIS AND Harry Tincknell have joined the Joest-run Mazda Daytona Prototype international team for next year's IMSA SportsCar Championship.

Former Audi DTM and LMP1 driver Jarvis and Tincknell, who will continue in the World Endurance Championship with Ford, will be the two newcomers in Mazda's pair of RT24-Ps for 2018 alongside marque

stalwarts Jonathan Bomarito and Tristan Nunez. They will be joined by IndyCar racer Spencer Pigot, another Mazda regular, and recently crowned DTM champion Rene Rast for the long-distance races that make up the North American Endurance Cup.

"Working with Joest, we were also able to secure fast, winning drivers from their recent history, which

makes Jarvis and Rast a good fit, as is Tincknell, who has been successful in both GT and prototype cars," said Mazda North American motorsport boss John Doonan.

Jarvis explained that it had "always been a goal of mine to race in the championship full-time and I don't think there's ever been a better time to be part of it".

GARY WATKINS



WORLD RALLY CHAMPIONSHIP

Ogier to return with M-Sport

SEBASTIEN OGIER HAS PUT HIS retirement on ice and will defend his World Rally title with M-Sport next season.

The superstar Frenchman identified M-Sport team principal Malcolm Wilson as one of the key drivers in his decision to stay in the sport. Following months of protracted negotiations, Ogier and Wilson were due to announce the news to the Cumbrian team at their championship celebrations at the squad's Dovenby Hall base on Tuesday.

Ogier told Autosport: "There was a lot talked about and a lot written about my decision and where I would go. I talked to the other teams, but I had to be really convinced, not only on the money side, but also there's the thing that money can't buy: a great boss. And nobody has given me the sort of feeling that Malcolm has. I really feel that he fights so hard to keep me in the team, I enjoy working with him and the team so much – there's a lot of good feeling for this."

Ogier will be joined in the M-Sport team by Welshman Elfyn Evans. M-Sport will reveal the remainder of its line-up at January's WRC launch at Autosport International at the Birmingham NEC.

Five-time champion Ogier admitted retirement had been a very real possibility for him. "Really," he said, "I have to consider this option when I am thinking about the future; this is something that has to come into the picture. I have my family and it's really important to me to spend the maximum

amount of time with them. But it's too early for me to retire – I still have time to do good things in the sport.

"It also means I can share the next step with M-Sport. We made a great start this year and it was very special to win the title as the underdog – that really gave us all a special feeling to do it this way. I couldn't talk about this officially, but for some time now it's been clear in my mind that I want to stay with this team for next year. It's good that it's now official; it means we can focus on next year to work for the future."

Ogier will begin testing the 2018 Ford Fiesta WRC next month, shortly before meeting his fans at their annual celebration in Gap on December 15.

An understandably relieved and delighted Wilson told Autosport: "This news is definitely worth waiting for. I'm over the moon that we've got Seb, Julien [Ingrassia, co-driver], Elfyn [Evans] and Dan [Barritt, co-driver] with us again next year. The negotiations with Seb have taken a while, maybe even longer than last season, but we've put everything in order. I'll be honest, negotiating with Sebastien's a very straightforward process: he told us what he wanted and we had to find a way to get there."

Rally GB winner Evans, who will run on Michelin not DMACK tyres in 2018, added: "I learned a lot from Seb and I'm looking forward to working with everyone again."

DAVID EVANS

IN THE HEADLINES

DC AND MCKENZIE TO HOST AWARDS

Formula 1 broadcasters David Coulthard and Lee McKenzie are the new presenters for the Autosport Awards, which take place in London this Sunday. Among the presentations will be the 29th McLaren Autosport BRDC Award, of which Coulthard was the inaugural winner in 1989. Live coverage will be shown on autosport.com, motorsport.tv and motorsport.com.

LE MANS POINTS ARE SCALED DOWN

The World Endurance Championship has scaled down its points coefficient for the Le Mans 24 Hours in time for the 2018-19 superseason. Previously counting for double points, the French classic will now be worth 1.5 times the tally for a normal six-hour race. The 1500-mile event at Sebring in March 2019 will be scaled up by 1.25.

MONTEIRO SIDELINED UNTIL 2018

Honda star Tiago Monteiro, who led the World Touring Car Championship for much of this season, will not race again before 2018 following the injuries sustained in his September testing crash at Barcelona. That means he will miss a fourth successive WTCC round with this week's finale in Qatar. Monteiro will be replaced for the third successive event by Esteban Guerrieri.

RATEL ORGANISES PRO-AM GT SHOWCASE

GT promotion king Stephane Ratel has announced a GT3 Cup of Nations for 2018. The event, intended as a pro-am equivalent of the FIA GT World Cup in Macau, is likely to take place at Sochi in October. The Russian venue would host three sprint races, with each car piloted by a silver-rated racer and a bronze driver, and each duo holding the same country's passport.

BARNICOAT WINS EDWARDS AWARD

Briton Ben Barnicoat has been awarded the Sean Edwards Trophy, in honour of the Porsche star who lost his life in 2013. Barnicoat, who has raced McLaren GT3 machinery in the Blancpain GT series and Pirelli World Challenge this year, was viewed as the driver who shows similar qualities to Edwards. He beat fellow nominees Dries Vanthoor and Fabian Schiller to the prize.

NORRIS JOINS SUPERSTARS IN SAUDI

Formula 3 European champion and McLaren Formula 1 reserve Lando Norris is among the early confirmed drivers for the multi-discipline Race Of Champions, which will be held in Saudi Arabia on February 2-3. Norris joins Juan Pablo Montoya, Tom Kristensen, David Coulthard, Petter Solberg, Josef Newgarden, Helio Castroneves and Ryan Hunter-Reay in the event.

F1 REVEALS REPLACEMENT LOGO

F1 chiefs unveiled a new logo in Abu Dhabi last weekend, replacing the old one used since 1995. Lewis Hamilton dismissed it as "not iconic", entirely correctly as it is brand-new and therefore cannot be iconic.



NIGEL ROEBUCK

Waiting for racing

The Formula 2 race in Abu Dhabi summed up what was missing from the Formula 1 grand prix: overtaking. It's time to bring it back

[@autosport](#)

WE HAD A GREAT RACE IN ABU DHABI LAST SUNDAY

— but it wasn't the grand prix. As at Monza, the excitement came in the morning, when Charles Leclerc topped off his championship-winning Formula 2 season with a stunning drive. The future Ferrari driver sliced through from sixth on the second lap to pass Alexander Albon for the lead on the last, a move at once superbly judged and *extremely* brave.

Leclerc was suitably exhilarated afterwards, and he should savour the memory, for it will be a long time before he has another race like that: next year he is in Formula 1, where the cars are so sophisticated that they can't actually race each other.

After the grand prix, Lewis Hamilton came out with another of his self-effacing observations: "Congratulations to Valtteri — he did an awesome job to hold me off..." He then went on to say that, "As soon as you get to 1.2 or 1.4 [seconds behind], you just lose downforce", and his conclusion, after sitting endlessly behind Bottas, was that Yas Marina was not suited to Formula 1 cars.

Hamilton's right, of course — but then where is? After shadowing him throughout the Belgian Grand Prix, Sebastian Vettel might have said the same of Spa: given that they were never more than a couple of seconds apart, it was tense — but

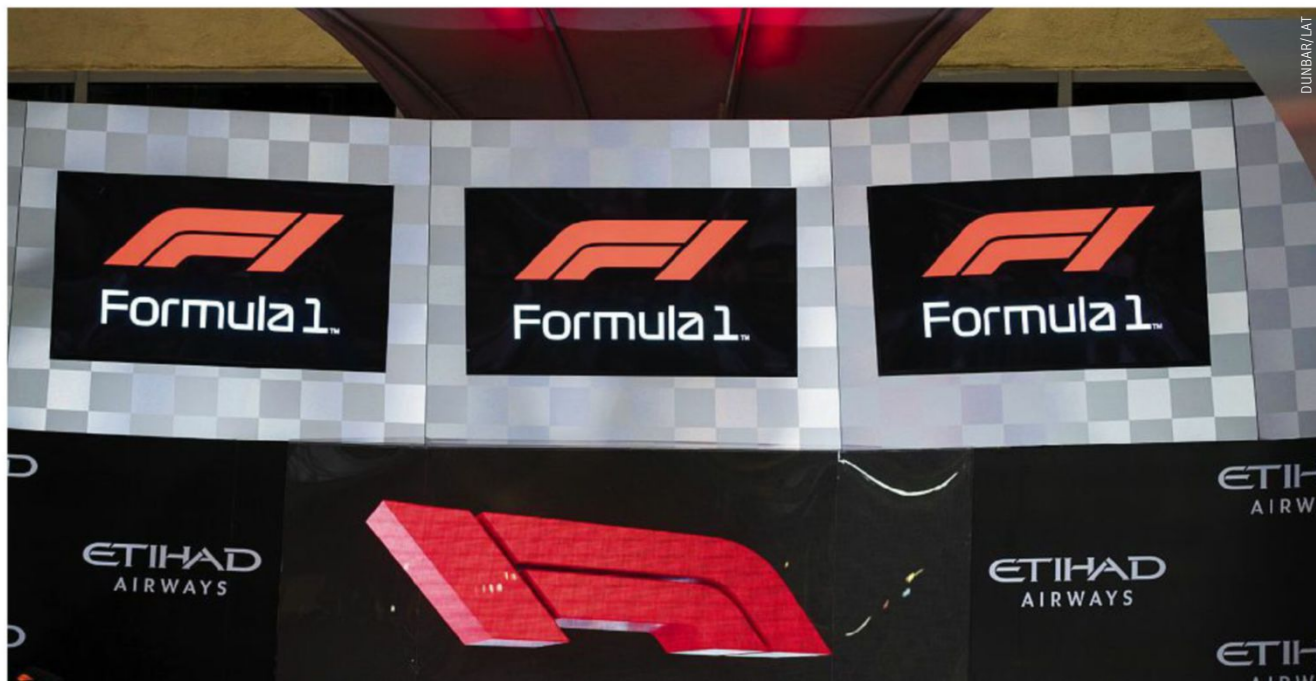
not more than that, for 'dirty air' decreed that only a mistake by Lewis would have allowed Seb to take a run at him.

We never learn, do we? The inalienable laws of nature are that, one, the sun rises every morning, and, two, downforce is ruinous to good motor racing. Why, then, you might ask, do hundreds of people spend every waking hour — and unimaginable amounts of money — in trying to find more of it? Well, because it's their job to make the cars faster, and they're brilliant at it.

For Formula 1 fans — who in the end pay for all this — it's a somewhat different proposition, because what they want above all is great racing, and it's a very long time since they've had it.

Although by any standards a nondescript circuit, Yas Marina yet proved capable of producing a memorable race, as Leclerc, Albon *et al.* demonstrated, and it was their cars — devoid of fancy aerodynamics — that allowed them to do it. Sunday morning brought back something Fernando Alonso said to me earlier this year: "For sure, the actual *racing* would be more spectacular if you had 20 Formula 2 cars, driven by Formula 1 drivers. I think the fans would love that kind of racing — with the cars so equal, the driver would matter more, and, compared

"F1 fans want great racing, and it's a very long time since they've had it"





with what we have now, it would be incredibly cheap. But of course Ferrari and Mercedes and Renault would not be there..."

Formula 1 fans — or at least those to whom I have spoken — have never been enamoured of this breed of Formula 1 car, with its clever, heavy, muted, expensive, hybrid power unit, but in its early days something they did like was the way the cars would 'step out' when the massive torque kicked in. Everyone surely revels in the spectacle of opposite lock, and briefly that was in evidence.

It didn't last, of course, because downforce caught up, and when the F1 Strategy Group began debating the need to make the cars quicker, to get back to the performance level of the three-litre V10s of a dozen years earlier, it was to be achieved, they determined, by increasing mechanical grip through larger tyres — but, more fundamentally, by *hugely* increasing downforce, and doing it entirely 'over the car', with wings and even more unsightly aerodynamic bits and pieces.

At Autosport International in January I got talking to a posse of real long-haul Formula 1 fans — the kind Liberty Media needs to take care not to alienate — and they weren't looking to the coming season with optimism: yes, the cars would be quicker, but with even more 'aero', the racing was surely going to be worse. I could only agree. "Well, if we can all see it," one of them concluded, "why can't the people who make the rules?" Answers on a postcard, please. I don't have one of my own.

As soon as pre-season testing began, we were confirmed

in our fears. The drivers, suddenly going way quicker than most had ever experienced before, loved the sensation, but Hamilton was one of several to temper his enthusiasm, suggesting that already he was finding it way more difficult to follow another car through a corner: inevitably *racing* was going to suffer. Lewis was right, and as well as that, of course, a lot of once testing corners have sadly become 'easy flat'. Is anyone — save perhaps the Strategy Group — surprised?

For a different reason, Kimi Raikkonen was another man disenchanted on Sunday evening, complaining that the whole race had been 'pretty much fuel saving', although he didn't explain why this had cost him 26 seconds more than team-mate Vettel. "It didn't feel like racing," Kimi said, "but those are the rules..."

So they are, and they need changing. Hopefully, we are done with silly high-degradation tyres, and that has been good (as is the forthcoming removal of shark fins and T-bars, compensating in part for the arrival of the hideous halo), but *anything* that requires 'cruising' has no place in Formula 1.

Liberty Media needs to give these matters some thought, not least given its wish to build up the sport in America, where fans are accustomed to order changes. In Ross Brawn they have the right man for the job, but in the meantime their big news of the weekend was the announcement — presumably to draw another line under Bernie — of a new 'F1' logo, which comes with the blessing of the FIA. So that's a weight off everyone's mind. ✂

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Carlin's F2 return

The returning Carlin team and rookie Lando Norris face a crucial 2018 F2 season against fierce opposition. It'll be tough to 'do a Leclerc'

By Alex Kalinauckas, Assistant Editor

[@nauckas](#)

LANDO NORRIS. IN 2015 HE WON THE BRITISH Formula 4 championship (then MSA Formula) in his rookie season in cars. After winning Formula Renault 2.0's Eurocup, its NEC offshoot and the Toyota Racing Series in New Zealand all in '16, this season he won the Formula 3 European Championship in his rookie year. And now he's been confirmed as moving up to Formula 2 for '18.

That's quite a progression. Norris followed up his 2017 Macau Grand Prix runner-up spot with a one-off F2 appearance in Abu Dhabi for Campos Racing just one week later, and, when you add in McLaren upgrading him from a junior driver to full F1 reserve after impressing in testing, less than a year after he won the prestigious McLaren Autosport BRDC Award, he's packed a lot in.

Rumours of a switch to Super Formula or possibly joining F2 with Prema (a scenario that had already been squashed anyway) were put to bed for good when he was announced as one of Carlin's drivers – alongside Sergio Sette Camara – for its return to the second-tier series after a year out. It's a team he knows very well – Carlin, after all, ran Norris's car for both his F4 and Euro F3 titles, and he was a race winner with the team in BRDC F3 alongside his FRenault achievements too.

Carlin's form in what was then GP2 had rather tailed off in 2015 and '16. The team went from finishing second in the teams' championship in 2013 and '14 (only losing out to Russian Time in the former on countback after a points tie) to ninth and 10th in '15 and '16. This, according to team boss Trevor Carlin, was because it had "ended up losing a bit of money and not getting great results", and so the team took "a sabbatical" to "cut our losses and regroup".

Always with an eye on coming back, Carlin says his squad has done just that. A "pretty strong engineering team" – made up of many of the engineers who had worked on its previous GP2 project and some other "super-experienced GP2/F2 staff" – will work on its new F2 2018 machines next year.

But a strong driver line-up, particularly with Norris – added to a healthy budget – was key to convincing Carlin that re-entering F2 was the right way to go.

"There was no point in us rejoining the championship in the way we left it," he explained, "with average drivers and average budgets. We wanted to have decent drivers and decent budgets. That's the only way to compete in F2."

With Norris and Sette Camara, Carlin can do that.

When the Norris-Carlin F2 deal was officially announced, the 18-year-old said that one of the positive aspects of signing with a team he knew so well was that he "feels part of the 'family'". It could be argued that to fully develop as a driver he might have needed to step away from a familiar environment and perhaps join a team based elsewhere in the world – as the Racing Steps Foundation has encouraged its drivers to do. It's generally recognised that stepping out of your comfort zone is necessary to adapt and improve – but then Norris linking his F2 future with Prema and other F2 squads ART Grand Prix and DAMS, as he did at the F3 season finale at Hockenheim, suggests he was willing to make that step.

Now that he's officially in F2 – and with such tremendous career momentum behind him – expectations will be high for 2018. Norris has already dispatched F4, FRenault and F3 each in a single season, and there will be pressure for him to do likewise (or more accurately, Charles Leclerc-wise) and become GP2/F2's fifth rookie champion.

Norris himself spoke over the Abu Dhabi weekend of needing to take the title as a rookie to "prove I'm just as good" as Leclerc. The Ferrari F1 junior – quick to look for Norris's results in the cool-down room

immediately following the Abu Dhabi sprint race – took seven wins and eight poles in 2017. Those are stats that eclipse fellow GP2/F2 rookie winners Nico Rosberg (five and four), Lewis Hamilton (five and one), and Nico Hulkenberg (five and three) – although all three beat him in the fastest lap count. And let's not forget that Leclerc lost at least one more pole and win over the course of '17, and was eliminated in a crash while fighting for the victory at Monza.

Norris is likely to come up against stiff opposition, too. Prema has signed rapid 2017 rookie – and another McLaren F1 junior – Nyck de Vries, while GP3 champion George Russell and his ART team-mates Jack Aitken and Nirei Fukuzumi are also expected to step up from the third tier. No wonder that Carlin moved to downplay expectations at this stage. "You have to be realistic," he said when asked if Norris can follow in Leclerc's footsteps.

Almost every season in a junior single-seater racer's career is crucial, but 2018 is set to be an important step in Norris's F1 ambitions – and hopefully, with new teams and drivers, that'll combine into an excellent F2 season overall. 🏁

“Now that Norris is in F2, expectations will be high for next year”

THE ULTIMATE REVIEW OF 2017

Whilst rival F1 annuals come and go, AUTOCOURSE – The World's Leading Grand Prix Annual – is proud to have reached its 67th year of publication as the indisputable leader in its field.

The 20-race Formula One World Championship season is covered in its usual full depth, with hugely experienced paddock insiders Tony Dodgins and Maurice Hamilton dissecting the drama and intrigue that is always an intrinsic part of any F1 season. Their race commentaries are backed up by detailed results spreads, including lap charts and tyre strategies.

Mercedes-Benz again proved the class of the field, with Lewis Hamilton and Valtteri Bottas taking the lion's shares of the victories, however they did not have it their own way.

Sebastian Vettel and Ferrari returned to winning form in 2017, and the German driver took the title battle to Hamilton in a feisty and often controversial manner. In addition, the ever-resourceful, Red Bull Racing with Daniel Ricciardo and Max Verstappen also scored dramatic victories to deny the Silver Arrows total domination.

Renault and McLaren Honda endured a challenging year as they sought a return to past glories, whilst Sahara Force India showed the independents how to go racing as they led the race to fourth place in the constructor's championship for a second successive year.

The highly respected Mark Hughes, in his Team-by-Team review, looks at the technical development of every team, the feature is enhanced by Adrian Dean's beautiful F1 car illustrations.

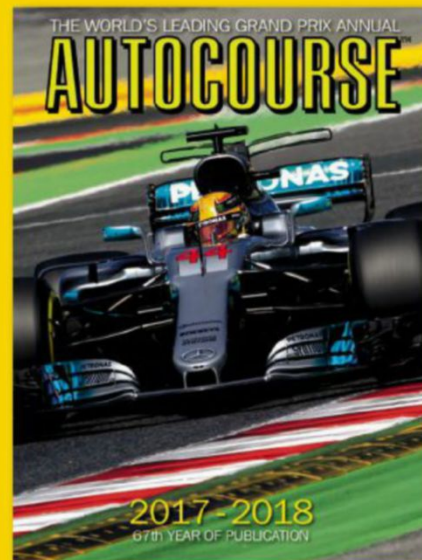
As well as Formula 1, the sport's other major categories are all afforded ample coverage. The Formula 2 and GP3 championships, the key rungs on the professional single-seat ladder to the top are chronicled, as is the rise of Formula E, which is gaining big manufacturer support.

In Sports car racing, Porsche, won Le Mans once again, and then swept to a WEC title triumph over Toyota, before taking their leave from the sport. Also covered are the door-banging exploits of leading Touring Car series comprising of the WTCC, DTM and BTCC.

From the other side of the Atlantic, Gordon Kirby provides his always insightful analysis of the United States racing scene.

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FEEDBACK

Britain's greatest F1 driver – your verdict

The conclusion in favour of Jackie Stewart is just wrong. The elimination of Stirling Moss partly because he once blew up a Vanwall at Spa through a missed gear is ludicrous, as is the criticism of him for not driving his team forward in a comparable manner to Stewart.

You do not appear to have recognised Moss's wins in Rob Walker's Lotus 18/21 at Monaco and Nurburgring against far superior machinery. I do not see any evidence that Stewart's drives in the wet were a match for those of Hamilton, Moss or Jim Clark. Moss particularly and Clark achieved just as significant results in uncompetitive cars, and Hamilton's wins when McLaren were in the doldrums in 2009 were equal achievements. I fail to appreciate the basis of your assertion that Stewart was more professional as a driver than the other candidates.

A numerate analysis is probably more effective than a qualitative evaluation. If one considers the combined performance over race wins, fastest laps and pole positions quoted as a percentage of race starts, then it is clear that the top three are Stirling Moss, Jim Clark and Lewis Hamilton, who are head and shoulders above the rest, and it is very difficult to separate them. Taking an aggregate of the three percentages gives a ranking of 1. Clark, 2. Hamilton and 3. Moss, which seems a very sensible conclusion to me.

Colin Scrivener
Derby

I mostly agreed with your list, but I think the first two should be Clark and Stewart, in this order, not Stewart/Clark.

Clark could have been champion for seven straight years, from 1962-68, if it wasn't for poor reliability and his untimely death. He dominated F1 like no-one else ever did, and it was not for lack of opposition; he raced against Graham Hill, John Surtees, Jack Brabham, Dan Gurney and Stewart himself.

Clark produced arguably the best drive ever (Monza 1967) when he came back from a lap down to first place, showing he wasn't only good at starting in front and disappearing into the distance.

Octavio Vieira
Aveiro, Portugal

Peter Windsor had it right. Jim Clark was not only the greatest British F1 driver of all time, he was *the* greatest driver of all time. Sublime skill, silky smoothness and simply blistering speed. His contemporaries knew he was the best. They were all playing catch-up.

Eliot Wilson
London

Just wanted to say how much I enjoyed reading and digesting your summary. I read it with an open mind and found your points and arguments interesting and convincing! I would have to agree with your conclusions – Sir Jackie gets the accolade.



Jackie Stewart gets the nod as F1's greatest Brit (November 23). Unsurprisingly, not all of you agree...

At almost 70 years of age I have been privileged to watch all those mentioned compete at some point in their careers.

Ian Bunker
Byemail

For me, it will always be Sir Stirling. His successes captured the imagination and led to a lifelong obsession with the sport. I agree with Nigel Roebuck, but think a lot of it has to do with the era when you were most captivated by the sport...

Julian Nowell
Walton-on-Thames

Having followed F1 for nearly 50 years, do I agree with your choice of Stewart? Yes and no; to be honest, I think Hamilton just shades it on balance.

What fascinates me is how different this debate could have been had Tony Brise, Roger Williamson and Tom Pryce lived, one of these could have been in the mix. And what could Johnny Herbert have achieved without his accident?

Andy Groves
Byemail

Thank you for the many replies. Stewart's wins strike rate (surely the most important) was 27.3%, so between Hamilton and Moss, though we try to be careful when it comes to statistics, which are only ever half the story. As for Monza 1967, look out for our list of Clark's greatest drives next year. It won't be #1! – ed

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Bottas stakes his claim for 2018

By Ben Anderson, Grand Prix Editor [@BenAndersonAuto](#)





ETHERINGTON/LAT

WHEN LEWIS HAMILTON WON THE THIRD OF HIS FOUR FORMULA 1 WORLD titles with three races to spare in 2015, he subsequently went off the boil, struggling to perform with the same intensity and focus that had propelled him to that glory in the first place.

Hamilton lifted off the gas and allowed Nico Rosberg to win three races in a row, which handed Hamilton's arch rival some useful momentum to carry through that winter and build into a successful title charge the following season. On the evidence of the 2017 Abu Dhabi Grand Prix, Hamilton should be wary that the ghosts of the past don't come back to haunt him.

There was a sense of déjà vu about the way Hamilton's season slightly tailed off again in 2017. He won his fourth world championship with two races to spare, but hasn't tasted victory in any of the final three. Perhaps more worrying this time around is the fact that Hamilton had approached the two 'dead rubbers' this season with a resolute determination not to back off – full focus and flat-out until the final race was done.

With better reliability in 2016, Hamilton could already be a five-time champion, but there's no doubt Rosberg was at his best in taking the title last season. And in promising to stay on the case to the end this time, Hamilton probably recognised the importance that late-2015 run played in Rosberg stealing the championship.

Hamilton has looked potentially fast enough to win each of the final two races of this year, but has ended up winning neither. In Brazil, everything was undone by that crash in Q1, but the free fresh engine he gained as a result set him up nicely for Abu Dhabi, especially considering Yas Marina is undoubtedly a power track.

But Hamilton fell short again, beaten narrowly but assuredly by Mercedes team-mate Valtteri Bottas, who has closed out his own campaign with two successive poles and amassed more points over the final three grands prix than any other driver on the grid.

Abu Dhabi was Bottas's most convincing performance yet in Mercedes colours – easily the best of his four poles, and his first victory in a straight fight with Hamilton. Previously, Bottas's wins have come against the Ferraris, with Hamilton mired in the pack, thanks to struggles with the ultra-soft tyre in Russia, and a gearbox penalty in Austria.

But in Abu Dhabi Bottas went toe to toe with the world champion for the first time – Rosberg-style – and came out on top. This result was the culmination of diligent work after a mid-season dip in form. In similar fashion to Rosberg at the end of 2015, Bottas has been steadily getting stronger over these final races.

He was decently fast in Japan but undone there by a grid penalty. In the United States, Mercedes was impressed by his pace at certain points until he ran out of tyres towards the end. Bottas was strong in qualifying in Mexico, Brazil and Abu Dhabi.

Bottas had his killer racing instinct questioned by Mercedes boss Toto Wolff after giving away victory to Sebastian Vettel at the first corner in Brazil, but the Finn always learns from his mistakes and remains mentally strong, another Rosberg-like quality.



Hamilton ran off at Turn 17 on lap 30



Bottas beat Hamilton to first corner

“The best ones are the ones that recover from bad moments,” said Wolff after Bottas’s Abu Dhabi success. “Maybe in a few years we will look back and say this was an important moment for his racing.”

Bottas was close to faultless around the Yas Marina circuit. He described his own start as “average” but it was enough to get into the first corner leading, as Hamilton paid for being “too aggressive on the power.”

“Many times I’ve had issues with being too keen getting on the power,” admitted Bottas. “The tyres, they are so sensitive, and also the power unit — applying the power — so we made some changes for the pedal map, which really helped out here.

“Being first out of Turn 1 really allowed me to control the pace.

It wasn’t easy. It might have looked like we were just cruising around, but we were pushing hard with Lewis.”

That was the other impressive thing about this performance, the way Bottas resisted fierce pressure from Hamilton, particularly after the pitstops. Hamilton was never more than 2.627 seconds behind Bottas through the first 20 laps, and had the gap down to barely more than a second in the early laps of the second stint.

Hamilton locked up and ran off the track at Turn 17 on lap 30 of 55 as he ramped up his chase, but only cost himself around three tenths. Bottas lost roughly the same amount when he locked up at the Turns 5/6 complex while encountering traffic. Hamilton got close under braking for Turn 7, but not close enough to attempt a pass. >>



Hamilton said his car balance was “spot-on” for the race, having miscued his set-up and lost crucial rear grip in qualifying, and he “gave it everything” trying to force a mistake from his team-mate, but Bottas remained resolute in his mission.

“When you’re so close in pace it’s so hard,” rued Hamilton. “The engineers say it’s a 1.4s delta you need to overtake. To get as close as I was shows I had good pace, but once you get within 1.2s it’s like you hit a wall and the car stops. Basically, you start sliding around, all four wheels, so there was a lot of rallying today.”

Nevertheless, Hamilton put the squeeze on Bottas in a concerted effort to unsettle the leading Mercedes, but Bottas resisted everything Hamilton could throw at him, trading quick laps and not making the big mistake Hamilton needed to find a way past. It was a very similar performance and outcome to the one Rosberg engineered at this race two years ago.

“Normally, under pressure I feel I perform well,” said Bottas. “There were many opportunities this race I could have messed it up. When you have Lewis behind, it doesn’t need much and he will go for it. In the team meeting he said he was trying everything and he was waiting for that one mistake.”

“The only thing that matters to me is to focus on my own stuff. I need to go corner by corner and lap by lap. I could keep my thoughts together, my head together, and it was all good.”

It took Rosberg a few tries before he wasn’t pressured out of the way by one of Hamilton’s relentless charges, but he improved methodically in the face of repeated defeats, and that hard-earned

2015 Abu Dhabi win was Rosberg’s most impressive over the final races of that season. Look what came of it subsequently.

Bottas has arguably progressed at an even quicker rate. The 2017 season was all about Hamilton versus Vettel; Mercedes versus Ferrari. But if Bottas can put everything together next year as he did in Abu Dhabi, he will be a proper title contender in ’18.

“For me [this win] is really important, because of the struggles I had after the August break,” said Bottas. “By working hard with the team, I feel I’ve really managed to improve so many things with my driving, and managed to be quicker in different kinds of circumstances. That’s the main thing and it gives me more confidence for next year.”

This weekend, being on the pole and winning the race, Lewis was giving everything, so that’s a good feeling. It will be nice to continue that from Melbourne.”

Whether he can will all depend on how successful

Bottas is at ironing out his residual weaknesses over the winter, and how well Hamilton regroups after a slightly flat end to this campaign.

Wolff said afterwards “I don’t think 2015 has happened [again]” with regards to Hamilton’s limp finish, and certainly Hamilton doesn’t seem to have backed off to quite the same extent this time around. He continued to work hard and was properly fast in both Brazil and Abu Dhabi. But perhaps that’s more concerning – that he tried that much harder and still came up short...

“There’s zero concern,” Hamilton insisted. “I think it’s clear that something happens once you’ve won the championship. All I can say is, the week after I won, I partied a lot with my family and

“When you have Lewis behind, it doesn’t need much and he will go for it”



Hamilton kept Bottas under pressure



Vettel took third but was not quite quick enough to stay with the Mercedes duo

celebrated, and that's what you do. I can tell you that before all the other races, that was not the case.

"So, sleep, energy, has definitely been different these last couple of races. But nonetheless I still tried to approach them the same. But if you don't prepare the same, there's no way [you're going to perform the same]. I'm not bothered about that. Next year that will go back to how it was in the second half of this season."

Hamilton will certainly need to come out firing on all cylinders again, and must also consider how the positive internal dynamic within Mercedes may shift as Bottas becomes more confident and more competitive. Hamilton and Bottas clearly get on as team-mates in a way Hamilton and Rosberg did not, but it's much easier for Hamilton to be magnanimous in defeat when he's already champion. Will things change if Bottas uses this »

QUALIFYING



THIS WAS PROBABLY THE MOST IMPRESSIVE QUALIFYING performance we've seen from Valtteri Bottas in Formula 1. Statistically speaking, it was undeniably so. His previous three poles were earned by less than half a tenth of a second; in Abu Dhabi, he was a relatively whopping 0.172s clear of Mercedes team-mate Lewis Hamilton.

Hamilton looked the favourite for pole after dominating the timesheet in practice, but Bottas closed to within three tenths of Hamilton's pace in FP3 and was faster (by just 0.035s) in Q1. Hamilton edged back ahead (by 0.080s) in Q2, but Bottas struck the killer blow by posting a 1m36.231s lap at the start of Q3.

When neither Mercedes driver found time on their final attempts, pole went to Bottas for the second race in succession.

"The team did a really good job on the timing and we had to make minimal changes during qualifying," said Bottas, who described his session as "seamless". "I could really focus on the driving and finding lap time here and there. I managed to get pretty much

everything together in Q3, run one. It was a good lap."

Hamilton gave up fractions of time to Bottas across the lap, but particularly through the final sector, where he was 0.145s down on the sister Mercedes. He went quicker through the first sector on his second try, but

"It was on the knife-edge and Valtteri did the better job"

Lewis Hamilton

then "lost it in Turn 5 and 6" – the chicane that precedes the hairpin before the back straight.

"I made some changes in anticipation of the track cooling and in hindsight it probably wasn't right," Hamilton explained. "I struggled a little bit with the balance generally through the laps.

"I had to push a lot. In FP3 I was much more comfortable with the car. I gave it everything I could, but it was on the knife-edge and ultimately Valtteri did the better job. It's great to see to him performing at this level, particularly at the end of the season, which puts him in a great position for next year."

Sebastian Vettel was third in the best of the Ferraris, improving to 1m36.777s on his final Q3 run, but ending up almost four tenths down on Hamilton and 0.546s adrift of Bottas – Vettel's largest deficit to pole in a dry session he's taken part in since the British GP.

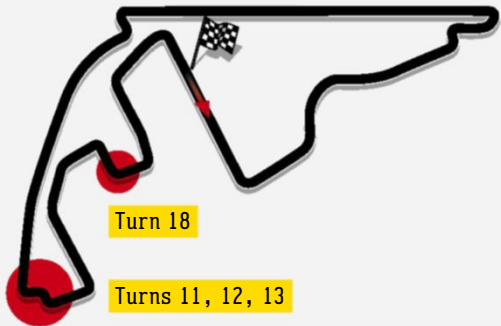
"We tried everything," said Vettel, who felt he was "fighting a little bit" with the Turns 5, 6, 7 complex. "The gap is big, but also it's a long lap, so naturally the gaps are a bit more spread. We've seen all year we've never had the car to put half a second between us and somebody else."

Kimi Raikkonen was provisionally fourth quickest until a last-gasp effort from Daniel Ricciardo's Red Bull displaced Raikkonen – who complained he couldn't get the Ferrari's tyres working consistently – from the second row by just 0.026s.

Max Verstappen rounded out the top six, 0.343s down on Raikkonen, paying for a lack of power on the straights and not finding a proper balance in his car through the crucial final sector.



“YAS MARINA IS TOUGH IF YOU CAN’T ROTATE THE CAR PROPERLY ON CORNER ENTRY”



KIMI RAIKKONEN’S FEELINGS on the Yas Marina circuit are legend. Fellow Finn Valtteri Bottas wouldn’t go quite as far as calling it “shit”, so when asked how much he liked the track, you had to read between the lines: “My honest opinion is that it is quite average – it’s not one of my favourites; not one I hate.”

An expert piece of fence-sitting, if ever there was one. Max Verstappen was more effusive, calling the circuit “quite interesting” because “a lot of corners follow up on each other, so if you miss one you’re not well positioned for the other one – so it’s quite

technical in that way.”

It’s no surprise to find Verstappen being positive about a circuit he says is “a bit like Mexico”, where he recently dominated. Yas Marina’s tight corner sequences create the sort of layout that ordinarily suits his spectacular driving style. But this is a tough place if you can’t rotate the car properly on corner entry, which is why he became so frustrated by the RB13 in second practice on Friday.

In FP1, Verstappen looked in great shape. At the Turns 11, 12 and 13 complex there was a notable difference between the way his car responded



compared to Daniel Ricciardo’s heavier machine, which understeered badly.

It was a similar story at Mercedes, except Lewis Hamilton turned the understeer to his advantage, using the extra traction and relying on his acrobatic abilities on the brakes to overcome the lack of front grip.

Bottas’s car looked too lively, requiring constant

corrections. He naturally desires an acutely responsive car, but this looked over the top. Bottas was way off Hamilton’s pace and later explained that he was running experimental set-ups.

In last practice on Saturday, when set-ups converge, the behaviour of the two Mercs also came together through the 90-degree left at Turn 18. Both appeared to have dialled

in understeer to keep the rear in check, but on a good lap Hamilton could get the car rotated quickly and wind the steering lock off properly.

It looked as though Mercedes has fudged this car’s weakness at low-speed, but it doesn’t look easy, or consistent. If that can be solved properly for 2018, the rest will be in serious trouble.

BEN ANDERSON

Bottas hopes to build on his win in 2018



ETHERINGTON/LAT



Bottas defeated
Hamilton on merit
in Abu Dhabi

result as a springboard to a championship charge next year?

Probably not, as long as there are no games off-track, which will help maintain Hamilton's equilibrium. But we also don't know how Bottas will behave if he gets properly into the fight, and what new (or old) challenges that could pose for Mercedes.

"I don't think we need to avoid a stressful situation," said Wolff. "We are not trying to build a new family here. We want to be the most effective racing team, and an effective racing team needs stress, needs tension, needs disruption, as much as it needs calmness and a positive attitude and mindset. Like everywhere in life, you want to have the mix of both."

Ferrari would have hoped to be in the mix to finish its own season in style here, after Vettel's triumph in Brazil. But Vettel was more than half a second slower than Bottas in qualifying and couldn't live with the two Mercedes in the race either, although he at least closed the deficit to an average of 0.3s per lap, despite the need for Ferrari to aggressively save fuel.

"The first two laps were pretty good, I was able to follow and I thought, 'OK, I can stay with them,'" said Vettel, who locked up at Turn 1 after the start and flat-spotted his first set of tyres "a tiny bit".

"The section around [Turns] 5, 6, 7 – they were faster than us all weekend. In the last sector, they were [also] very strong, so even if Lewis had to follow Valtteri closer than I was to Lewis, he was still faster than me in the last sector. I think that's where it got away.

"In the final stint on the super-soft, overall we were more competitive. I felt happier with the car, but those two in front,

they were able to just go faster with the fuel going down.

That's something I couldn't do.

"We got a fair beating and couldn't touch them in qualifying and in the race, so obviously there is lots for us to do better."

Which is true for all Bottas's rivals on the basis of his Abu Dhabi performance. Formula 1 ushered in a 'new era' with the launch of its not universally well-received new official logo in Abu Dhabi. Perhaps the final race of 2017 will usher in a new era for Bottas too. If he can harness the lessons of these final races in the way his predecessor did two years ago, there could be a very different complexion to the championship in 2018.

"We are going to go through everything from this season before Christmas, the main points we need to improve and my main weaknesses especially," said Bottas. "Then again in January, the same process continues.

"I'm still trying to make my weaknesses none. That's always the target. It's never possible, but you can always try to be near-perfect. I'm going to work harder than ever this winter, and hopefully I can be better than ever next year."

Hamilton already has enough to worry about with the resurgence of Vettel and Ferrari, even though the Scuderia suffered an unfortunate blip in Abu Dhabi, and there is the irrepressible rise of Max Verstappen to contend with too.

With Bottas also on the up after his first year of grace with Mercedes, Hamilton will very much hope the Rosberg omens of 2015 do not come back to trouble him again. ❧

**"I'm still trying to make
my weaknesses none.
That's always the target"**

Ricciardo: Raikkonen should have outscored me by miles

DANIEL RICCIARDO shrugged off losing fourth place in the world championship to Kimi Raikkonen at the Abu Dhabi Grand Prix because he feels Raikkonen should have outscored him comfortably.

Ricciardo arrived at Yas Marina seven points ahead of Raikkonen in the standings and was on course to beat him to fourth in the race too.

But a hydraulic failure on Ricciardo's Red Bull and Raikkonen's fourth place meant the Ferrari driver beat Ricciardo in the championship by five points.

When asked how disappointed he was to lose fourth in the standings, Ricciardo told NBC: "If I'm brutally honest, with that car he should have been a long way in front in the championship. So, yeah, I don't think it's a big deal."

Ricciardo said his fifth retirement of the season due to mechanical failure was made more painful by the gap until the 2018 season begins in Australia next March. "This one hurts actually, probably more than the others," he added. "It's a pretty bitter way to end the season. Sure, we had some highs, but we finished in a bit of a trench."



Raikkonen: 'Boring' GP felt like

KIMI RAIKKONEN SAYS Formula 1's fuel limits meant the Abu Dhabi Grand Prix was "more like endurance racing" because he had to save so much fuel.

The Ferrari driver finished fourth, fending off Max Verstappen for the whole race and gaining a position when Daniel Ricciardo's Red Bull retired. But Raikkonen did not

enjoy having to aggressively save fuel to make the finish, which compromised both Ferraris.

"The car was most of the time pretty good, but to be honest it was not a lot to do with racing because the fuel saving was a lot," Raikkonen said. "I tried to keep the guys behind, but tried to be on the limits you're allowed to use so it was a kind of

boring race. It shouldn't be like that. It's more like endurance racing. But that's how it is. It's the rule and we have to respect it, but as racers nobody's happy because we want to race."

Raikkonen said the whole field was likely affected so rejected suggestions that Ferrari needs to improve its fuel economy.

Force India slams 'weak' Hulkenberg penalty

FORCE INDIA CRITICISED Formula 1's stewards for the way Nico Hulkenberg was penalised for cutting the track at the beginning of the Abu Dhabi Grand Prix.

Hulkenberg's Renault moved back ahead of the Force India of Sergio Perez on the opening lap by cutting Turns 12 and 13.

Hulkenberg was handed a five-second penalty, but the Renault driver built a large enough gap over Perez to stay ahead after serving the penalty. Hulkenberg finished sixth, moving Renault up a place in the

constructors' championship.

Perez complained several times that Hulkenberg should have given the position back immediately, and Perez's team agreed the penalty was not harsh enough.

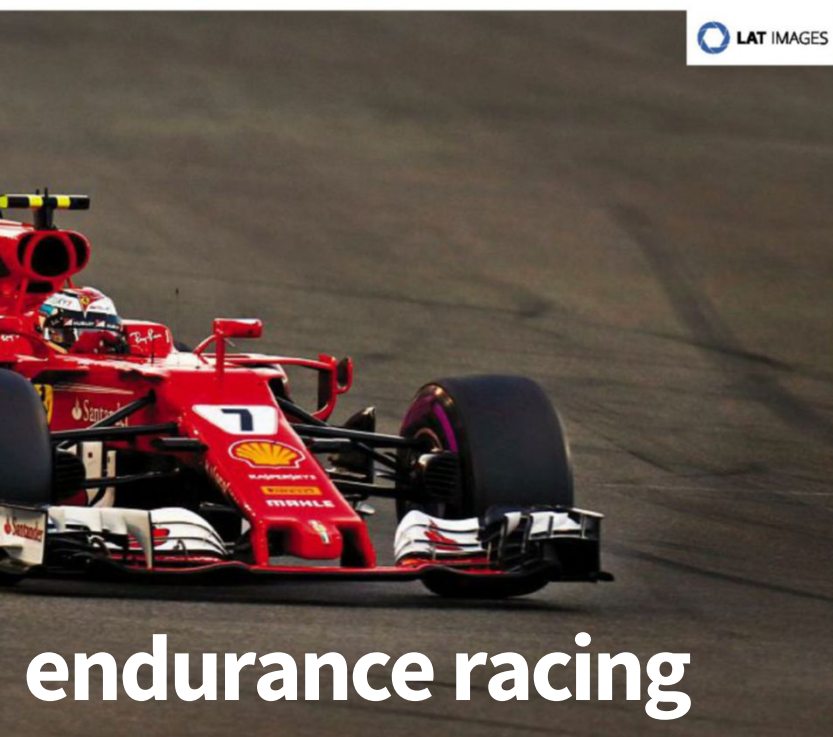
"It was a very lenient decision," Force India deputy team principal Bob Fernley told Autosport. "It should have been a case of reversing the position immediately. The five-second penalty meant there was no disadvantage to him. The gain was massive. If you looked at where he went off the track, he may as well

have gone shopping in Dubai and come back again."

Renault felt the penalty was fair, with Hulkenberg believing that he was forced to go off track by Perez "locking up and running wide", but Force India technical chief Andrew Green said there should not be "incentive to cut the corner, get ahead of the guy, and then go off into the distance and serve your penalty".

"It was a deliberate ploy by him [Hulkenberg]," added Green. "It's just rubbish. It's just wrong. The regulation is completely flawed."





endurance racing

"I don't think it's just us — it's the other teams also," Raikkonen added. "Maybe some have to do less than others and there are always a lot of things to do with how you run the cars and this and that, but I don't think we are any worse than others."

Raikkonen said his battle with the Red Bulls was entirely governed by fuel-saving. "You were thinking,

'Should I go after him?' because you knew at some point it was going to have to be painful to get back under the limit that we have," he added. "It's not a lot of fun. I think Max was more or less the same story. As we were close to each other it looks OK, but if you look closely you were lifting off 200 metres before the corners."

Toro Rosso 'massively disappointed' as team loses sixth place

TORO ROSSO DRIVERS PIERRE Gasly and Brendon Hartley both expressed their disappointment at the team's failure to hang on to sixth place in the constructors' championship after a poor race in Abu Dhabi.

The team was on for its best championship result since 2008 before the race, but lost out as both its drivers failed to escape Q1 and struggled to lowly finishes, while Nico Hulkenberg secured the spot for Renault with sixth.

"It was always going to be an uphill struggle for us to hang on to that sixth place in the championship and it's a real shame to lose it," said Hartley, who finished the



race 15th. "I'm obviously massively disappointed.

"I was in a train of cars — a McLaren, a Haas, a Sauber, myself and Pierre behind. It's just very tricky to overtake here with these big-downforce cars."

Gasly, who finished one place behind his team-mate after a high-speed spin at the penultimate corner, added: "I'm really disappointed with not being able to keep sixth place in the championship. This was the target — we knew it would be tough, but it wasn't possible.

"We struggled a lot in the race. It's frustrating to end the season like this and I feel sorry for the team."

Renault defends Hulkenberg strategy

RENAULT F1 TEAM BOSS CYRIL ABITEBOUL blamed a late TV replay for Nico Hulkenberg not handing position back to Sergio Perez after cutting the track on lap one.

"We didn't have access to the footage and the replay was late coming," said Abiteboul. "And when the replay came it was too late to give back the position. It was in the hands of the stewards and that [decision] was five seconds. From that point it was all about building the gap, in order for the pitstops to happen and not lose track position, which we did. I don't see a problem with that."

Q&A

CYRIL ABITEBOUL
RENAULT SPORT F1 MANAGER



What was more important, securing the extra money for finishing sixth in the championship or the momentum of such a strong finish to the season?

F1 is all about people. You need resources but that is not what is going to make a huge difference for next year. But people, mindsets, spirit, motivation, that is huge. When you have more

than 1000 people working and having to work flat-out over the winter in order to build a complete car, new car, new engine, that is so important. I believe so much in every single employee and team member. We're going to have an extra element of motivation that will make so much more difference than a couple of million.

You must be encouraged by finishing the season with the fourth quickest car...

We had to learn a lot. We had to accelerate learning about ourselves, about our hardware, the mess in Mexico and the overreaction in Sao Paulo. We reacted too far, we were too conservative. There was a necessity to come up with a different preparation, to find a better balance between performance and reliability for this race. We've done that thanks to a fantastic team effort.

Are you happy with the final result or did you expect a bit more from this season?

We set a target of fifth. It is clear. I remember that; I'm not losing memory. It was an ambitious target, but I think it's important to set ambitious targets even if you underachieve slightly. If we start setting a conservative target we are never going to be where we need to be by 2020. Without the [un]reliability maybe we could have been there, so we know what we need to do next year. But next year is going to be a different grid, with a different McLaren, a different Williams, Force India — I'm sure they will come up with a great car, so I'm pretty sure we will have tough racing with those guys.



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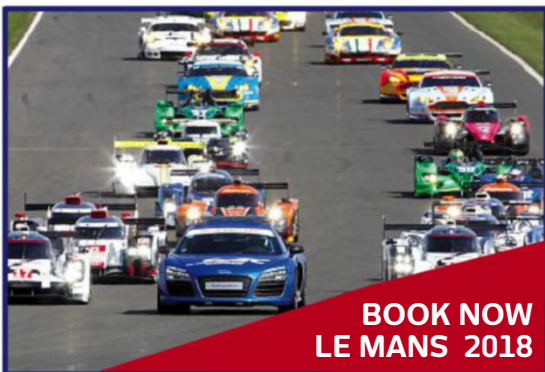
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Williams mystified by Stroll's struggles

WILLIAMS WAS AT A LOSS TO EXPLAIN Lance Stroll's lack of pace in the Abu Dhabi GP.

Stroll qualified over a second off team-mate Felipe Massa, but gained two places on the first lap to run 13th, before struggling with the car and dropping back. "He [Stroll] just didn't seem to have the balance to make it work," said Williams technical chief Paddy Lowe.

"We need to go and understand whether there was something wrong with the car and

at least rule that in or out.

"Then we're onto tyres. It has been a tricky weekend for everyone with tyre temperatures. Even on Friday he didn't have the pace. We need to understand that.

"There's a small step with the [older-spec] engine but not one that one could use as an explanation in this context."

Stroll finished 18th after struggling to get his tyres working, making three pitstops

where most made one, while Massa finished 10th in his final F1 race.

"Lance recognises himself that some of that was his own inexperience," Lowe added. "No matter how bad it is, sometimes you just stick with it and make the most of it."

When asked if Stroll needs to make a big step next year, Lowe replied: "Yes, I think that will be more clear to Lance than anyone. We've got things to work on."



Vandoorne says McLaren felt like a 'rally car' at Yas Marina

THE HANDLING OF Stoffel Vandoorne's McLaren-Honda was so bad in the Abu Dhabi Grand Prix that it felt like "a rally car".

Vandoorne finished three places and more than a minute behind team-mate Fernando Alonso in 12th, after starting 13th. He lost places at the start of the race and drove over the runoff on a difficult first lap.

Vandoorne then said over

the radio: "Honestly, I have no rear grip, is there anything I can do?," before McLaren told him it was "difficult to help him" with the settings.

McLaren suspects a piece of tape from another car that became lodged in the diffuser robbed Vandoorne's car of downforce.

"I think there was some kind of damage to the car or something – at least, it was wrong in the beginning,"

Vandoorne said. "It really felt like a rally car to drive out there. We went into the pits early to change the tyres, to assess the damage on the car as well, and after the pitstop we still continued to struggle for a while.

"The pace gradually recovered a little bit but still nowhere near good. There was no grip at all for me and a lot of sliding around. It felt like a big problem."



Hamilton: Abu Dhabi track layout doesn't suit F1

WORLD CHAMPION LEWIS HAMILTON SAYS THE lack of overtaking in the Abu Dhabi Grand Prix shows that the Yas Marina track does not suit Formula 1 cars in its current configuration.

"It's a great, great track but unfortunately it doesn't suit the cars very well," said Hamilton, who praised the venue's atmosphere and hospitality. "In the last sector you just can't follow. It's one of the worst tracks in that sense. You need 1.4s advantage to pass the car in front."

Circuit architect Hermann Tilke intimated changes were possible. "We have an idea to change one corner," he told Sky Sports F1. "It's a very small change, but maybe it has a lot of impact."

Haas team boss Gunther Steiner said the focus should be on making the grid more competitive. "We need to get the field back together," he said. "That is a cheaper way than to make new race tracks."





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G5

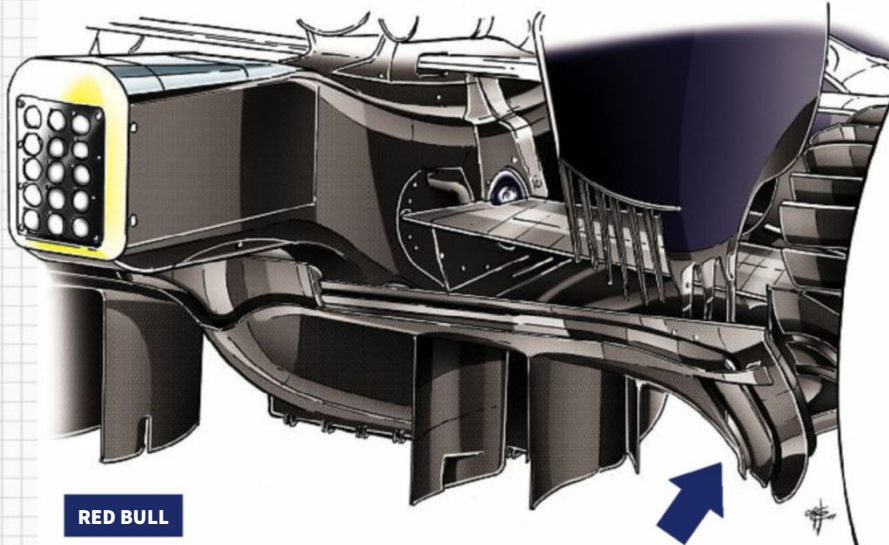
SWISS MOVEMENT

-Forged Carbon case -Sapphire Crystal Glass
-Carbon Fiber accents -Titanium Bezel

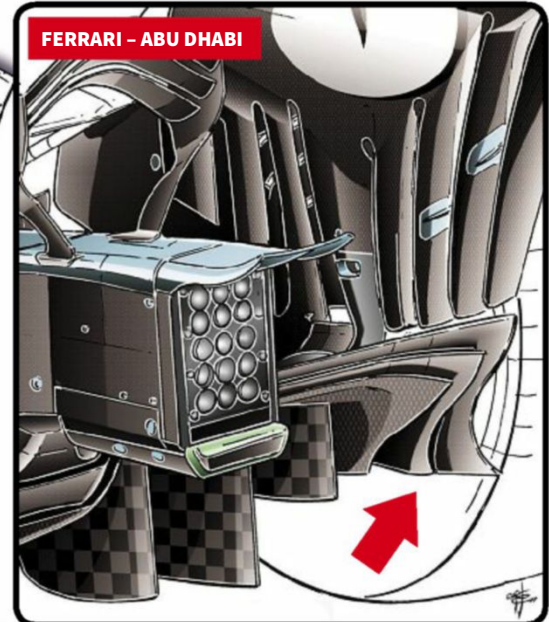


DRAWING BOARD

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RED BULL



FERRARI - ABU DHABI

FERRARI TRIES RED BULL FLOOR CONCEPT

Getting the best performance out of a current Formula 1 car is all about downforce – the more you have, the better you can load up the tyres and get them up to temperature faster.

Ferrari, with an eye on 2018, tested a Red Bull-style outboard section on its diffuser. Red Bull is the team that instigated the high-rear-

rideheight set-up and now a few teams are starting to follow suit.

The diffuser is vitally important to this concept. It's basically there to increase the velocity of the airflow between the ground and the large flat-floor area underneath the car. The faster the airflow, the more downforce you produce.

The actual size of the diffuser is controlled in the regulations, but its height is measured from the reference plane, which is the flat bottom of the car. By increasing the rear rideheight you effectively make the diffuser larger, but you also increase the airflow leakage being pulled in from the sides of the floor

in front of the rear tyre.

Getting the low-pressure area behind the rear tyre to work together with the diffuser means the airflow being pulled under the car at the front of the rear tyre basically fills the void behind the rear tyre, allowing the central section of the diffuser to work on the flat-floor area and

increasing overall downforce.

It's all about the detail of the louvres in front of the rear tyre, and the vertical turning vanes in the outboard section of the diffuser. Getting all this working together is no easy task but, in a world where the improvements for a top team are now very small, every avenue must be explored.

GARY ANDERSON

RED BULL TESTS FERRARI-TYPE FRONT WING DESIGN IN FRIDAY PRACTICE

RED BULL - ABU DHABI

RICCIARDO FRIDAY

F1 technical jargon will talk about the Y250 vortex. This is basically where the single-element, FIA-defined profile central section changes to whatever the teams design as their front-wing package. This defined central section became mandatory for 2009 to improve overtaking...

With the different wing profiles in this area, it is more or less impossible not to induce this vortex but, until now, Red Bull has been about the only team to not try to increase the aggressiveness of this vortex by using the wing flaps to contain it, then use it further downstream to

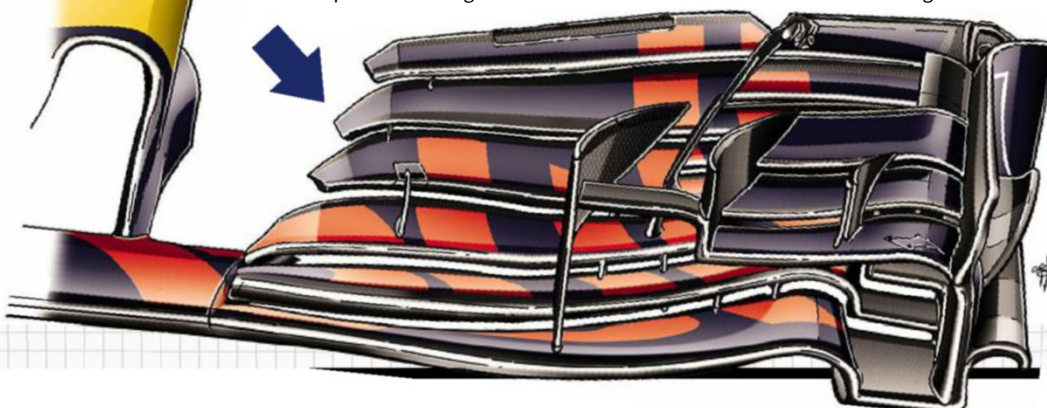
improve the performance of the bargeboards and leading edge of the underfloor.

In Abu Dhabi Red Bull tried a common front-wing-flap inner-end detail, similar to Ferrari's, where the flaps curve downwards to contain and also increase this vortex.

Getting the best from this

component further down the car will require some other tweaks, but the team will have measured what this has done to the airflow behind the front wing, and so get a better understanding of the next step required to perfect this design in preparation for 2018.

GARY ANDERSON



SILVERSTONE

F1/ABU DHABI GRAND PRIX RESULTS

STARTING GRID

1 Bottas #77 1m36.231s	2 Hamilton #44 1m36.403s	3 Vettel #5 1m36.777s	4 Ricciardo #3 1m36.959s	5 Raikkonen #7 1m36.985s	6 Verstappen #33 1m37.328s	7 Hulkenberg #27 1m38.282s	8 Perez #11 1m38.374s	9 Ocon #31 1m38.397s	10 Massa #19 1m38.550s	11 Alonso #14 1m38.636s
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Race results / 55 laps – 189.748 miles

Fastest laps

POS	DRIVER	TEAM	FINISH TIME	LED	TYRES	TIME IN PITS	POS	DRIVER	TIME	GAP	LAP
1	Valtteri Bottas (FIN)	Mercedes	1h34m14.062s	52	○ ●	21.478s	1	Bottas	1m40.650s	-	52
2	Lewis Hamilton (GB)	Mercedes	+3.899s	3	○ ●	21.274s	2	Vettel	1m40.770s	+0.120s	55
3	Sebastian Vettel (D)	Ferrari	+19.330s		○ ●	21.221s	3	Hamilton	1m41.473s	+0.823s	51
4	Kimi Raikkonen (FIN)	Ferrari	+45.386s		○ ●	21.609s	4	Alonso	1m41.669s	+1.019s	54
5	Max Verstappen (NL)	Red Bull-Renault	+46.269s		○ ●	21.269s	5	Verstappen	1m42.028s	+1.378s	43
6	Nico Hulkenberg (D)	Renault	+1m25.713s		○ ●	29.724s	6	Stroll	1m42.324s	+1.674s	52
7	Sergio Perez (MEX)	Force India-Mercedes	+1m32.062s		○ ●	21.869s	7	Raikkonen	1m42.338s	+1.688s	53
8	Esteban Ocon (F)	Force India-Mercedes	+1m38.911s		○ ●	21.865s	8	Hulkenberg	1m42.376s	+1.726s	53
9	Fernando Alonso (E)	McLaren-Honda	-1 lap		● ●	22.541s	9	Grosjean	1m42.437s	+1.787s	51
10	Felipe Massa (BR)	Williams-Mercedes	-1 lap		○ ●	21.449s	10	Ocon	1m42.609s	+1.959s	47
11	Romain Grosjean (F)	Haas-Ferrari	-1 lap		● ●	21.850s	11	Perez	1m42.689s	+2.039s	52
12	Stoffel Vandoorne (B)	McLaren-Honda	-1 lap		● ●	22.125s	12	Ricciardo	1m42.757s	+2.107s	13
13	Kevin Magnussen (DK)	Haas-Ferrari	-1 lap		● ●	21.875s	13	Massa	1m43.026s	+2.376s	45
14	Pascal Wehrlein (D)	Sauber-Ferrari	-1 lap		● ●	22.959s	14	Sainz	1m43.378s	+2.728s	26
15	Brendon Hartley (NZ)	Toro Rosso-Renault	-1 lap		● ●	21.598s	15	Ericsson	1m43.567s	+2.917s	36
16	Pierre Gasly (F)	Toro Rosso-Renault	-1 lap		● ●	21.519s	16	Gasly	1m43.844s	+3.194s	33
17	Marcus Ericsson (S)	Sauber-Ferrari	-1 lap		● ●	22.176s	17	Wehrlein	1m43.867s	+3.217s	50
18	Lance Stroll (CDN)	Williams-Mercedes	-1 lap		● ● ○ ○	1m05.064s	18	Hartley	1m43.897s	+3.247s	52
R	Carlos Sainz (E)	Renault	31 laps-loose wheel		● ●	21.956s	19	Magnussen	1m43.928s	+3.278s	50
R	Daniel Ricciardo (AUS)	Red Bull-Renault	20 laps-hydraulics		○ ●	23.477s	20	Vandoorne	1m43.986s	+3.336s	50

WEATHER Dry, cloudy; track 31C, air 24C WINNER'S AVERAGE SPEED 120.808mph FASTEST LAP AVERAGE SPEED 123.437mph

● New ○ Used ● Ultra-Soft ● Super-Soft ● Soft ● Medium ● Hard ● Wet ● Intermediate

13

Hamilton made his 208th F1 start, elevating him to 13th-equal, alongside Andrea de Cesaris overall

19

Hulkenberg ended the season with the best qualifying record versus his team-mates, only being outqualified once

50

Mercedes took its 50th front-row lockout in F1 history, 12 behind the record held jointly by McLaren and Williams

78

Massa made his 78th Williams start – only Nigel Mansell (95), Ralf Schumacher (94) and Riccardo Patrese (81) have more

99

Vettel ended the season one short of a century of F1 podium finishes

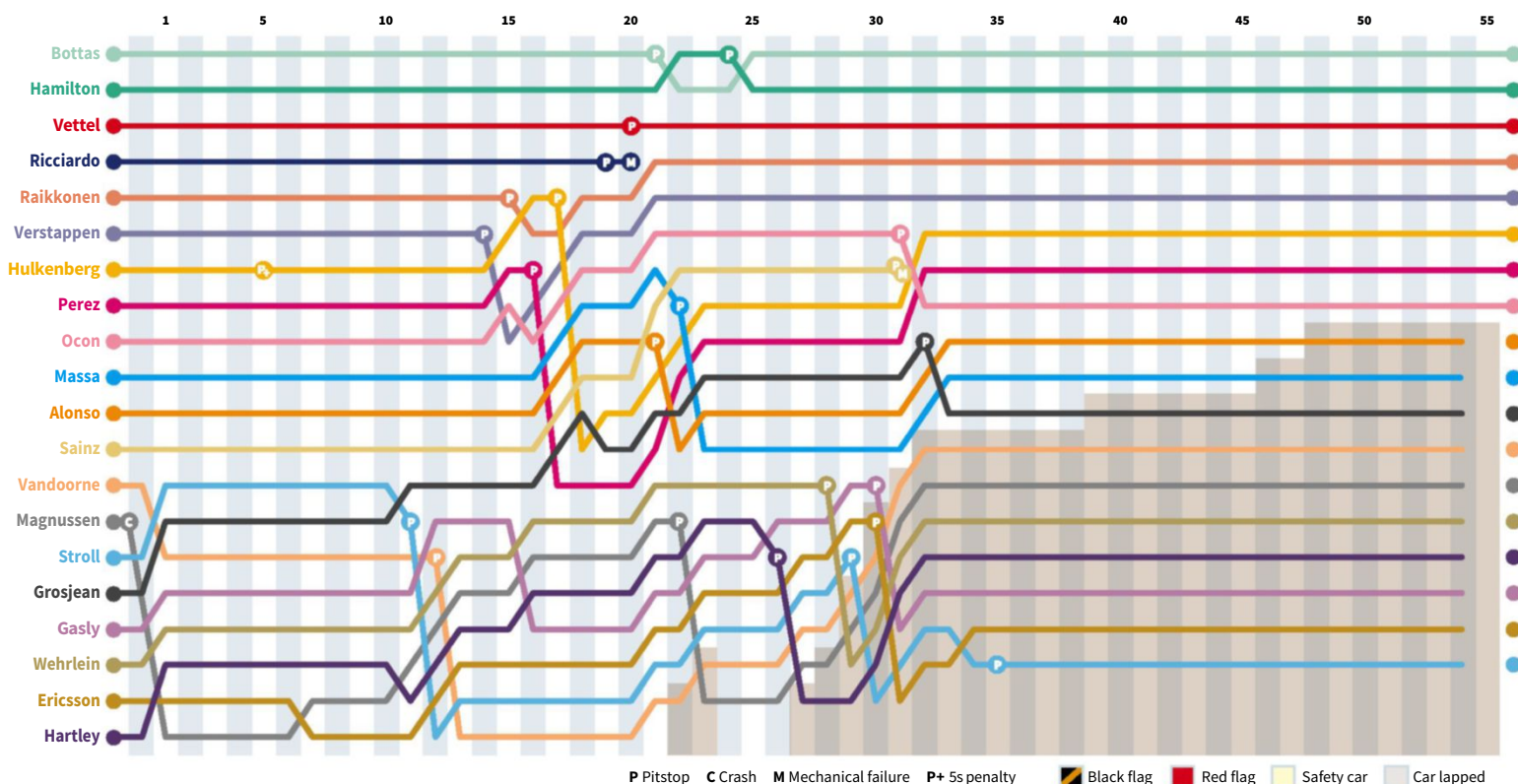
269

Massa's F1 career ended after 269 starts, the sixth-highest total in the sport's history

400

Honda started its 400th grand prix as an engine supplier – fifth in the all-time list

Lap chart / What happened, when



P Pitstop C Crash M Mechanical failure P+ 5s penalty Black flag Red flag Safety car Car lapped

12 Sainz #55 1m38.725s	14 Magnussen #20 1m39.298s	16 Grosjean #8 1m39.516s	18 Wehrlein #94 1m39.930s	20 Hartley #28 1m40.471s
13 Vandoorne #2 1m38.808s	15 Stroll #18 1m39.646s	17 Gasly #10 1m39.724s	19 Ericsson #9 1m39.994s	

Qualifying 1			Qualifying 2			Qualifying 3		
POS	DRIVER	TIME	POS	DRIVER	TIME	POS	DRIVER	TIME
1	Bottas	1m37.356s	1	Hamilton	1m36.742s	1	Bottas	1m36.231s
2	Hamilton	1m37.391s	2	Bottas	1m36.822s	2	Hamilton	1m36.403s
3	Raikkonen	1m37.453s	3	Vettel	1m37.023s	3	Vettel	1m36.777s
4	Vettel	1m37.817s	4	Raikkonen	1m37.302s	4	Ricciardo	1m36.959s
5	Ricciardo	1m38.016s	5	Ricciardo	1m37.583s	5	Raikkonen	1m36.985s
6	Verstappen	1m38.021s	6	Verstappen	1m37.777s	6	Verstappen	1m37.328s
7	Perez	1m38.601s	7	Hulkenberg	1m38.138s	7	Hulkenberg	1m38.282s
8	Massa	1m38.629s	8	Perez	1m38.359s	8	Perez	1m38.374s
9	Vandoorne	1m38.777s	9	Ocon	1m38.392s	9	Ocon	1m38.397s
10	Hulkenberg	1m38.781s	10	Massa	1m38.565s	10	Massa	1m38.550s
11	Sainz	1m38.810s	11	Alonso	1m38.636s			
12	Alonso	1m38.820s	12	Sainz	1m38.725s			
13	Ocon	1m38.896s	13	Vandoorne	1m38.808s			
14	Magnussen	1m39.395s	14	Magnussen	1m39.298s			
15	Stroll	1m39.503s	15	Stroll	1m39.646s			
16	Grosjean	1m39.516s						
17	Gasly	1m39.724s						
18	Wehrlein	1m39.930s						
19	Ericsson	1m39.994s						
20	Hartley	1m40.471s						

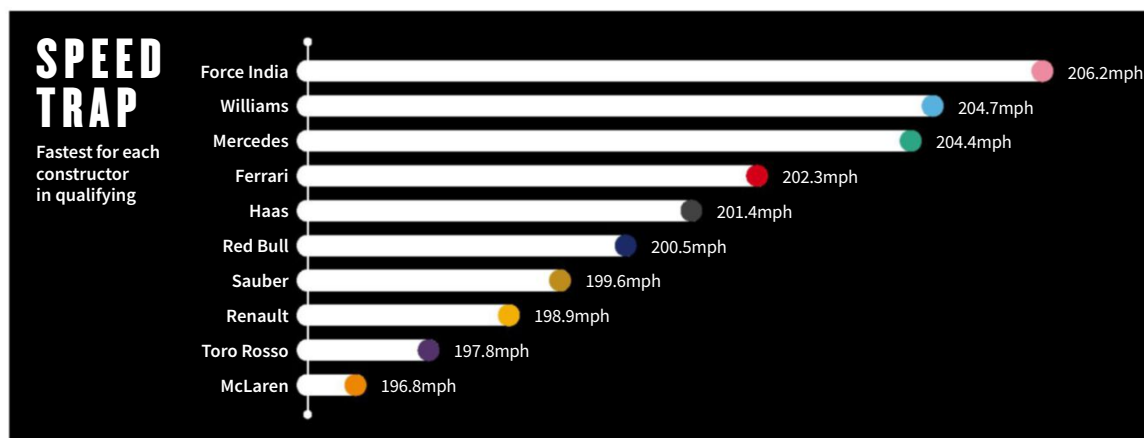
WEATHER Dry, clear; track 31C, air 24C

Race briefing

FRIDAY PRACTICE
GEORGE RUSSELL replaced Ocon at Force India
ANTONIO GIOVINAZZI replaced Magnussen at Haas

GRID PENALTIES
HARTLEY 10-place penalty for replacement MGU-H

RACE PENALTIES
HULKENBERG 5s penalty for leaving track and gaining advantage



Free practice 1			Free practice 2			Free practice 3		
POS	DRIVER	TIME	POS	DRIVER	TIME	POS	DRIVER	TIME
1	Vettel	1m39.006s	1	Hamilton	1m37.877s	1	Hamilton	1m37.627s
2	Hamilton	1m39.126s	2	Vettel	1m38.026s	2	Bottas	1m37.900s
3	Verstappen	1m39.154s	3	Ricciardo	1m38.180s	3	Raikkonen	1m38.157s
4	Raikkonen	1m39.518s	4	Raikkonen	1m38.352s	4	Vettel	1m38.174s
5	Bottas	1m39.741s	5	Bottas	1m38.537s	5	Ricciardo	1m38.340s
6	Perez	1m40.293s	6	Verstappen	1m38.894s	6	Verstappen	1m38.587s
7	Alonso	1m40.522s	7	Perez	1m39.323s	7	Alonso	1m39.155s
8	Vandoorne	1m40.569s	8	Ocon	1m39.333s	8	Vandoorne	1m39.277s
9	Massa	1m40.723s	9	Hulkenberg	1m39.529s	9	Sainz	1m39.340s
10	Ricciardo	1m40.773s	10	Alonso	1m39.559s	10	Perez	1m39.367s
11	Russell	1m41.131s	11	Massa	1m39.635s	11	Massa	1m39.383s
12	Grosjean	1m41.306s	12	Vandoorne	1m39.671s	12	Hulkenberg	1m39.396s
13	Stroll	1m41.581s	13	Sainz	1m40.201s	13	Ocon	1m39.500s
14	Gasly	1m41.646s	14	Stroll	1m40.329s	14	Magnussen	1m39.831s
15	Sainz	1m41.748s	15	Gasly	1m40.694s	15	Grosjean	1m40.079s
16	Wehrlein	1m41.752s	16	Magnussen	1m41.128s	16	Wehrlein	1m40.307s
17	Hulkenberg	1m41.864s	17	Wehrlein	1m41.270s	17	Stroll	1m40.572s
18	Giovinazzi	1m42.065s	18	Ericsson	1m41.302s	18	Gasly	1m40.737s
19	Ericsson	1m42.344s	19	Hartley	1m41.496s	19	Ericsson	1m40.789s
20	Hartley	1m42.585s	20	Grosjean	1m41.560s	20	Hartley	1m40.883s

WEATHER Dry, sunny; track 42C, air 27C

WEATHER Dry, clear; track 32C, air 25C

WEATHER Dry, sunny; track 43C, air 25C

SEASON STATS

Drivers' championship

1	Hamilton	363
2	Vettel	317
3	Bottas	305
4	Raikkonen	205
5	Ricciardo	200
6	Verstappen	168
7	Perez	100
8	Ocon	87
9	Sainz	54
10	Hulkenberg	43
11	Massa	43
12	Stroll	40
13	Grosjean	28
14	Magnussen	19
15	Alonso	17
16	Vandoorne	13
17	Palmer	8
18	Wehrlein	5
19	Kvyat	5

Constructors' championship

1	Mercedes	668
2	Ferrari	522
3	Red Bull	368
4	Force India	187
5	Williams	83
6	Renault	57
7	Toro Rosso	53
8	Haas	47
9	McLaren	30
10	Sauber	5

Wins

Hamilton	9
Vettel	5
Bottas	3
Verstappen	2
Ricciardo	1

Fastest laps

Hamilton	7
Vettel	5
Bottas	2
Raikkonen	2
Alonso	1
Perez	1
Ricciardo	1
Verstappen	1

Pole positions

Hamilton	11
Bottas	4
Vettel	4
Raikkonen	1

Qualifying battle

HAM	13	7	BOT
RIC	7	13	VER
VET	15	5	RAI
PER	13	7	OCO
STR	2	17	MAS
STR	1	0	DIR
VAN	3	16	ALO
VAN	0	1	BUT
GAS	1	2	HAR
KVY	1	0	HAR
GAS	0	2	SAI
KVY	6	8	SAI
GRO	12	8	MAG
HUL	3	1	SAI
HUL	16	0	PAL
ERI	7	11	WEH
ERI	2	0	GIO

Four's to be reckoned with

A quartet of drivers rate full marks for their exceptional efforts in the season finale

By Ben Anderson, Grand Prix Editor

[@BenAndersonAuto](#)

MERCEDES



8 LEWIS HAMILTON

Ultimately, lost this race by uncharacteristically failing to get it together when he really needed to in Q3. Preferred to see that as a "lesson" rather than a mistake, but pushed for set-up changes that misjudged the circuit, so must carry the can. Did everything he could in the race, but Bottas simply would not budge.



10 VALTTERI BOTTAS

Vettel called Bottas's qualifying lap "mega" and it looked that way – clean and fast, and the biggest margin yet for Bottas. Executed a very fine race too – all the more impressive given the need to respond after botching his big chance in Brazil. Withstood enormous pressure to get the job done. Bottas at his best.

RED BULL



10 DANIEL RICCIARDO

After a disappointing couple of races, this was vintage Ricciardo. Found a harmony with the RB13 that escaped his team-mate and outstandingly split the Ferraris in qualifying. Resisted Raikkonen's challenge, then dropped him, and was keeping pace with Vettel until a hydraulic problem ruined his day.



7 MAX VERSTAPPEN

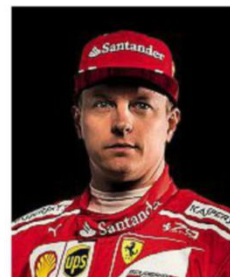
Was within two tenths of the pace in first practice, but never felt happy thereafter, and gets marked down for being an unusually large amount off Ricciardo's pace in qualifying. Race was fine; he was quicker than Raikkonen, but got stuck behind the slower Ferrari. Even Verstappen can't produce overtaking miracles at Yas Marina.

FERRARI



9 SEBASTIAN VETTEL

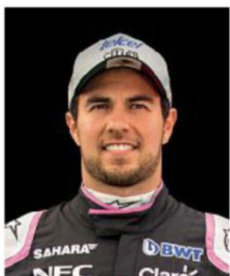
The qualifying gap to Mercedes was the largest since Silverstone, but Vettel was still two tenths up on his team-mate. Couldn't live with the Mercs in the race either. Drove cleanly, apart from a lock-up into Turn 1, and coped better with Ferrari's fuel-saving demands than Raikkonen. A heavy defeat for Ferrari, but a decent effort.



6 KIMI RAIKKONEN

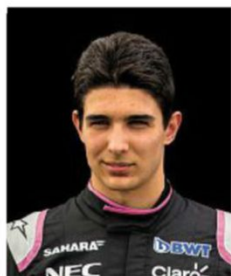
Disappointing from Raikkonen, who blamed tyre inconsistency for turning a 0.364s Q1 advantage over Vettel into a two-tenths Q3 deficit, which also allowed Ricciardo ahead. Said fuel-saving explained his underwhelming race, but Vettel had to do similar and was 26s up the road. Raikkonen should do better.

FORCE INDIA



8 SERGIO PEREZ

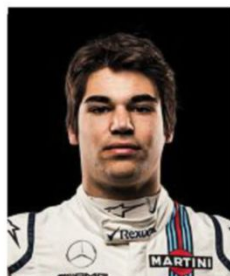
The fact that both Force India drivers did 1m38.3s laps in Q2 and Q3 suggests there wasn't much left, but they were disappointed not to beat Hulkenberg to seventh, suggesting each could have done a bit better on Saturday. Perez was frustrated by Hulkenberg's chicane cut to stay ahead, but lacked the pace to mount a counter attack.



7 ESTEBAN OCON

There was nothing in it with Perez yet again in qualifying – this time the gap was only 0.023s, though Ocon felt he would have gone quicker without racing Bottas for track position in Q3. Tried a different strategy by running a longer first stint than Perez, but didn't quite have the pace in clean air to make the difference.

WILLIAMS



3 LANCE STROLL

Hard to see positives for Stroll, who made Q2 but was over a second off Massa – way too much, even with an old engine. Got bested by Grosjean and struggled with the car throughout. Clearly found the race stressful and made too many pitstops. Should not have finished more than a minute behind Grosjean's Haas.



8 FELIPE MASSA

Williams called Massa's qualifying effort "perfect" as he beat the McLarens into Q3. His race was decent, but no more. Should have stayed ahead of Alonso, but a slow out-lap after Massa's stop made the difference. Not quite on par with those Brazil heroics, but Stroll's struggles suggest Massa performed well in a tricky car.

McLAREN



6 STOFFEL VANDOORNE

Faded after beating Alonso in Q1 and struggled after losing ground on lap one, complaining rear grip was so bad the car must be damaged, though he didn't suffer contact. Finished more than a minute behind Alonso, but McLaren's data said Vandoorne's car lost downforce, so gets some benefit of the doubt.



10 FERNANDO ALONSO

McLaren had the fourth-fastest car in practice, but faded in qualifying, where Alonso felt 11th was "deserved" as his pace flatlined at 1m38.6s. Was stunning in the race. Hung in Massa's slipstream through the first stint, and got ahead thanks to strong pace around the pitstops and decisive wheel-to-wheel battling.



SUTTON

TORO ROSSO



6 PIERRE GASLY
Hard to accurately assess qualifying effort, given team-mate's penalty and serious underperformance, but Gasly looked hooked up in practice so deserves some credit. Silly mistake on lap 16 undid Gasly's race. Instead of battling Vandoorne, he ended up behind Magnussen, Wehrlein and Hartley, and couldn't recover.



5 BRENDON HARTLEY
Was only a tenth and a half off Gasly in final practice, but admitted doing a poor job in qualifying, where the gap ballooned to over a second. Even allowing for set-up experiments, that was a weak effort. Did a better job in the race, but was stuck behind Wehrlein's Sauber throughout. Disappointing overall.

HAAS

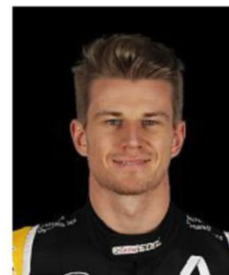


9 ROMAIN GROSJEAN
A strong race from Grosjean, who was marginally quicker than Alonso and Massa ahead of him (before Alonso's late attempt at fastest lap), after forcing his way past Stroll. Couldn't have done much more. The only blot was defeat to Magnussen and Stroll in qualifying. Needs to find a way to cope better with understeer, or dial it out.



7 KEVIN MAGNUSSEN
Was more proficient with the car's understeer than Grosjean and could not have qualified higher realistically. Paid dearly for running wide then spinning on lap one, his gung-ho approach in pursuit of points undoing him this time. Recovered past slower cars, but lacked Grosjean's pace, so a mixed bag overall.

RENAULT



10 NICO HULKENBERG
Hulkenberg was superb in qualifying and reckoned his Q2 lap – six tenths clear of Sainz – to be one of his best of the season. The race was excellent too. OK, Perez got past on lap one and Hulkenberg cut the track to get back ahead, but his prodigious pace compensated for the penalty, and a slow pitstop.



7 CARLOS SAINZ JR
Sainz was 0.161s away from making Q3 – disappointing in light of Hulkenberg's result – although a loss of power out of the last corner didn't help. Still needs to find something to be on Hulkenberg's level. Was solid in the race, looking likely to jump Alonso and Massa until that pitstop disaster, and was closing rapidly on Ocon too.

SAUBER



7 MARCUS ERICSSON
The 0.064s qualifying deficit to Wehrlein was insignificant other than costing one grid slot, but Ericsson's race was disappointing. He was half a second per lap slower than Wehrlein through the first stint, which is far too big a deficit. Improved on ultra-softs, but couldn't find a way past Gasly.



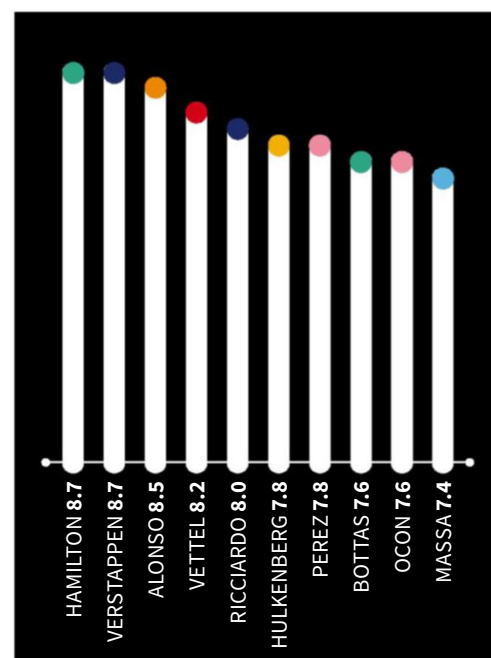
9 PASCAL WEHRLIN
Impressively outpaced Stroll and both Toro Rossos in final practice, but wasn't quite so strong in qualifying. Should be proud of his performance in the race, broadly matching Vandoorne and Magnussen for pace throughout, and quicker than both Toro Rossos in the first stint.



LAT IMAGES

ETHERINGTON/LAT

TOP 10 AVERAGE RATING



Will Audi become Formula E's new powerhouse?

Audi brings brains, brawn and big bucks to its electric-racing venture, and the team's long-run pace in pre-season testing looks ominous as the opening round looms this weekend in Hong Kong

By Scott Mitchell, Autosport Plus Editor

[@ScottAutosport](#)

Three champions in three seasons, another final-round showdown and manufacturers queuing outside the door. The way Formula E's previous campaign ended means 2017-18 has a lot to live up to. Fortunately, a three-year rules cycle means the field is likely to compress — so expect one hell of an opening qualifying session in Hong Kong this Saturday.

There is, however, a big but. The end-of-day timesheets in pre-season testing at Valencia point to a remarkable season in store — barely a tenth covered multiple drivers and multiple teams. But the long runs painted a different picture. Gaps that were previously covered by hundredths ballooned to a few tenths, as is normally the case as the efficiencies of the various powertrains are proven or exposed.

Audi's advantage was astonishing. Reigning FE champion Lucas di Grassi and Daniel Abt had not been anonymous on the timing sheets in testing, but they weren't stealing headlines with day-topping pace. Quietly and efficiently the new works team went about its business, logging 910 miles — the highest total of any team.

A 15-lap run at Valencia was thought to be bang on the money for an FE race stint. Individual programmes are exactly that, and most teams kept their cards close to their chest. But a look at the best long runs suggests a clear, and surprising, advantage for the Audi team: a 1m26.184s average over 14 laps, 0.8s quicker than DS Virgin Racing's Sam Bird over the same stint and 1.2s quicker than Renault e.dams' Sebastien Buemi (who only managed 13 laps, but was on a slightly quicker run that got aborted due to a red flag).

This analysis must be taken with some caveats. Adding two "dangerous", "ugly", "odd" (depending on who you asked) chicanes didn't exactly turn Valencia into the sort of circuit FE will race on. Second, we don't know if those cars finished their respective stints with 0% remaining energy, or 5% or 10%, and so on. And di Grassi's long run was a lap short of what was being considered a proper race stint.

So, maybe rivals can cling to the hope that if he'd done a 15th timed lap, di Grassi would have had to lap six seconds slower to make it to the end of his stint. But a look at the sector times on his in-lap, and the general consistency of di Grassi's stint, suggest that's unlikely. Abt also registered a very similar consistent stint, and one that was slightly faster too, although that trailed off on the very last lap.

Di Grassi stole the 2016-17 title, but it was a curious victory. To win again, on merit, needed a lot of change. It seems he's got his wish. Audi's apparent leap to the top of the pack, and the emphatic nature of its testing advantage, is through investment. It withdrew from the World Endurance Championship to focus on FE, with the brainpower and financial might that were the building blocks of its ultra-successful LMP1 stint now married to the support of long-time Abt technical partner Schaeffler.

"We have integrated some people," says Audi head of motorsport Dieter Gass. "I think the LMP1 experience is beneficial in many concerns. We have seen in the development of the new car, of the new MGU, of the software, that you can use plenty of things learned in WEC." Gone is the three-speed gearbox, replaced by a Renault-esque single-speed solution. (Expensive) lightweight

materials bring the weight limit down and allow for tighter packaging, which is utterly crucial with the chronically overweight base car and battery.

This is the gift that keeps on giving — it allows more weight to be shuffled forward (the FE car's distribution is horribly rearward), which creates a better balance, and aids pure laptime and efficiency through better braking and acceleration. Allied with a lower centre of gravity and the Audi e-tron FEO4 is a powertrain that's far better suited to a racing car than its predecessor.

At the race track, Abt will use Nico Muller's DTM engineer Daniel Gundwald, while a couple of data engineers have also been moved in. More significantly, one of the team's key engineering members, who is also di Grassi's race engineer, will leave after the start of the 2017-18 season: Franco Chiochetti. »

"The LMP1 experience is beneficial in many ways"

Audi motorsport boss Dieter Gass



ALL PICS: S. BLOKHAN/LAT



Audi's investment of manpower and knowhow gives di Grassi a huge fillip

As a mainstay of the Abt engineering team from the beginning in FE, Chiocchetti will be a big loss – but a big part of his job has already been completed, as he has been one of the key figures during the off-season transition to full Audi status.

“The thing we noticed the most is the amount of manpower that is now involved, and their knowhow,” he says. “I wouldn’t say it’s excessive but compared to what we had at Abt it’s a big step forward. We started at Abt basically at grassroots and the Audi guys have so much knowledge. It’s been quite a good mixture – we’ve had the experience of the series, they’ve had the knowledge of the powertrains.

“The best technical solution is not always the best in FE. You need to find a happy medium and this is where we as a team were important in the development role, to guide them in the direction we believe is the right thing for Formula E.”

Audi is also being helped by Renault choosing to direct a lot of its resource at 2018-19. By being top of the tree, Renault – which will move aside so manufacturer alliance partner Nissan can take over its technology and join the e.dams team next season – has less scope to improve anyway. Its decision to focus beyond this season may bear fruit further down the line, but it has left the team vulnerable.

“We are one of the only teams that didn’t redo everything,” says Buemi. “We’ve kept the same kind of casing, same electric motor and everything from season two. We didn’t do a new

“We are one of the few teams that didn’t redo everything”

Sebastien Buemi

crash test like most did. We didn’t really improve the car – we focused on other things.”

What that means is Renault has stopped throwing the kitchen sink at FE for a season in which its closest competitor has gone from a superb race team with limited resources to, as Buemi puts it, a team that “is so much bigger than us now”.

But it’s not like Renault’s likely to be thrown into no-man’s land. It was right up there on pure pace, and Buemi was on a much more competitive long run on the final lap at Valencia before a late red flag. It probably wouldn’t have challenged

di Grassi’s, but it would have vaulted him clear of Bird’s effort.

The benchmark powertrain hasn’t been invested in to the same degree as Audi’s, perhaps, but its potency and efficiency has been clear from the beginning and it will surely be in the mix. Perhaps the most likely outcome this season will be a fierce fight for pole position, with Audi and Renault enjoying a bigger advantage in the races.

Just a quarter of a second separated six teams on raw pace in pre-season testing, with NIO’s Oliver Turvey leading the way. The NIO team was rapid in qualifying last season but lacked efficiency in the races. Improvements to the thermal management of the powertrain (cooling was a major problem last season) and the efficiency has left overall pacesetter Turvey buoyant, even though it was newboy Luca Filippi who had the most impressive long run of the two.

NIO will need to overcome race-winning teams if it’s to haul itself from point-scorer to regular frontrunner, though. Techeetah, DS Virgin and Mahindra all took victories last season, and look like they will be in the best-of-the-rest ballpark this campaign.

As a Renault customer team Techeetah needs to be judged against the works squad, particularly with Jean-Eric Vergne and Andre Lotterer leaving it nowhere to hide on the driver front. It might take a couple of races to iron out any operational issues (Techeetah is the only customer team on the grid, so is not granted the 15 days of private testing afforded to everyone else), but the bottom line is it should be exactly where Renault is.

DS Virgin and Mahindra are harder to judge – certainly Bird looked competitive relative to the non-Audi runners in testing, and it would be odd to see that team drop down the order. Mahindra emerged as a genuine frontrunner last season and is sparing little expense in its pursuit of more success in FE. Felix Rosenqvist was right up there on pure time, but lacked a little in his long runs.

There should be progress at Dragon Racing, which has reacted to an awful season with a good powertrain by all but axing Faraday Future as a technical partner and drafting in Porsche LMP1 star Neel Jani to replace Loic Duval. Andretti had a dismal campaign as well, but more BMW engineering support should at least refine its race operations – even if technology-wise it’s still trailing.

Audi may have an advantage in race trim, but if the qualifying fight is tougher than ever then it will not be plain sailing. “Everyone has more or less the same powertrain now,” says Buemi. “There will be more people fighting for race wins on individual weekends. It will be down to grab this second or fourth or fifth place – that’ll make the difference in the end.”

FORMULA E CALENDAR

HONG KONG (PRC) DECEMBER 2	PARIS (F) APRIL 28
HONG KONG (PRC) DECEMBER 3	BERLIN (D) MAY 19
MARRAKESH (MA) JANUARY 13	ZURICH (CH) JUNE 10
SANTIAGO (RCH) FEBRUARY 3	NEW YORK (USA) JULY 14
MEXICO CITY (MEX) MARCH 3	NEW YORK (USA) JULY 15
SAO PAULO (BR) MARCH 17	MONTREAL (CDN) JULY 28
ROME (I) APRIL 14	MONTREAL (CDN) JULY 29

Reigning champion di Grassi’s test form gives him every reason to smile



Di Grassi (pictured) and team-mate Abt racked up highest test total of 910 miles



Buemi's Renault team has turned its focus to 2018-19, but is still right up there on pure pace



Kiwi rising star Evans will be joined by new team-mate Nelson Piquet Jr

There's no extra grace for Jaguar now

LAST YEAR'S LAST-PLACED team should be best-placed to be the next team to win a race.

Jaguar's debut was not good enough for a manufacturer of its size and history, even though it was coming in cold, struggling against a minimal lead-up time (the team claims four months to design, prepare, test and homologate its first powertrain, the I-type 1) and no prior series knowledge.

Jaguar preached patience

throughout 2016-17 and, after no points from six attempts, recorded six top-10 finishes from the next 18. It still finished 10th and last in the championship, but could very easily have finished seventh had a couple of results fallen differently.

The team made genuine progress as a racing operation as the season unfolded and it's had over a year to develop its I-type 2, and the team running

it. There are four areas of progression for Jaguar for 2017-18. It has completed its learning season and has the benefit of a year's experience. The engineering team has been restructured with some F1-level additions. Investment is forthcoming. And it has signed Nelson Piquet Jr to replace Adam Carroll, so we'll know for certain what the package is capable of and get a proper benchmark

for the excellent Mitch Evans.

The benefit of Jaguar's technical immaturity in the first season also means it can refine its package more as the rest make incremental gains. Initial progress should be swift.

Jaguar is keeping quiet on the details of the I-type 2, but expect a single-speed gearbox, an inverter that will no longer be mounted on top of the battery and will instead be

integrated behind it to contribute to a lower centre of gravity, and the aluminium casing within will surely be replaced by carbonfibre to save the weight it was giving away last season (believed to be at least 30kg).

This season we'll see the first real fruits of everything Jaguar offers. It's not quite 'put up or shut up', but the graces afforded last season will not be handed out so generously now.

Electric rookie's Virgin berth

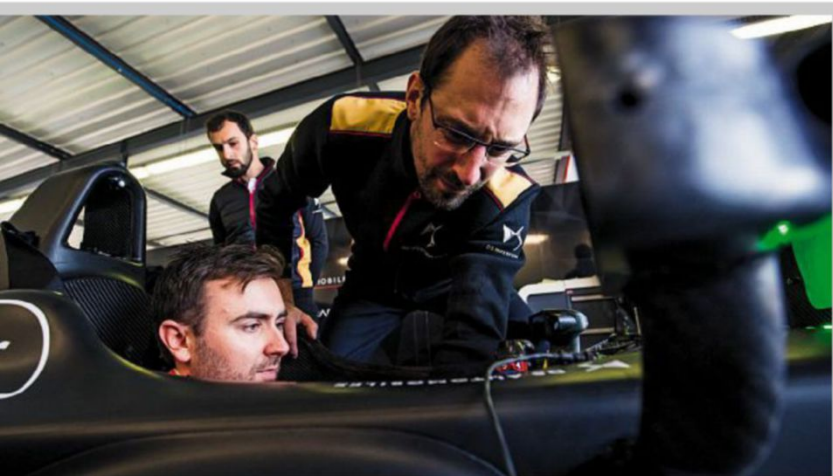
A first-time outing in a Formula E car reveals a whole new level of challenge to master the complexities of battery-powered racing

By Glenn Freeman, Autosport.com Editor

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ALL PICS: BLOXHAM/LAT



We're only three buttons into my briefing on how to use the functionality of a Formula E steering wheel and already I'm wishing I was taking notes.

The DS Virgin Racing team has been kind enough to invite Autosport to the La Ferte Gaucher circuit in France to try out its latest specification of car just before it heads off to Valencia for pre-season testing. Our input is unlikely to be of much use to Sam Bird and Alex Lynn when they hit the track in Spain, but to the team's credit we are getting a serious runout in the car.

Once the engineers finish running me through the limited number of controls they'll let me play with, I'm doing everything I can to get another glance — alone — at the piece of paper with a labelled picture of that steering wheel. Radio, pit limiter, start lever (more on that later) and regenerative braking paddle are the highlights of what I'll be allowed to touch, and that doesn't even represent 20% of the controls or functions that are at the driver's disposal in the cockpit. Complicated modern racing cars are nothing new, with F1 and LMP1 at the forefront of that in recent years, but all-electric racing poses its own challenges, and that means its own levels of complication. Fortunately, the DS team won't impose too much of that on its latest rookie driver.

Autosport is pencilled in to run second on the day, so while my seat-fitting is going on, there's a chance to get some insight from the French journalist who was first on track. His main feedback is that "it feels like a big go-kart". That makes sense, given that on average a Formula E car's weight distribution can be 70% rearwards, although first-hand experience — as we'll come back to — suggests that's still not a great comparison.

Next up, the team talks me around a map of the circuit. Usually this exercise would be a simple case of discussing braking and turn-in points, perhaps with a suggested gear for each corner to give a rough indication of the speed you should be carrying. But in a Formula E car the requirements are different. Gearchanges are infrequent — the DS powertrain has three gears, but the team declares that the whole track can be tackled in second. With other functions to learn, at least changing gear is one that can be forgotten for the purposes of this run.

Slowing the car down is more complex than the team simply giving advice on where to smash the brake pedal, as you would in a conventional single-seater. There's a three-part process for reducing your speed for a corner in Formula E: lift and coast, use the regen paddle, then brake.

If you watch a Formula E race carefully, when the series' detailed TV graphics accompany an onboard camera shot with live data from the car, it seems laughable how early the drivers often lift off the throttle on a straight. We've all tried it in our road cars, lifting off when you've got a straight, flat piece of road ahead of you, or even if you're travelling slightly downhill. »



Test-track venue more rookie-friendly than FE's usual urban home



Freeman attempts to absorb key insights to driving an FE car

Even if you take it one step further and drop the gearbox into neutral to take away the effects of engine braking, there's always an element of rolling resistance that frustratingly drops the needle on the speedometer ever so slightly. Experiencing firsthand how it works so well in a Formula E car reveals a lot.

The first time you lift off the power approaching a corner, you realise that the road-car comparison is utterly redundant. On the road, at best you could say it's the equivalent to pedalling on a bike and then keeping your feet still: you've built up the speed, but you can hear the gearing mechanism still clicking through, and eventually you're going to slow down. To get somewhere near the difference you feel doing the same in a Formula E car, imagine pedalling to get up to speed, then removing the gearing system entirely, and getting rid of the pedals as well for good measure. That would get you somewhere close to how 'free' the drivetrain feels when you lift and coast.

Part of this is down to excellent engineering to reduce any internal friction that could cause a form of engine braking, but Formula E manufacturers can take it to another level, programming the software to allow for a tiny percentage of power to remain when you lift off, which is just enough to keep the speed constant without penalising factors like drag, tyre resistance and weight causing any loss of velocity. There are different levels of retained power for this, depending on how much energy is available and the racing situation the driver finds himself in, and it's a strange sensation that takes a few laps to get used to.

There's little time to spend in awe of the lift and coast

phenomenon though, because there are still two more braking phases to get through before the corner. There are several paddles on the back of the steering wheel – not just the gearchange levers that we are ignoring for this run – so the first time you pull in the regen paddle, there's a moment when you really hope you've got it right.

The regenerated energy can only slow the car down from the rear wheels, but fortunately this is one of the many parts of the car's set-up that DS Virgin prepared with an amateur driver in mind – so it's not as aggressive as it can be when the professionals are behind the wheel, and you see the rear of the cars bucking around in close proximity to street-circuit walls. It's

not as effective as using the brake pedal, but it's an efficient middle stage between lifting off and finally using the brakes in a conventional way, and you can feel the difference between using it when the system hasn't stored up

much energy, and later in the run when it's more effective.

We've broken the process down in great detail here, but when you're slowing for a tight corner, that is all taking place in a matter of seconds, and the key is to get into a rhythm that makes it become second nature as quickly as possible. Software comes into play here as well, with the car detecting if the driver tries to combine use of the regen paddle with the brake pedal and making sure the two don't overlap. Unlike some proper Formula E drivers, whose characteristics required the teams to create that software in the first place, we manage to avoid doing that, but the same process applies to use of the throttle and brake pedal at the same time, and in that case we were

"You must nail 'lift-regen-brake' because the car's a handful in the corner"



Autosport wasn't pussyfooting during its run

ALL PICS: BLOXHAM/LAT

LAT IMAGES



Driving with Bird
in the one-off DS
E-TENSE concept car

guilty of upsetting the computers. Let's move on.

You need to get the lift-regen-brake process nailed because, as mentioned earlier, the weight of the car, and its front-to-rear distribution, means it's a handful once you get into the corner, and you can't afford any overhang from the slowing-down process when you have a heavy monster to point in another direction before your right foot calls for more instant torque.

While the weight distribution might be similar to a kart, a Formula E car has little else in common with one, aside from the lack of a clutch. It's in the slow-speed corners that you really feel the weight, as the car labours and it's clearly up to the driver to hustle it to bring it alive and get the front end turning positively. If you're too cautious, the rear will stay sat down and the front wheels might as well not be in contact with the ground.

However, get the car into the faster, more flowing turns of this test track – corners that are not particularly characteristic of Formula E's tight and twisty city circuits – and it starts to feel more like a traditional single-seater. It's predictable, forgiving (helped by a neutral set-up for the day, but also the treaded Michelin tyres), and you don't notice how heavy the car is – although you certainly would if it broke away mid-corner.

Bizarrely, the last feature we'll come to is how you perform a race start, something the team was generous enough to let us have a go at after a few laps. The instructions from Sam Bird, who was on hand to coach on the day, were "pull the 'start' paddle, check on your dash that you have 100% throttle, then when you're ready – let go".

Once again, in this instance the team set up the car to have a power-delivery setting that could be called 'kind'; but it's still one of the most impressive aspects of driving a car with an electric powertrain. As we discovered while driving with Bird in the one-off DS E-TENSE concept car, the amount of bottom-end power is where these powertrains excel.

"When you first hit the throttle and you feel that power," says Bird, "you'll think, wow, this is really going somewhere." He trails off, but it's clearly implied that, once that initial kick is out of the way, the power curve flattens out pretty quickly. Before you know it you're up to speed, and that's about it. Get ready to lift and coast ahead of the first corner.

The lack of top speed removes another conventional racing car challenge to master and, much like the reduced need for gearshifts, in this taster session that allows some spare capacity to be focused on the unique challenges of a Formula E car. Our outing went well – there's even an inside-wheel lock-up into the tight final left-hander in front of the pits to show the team Autosport is pushing on, so perhaps Richard Branson has some competition for the 'reserve-driver role' he supposedly fulfilled at the New York round last season.

Afterwards, Bird offers some words of wisdom that put the challenge of driving one of these cars into perspective: "Now try doing it surrounded by concrete walls, on bumpy public roads, with Lucas di Grassi, Sebastien Buemi, Antonio Felix da Costa and Nelson Piquet Jr snapping at your heels." Terrifying. ❦



DS VIRGIN RACING

The next step up

DS VIRGIN RACING isn't always best of the rest in Formula E, but it does a damn good job of keeping itself in the frame for the end-of-season race previews that highlight those still in mathematical title contention. To put that more simply, DS Virgin has never been out-and-out on Renault e.dams or Abt Audi's level, but it has been consistently closest for longest.

Sam Bird's the only driver other than championship winners Sebastien Buemi and Lucas di Grassi to have won in each FE season so far, ditto DS Virgin compared to those drivers' respective teams. The challenge is to haul itself out of the ever-growing best-of-the-rest pack and turn the leading duo into a trio.

Will that come this season? Initial

expectations from pre-season suggest another campaign of scoring podiums and snatching a win or two might be on the cards. Bird is joined by Alex Lynn, whose reward for a star pole-claiming debut in New York is a full season. The all-British driver

"Sam is a maestro at energy saving, so I'm learning from him"

line-up is one of the strongest in the field, although Lynn – who describes his New York outing as "crucial" – has plenty of learning to do.

"Prior to Hong Kong I will have some experience in the bank," he says. "Sam is a maestro in energy

saving, so I'm learning from him. I'm happy because it's a very quick learning curve.

"I think it's obvious Audi and Renault are the leading two. Our job is to be taking the fight to them. We do that by being a strong team – I've not worked with a stronger work ethic than what we have."

Among the big players, DS Virgin will have to contend with Audi making Abt a fully works team, Jaguar pumping in new resource for its second season and fresh investment from the rising Mahindra operations. Lynn says that just adds to the motivation.

"That's the lovely thing about this championship: if you slip up, you won't win," he says. "The margins are very small."

SCOTT MITCHELL

All-Brit line-up of Bird and Lynn is one of the strongest in the field



Dovizioso makes Marquez sweat

The 2017 MotoGP season boiled down to a battle between two contrasting riders and characters

By Jamie Klein, MotoGP Correspondent

[@JamieKlein_](#)

This year's MotoGP campaign had something that was lacking in the previous season – a proper title fight that went down to the wire.

And what a fight it was, between two riders with wildly contrasting characters and career paths: Marc Marquez, the 24-year-old phenomenon steadily staking a claim to being the best ever, and Andrea Dovizioso, the modest 31-year-old who had won just once in more than 150 starts prior to last October.

It was fitting that the pair's battle should be settled by a drama-filled Valencia showdown, but the reality was that Marquez probably should have had things wrapped up quite a bit sooner. It's easy to forget that the year didn't start well for the reigning champion, as crashes at Rio Hondo and Le Mans left him facing a 27-point deficit after the French race to the dominant force of pre-season testing and the early races, Yamaha's new recruit Maverick Vinales.

It wasn't until a post-race test at Barcelona in June, where Marquez trialled a softer Honda chassis, that things began to turn around. By the second half of the year, boosted by another productive test at Brno, he'd hit his stride. From the Brno race onwards, Marquez only missed the podium when his engine let go at Silverstone and, in an uncharacteristically

cautious display in the wet, at Sepang.

Victory there for Dovizioso and fourth for Marquez gave the Ducati man a slim title shot heading to Valencia but, with 21 points splitting the pair, the Italian had to go for the win and hope that Marquez finished outside the top 11. The tight turns of Valencia were never going to favour Dovizioso and, after team-mate Jorge Lorenzo disregarded a team instruction to let him through, both Ducati riders crashed in the space of four corners, unable to keep the pace.

Ducati's hopes of the title crumbled just after Marquez came awfully close to jeopardising his own chances. Under pressure for the lead from Johann Zarco, Marquez outbraked himself at Turn 1 and lost his front end. Only his left elbow and knee stopped him from suffering what would have been a 28th crash of 2017; instead he rejoined the race fifth, which became third when the Ducatis crashed. That was more than sufficient for Marquez to clinch his fourth MotoGP title.

Although really, the decisive race had been at Phillip Island, a track where the Ducati's turning weakness was ruthlessly exposed. Dovizioso didn't help matters by running wide early on, and his eventual 13th-place finish left him too much work to do. But that was the only blot of real significance in an otherwise sparkling copybook. With the exceptions of Phillip Island, Valencia and Rio Hondo – where he was collected by Aleix Espargaro – 'Dovi' never finished lower than eighth, always banking crucial

points at tracks where the Desmosedici remained out of its element. None of his six victories came easily – all were hard earned, especially those breathtaking duels with Marquez at the Red Bull Ring and Motegi, where Dovizioso used guile and strategy to outfox his opponent.

While Dovizioso had the season of his career, Lorenzo went without a win for the first time since joining the premier class in 2008, also taking his lowest-ever position in the points (seventh). Second behind Dovizioso at Sepang was the best the three-time premier-class champion had to show for his season, although he did enjoy numerous spells in the lead. His best chance to win came at Misano, but he crashed out of a commanding lead after losing concentration trying to adjust his bike's mapping.

Conversely, Marquez's works Honda team-mate Dani Pedrosa won twice – at Jerez and Valencia – to make it 12 successive seasons of winning at least one premier-class race. Still, there were too many occasions where the 32-year-old failed to feature at all for him to be a real factor in the title chase. Wet races remained problematic, with his small stature leaving him unable to get any sort of heat into the tyres.

The 2017 season is also most likely to be remembered for Yamaha's failure to figure in the championship. It started so promisingly – Vinales was many people's title favourite pre-season, and any remaining nay-sayers were quickly silenced as he racked up victories in the opening two rounds in Qatar and Argentina, surging to an early points lead. Unfortunately for Vinales, such miraculous form didn't last, even if he did grab an impressive third win of the year after overcoming team-mate Valentino Rossi in a close fight at Le Mans. The French event was the last before Michelin reverted its front tyre to last year's construction, due to a rider vote. »

“Marquez, the 24-year-old phenomenon, is staking a claim to being the best rider ever”



Both Vinales and Rossi struggled in the intense heat and low-grip conditions of Jerez, and a similarly disastrous showing at Barcelona convinced the Yamaha hierarchy that there was something fundamentally amiss with its 2017 bike, namely the way it seemed to devour its rear tyre. Rossi gave a new chassis introduced at Assen a victory first time out, but it was a false dawn. Vinales, who crashed out of that race, became increasingly vocal as he saw his points lead shrink and ultimately vanish, and after a trio of so-so showings for both factory riders a third type of chassis was made available at Silverstone. Second there for Rossi seemed to indicate that all hope was not lost for Yamaha, but then his title hopes evaporated when he broke his right leg in a motocross crash, an injury that forced Rossi to skip Misano and put him in doubt for Motorland Aragon, although he was eventually passed fit and took fifth there.

But the rear tyre issues had not gone; if anything, they had got worse, as Zarco beat the factory riders in three of the last four races, despite a last-minute switch to revert them to the 2016 chassis for the Valencia race after a dismal qualifying.

Aboard that year-old Tech3-run Yamaha all year, Zarco was something of a revelation, leading on his Qatar debut before crashing out. That was followed up by pole positions at Assen and Motegi

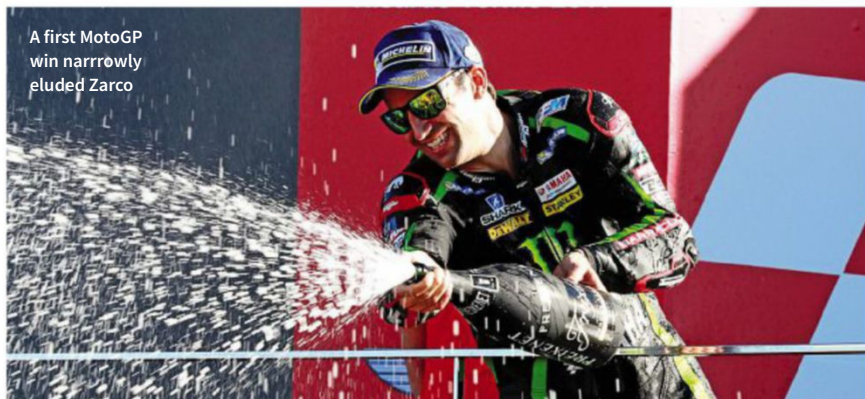
and three podiums, although what would have been an immensely popular first win remained tantalisingly beyond reach. Exactly which bike Zarco will be riding next season is a mystery for now but, whatever he is tasked with riding – even the maligned 2017 machine – he is going to be a force to be reckoned with.

Also meritorious was Jonas Folger, who put in a sensational ride to second at the Sachsenring before having his year cut short by Gilbert's syndrome.

Suzuki endured a nightmare season. It had recruited Ducati outcast Andrea Iannone as its new number-one rider in place of Vinales, signing rookie Alex Rins to be his understudy. But, almost from the word go, the campaign was a disaster, with Rins plagued by injury and Iannone failing to gel with the GSX-RR that Vinales had used to such good effect in 2016. Things hit rock bottom in the middle of the season, with Iannone coming in for repeated criticism for simply not trying hard enough. Rumours began to swirl of Suzuki moving to terminate the Italian's contract after a single season, with World Superbike champion Jonathan Rea being mooted as a potential replacement.

After the low point of Misano, where Iannone retired a healthy bike after claiming to have suffered arm pump, Suzuki at least was able to end the year with some respectable showings, »

Things looked up on few occasions for Rossi in 2017



A first MotoGP win narrowly eluded Zarco

ALL PICS: GOLD AND GOOSE/LAT

Qatar

- 1 Vinales**
- 2 Dovizioso**
- 3 Rossi**

With qualifying washed out, the grid was set by practice times, giving Vinales his first-ever MotoGP pole. But it was Zarco who stole the show early on, racing to a lead of 1.6 seconds before crashing. That handed the advantage to Dovizioso, but Vinales soon emerged from fourth after a bad start and caught up, eventually beating Dovizioso by four tenths.

Argentina

- 1 Vinales**
- 2 Rossi**
- 3 Crutchlow**

From pole, Marquez led the first three laps but then crashed out. That paved the way for Vinales, coming from sixth, to grab back-to-back wins by a little under three seconds from team-mate Rossi. Crutchlow took what would prove to be his only podium of the year in third, while Dovizioso suffered a rare DNF as he was taken out by Aleix Espargaro.

USA

- 1 Marquez**
- 2 Rossi**
- 3 Pedrosa**

Marquez was unbeatable at Austin, passing Pedrosa to take his first win of the campaign in dominant style. Pedrosa led early on, but couldn't make it a Honda one-two as he slipped behind Rossi, despite the Italian carrying a half-second penalty for cutting the track while fighting Zarco. Dovizioso was a distant sixth, 14s down on Marquez.

Spain

- 1 Pedrosa**
- 2 Marquez**
- 3 Lorenzo**

Pedrosa was in a class of his own from pole, repelling a mid-race attack by Marquez to win by six seconds. Lorenzo put his early Ducati troubles behind him with his first podium finish in red, 14s down on Pedrosa, while Zarco beat both factory Yamahas in fourth. Dovizioso continued his quiet start to the season in fifth.

France

- 1 Vinales**
- 2 Zarco**
- 3 Pedrosa**

After a disastrous outing at Jerez, Rossi and Vinales were back on form in France, enjoying a private battle for victory that went down to the last lap. In the end, it was Vinales who scored win number three as Rossi crashed at Turn 11. Pedrosa took third from 13th on the grid, ahead of Dovizioso, while Marquez crashed out of fourth place.

Italy

- 1 Dovizioso**
- 2 Vinales**
- 3 Petrucci**

Dovizioso kick-started his title challenge with victory, but he had to do it the hard way, coming out on top in a thrilling battle with Vinales – helped by Petrucci temporarily passing the Spaniard for second. Rossi was in fourth, while Marquez was beaten by Alvaro Bautista to fifth. After a first stint in the lead as a Ducati rider, Lorenzo slumped to eighth.



MORBIDELLI MAKES MOTO2 HISTORY

THE RECENT DOMINATION OF MOTO2 BY KALEX chassis looked to be coming to a halt by the end of the 2017 season, but it was still one of the German manufacturer's riders that prevailed in the title hunt.

Succeeding star MotoGP rookie Johann Zarco was Franco Morbidelli, who became the first product of Valentino Rossi's VR46 Academy scheme to secure a world title and a graduation to the premier class, where he will share a track with the master himself. Heading into his second year riding for the crack Marc VDS squad, Morbidelli had yet to win a race. So it was something of a surprise to see the 22-year old from Rome reel off four wins in the first five races of the year and establish a healthy points lead. It was soon confirmed he would be joining Marc VDS's MotoGP squad – and some time later, the Belgian team recruited Morbidelli's closest rival in the championship to join him.

Thomas Luthi, a mainstay of Moto2 since its inception in 2010, built on a breakthrough '16 season to emerge as a genuine title threat this time around. But the Swiss rider's chances were already looking remote when he broke his ankle in a qualifying crash at Sepang. That injury not only ruled him out of the final two races of the year, handing the crown to Morbidelli by default, but also his debut Marc VDS MotoGP test.

In the last three races of the year, Morbidelli was

well and truly upstaged by KTM's Miguel Oliveira, who staked a strong claim to begin the 2018 season as title favourite with a trio of race wins at the Phillip Island, Sepang and Valencia circuits.

Another to score three wins in 2017 was Marc VDS's other rider, Alex Marquez, younger brother of '17 MotoGP champion Marc. But the Spaniard lacked the consistency of Morbidelli, even if there was often little to choose between the pair on pace.

The only other winners of the year were Italian veteran Mattia Pasini and MotoGP-bound Honda protege Takaaki Nakagami, who won at Mugello and Silverstone respectively. Neither, however, was a factor in the title race, despite Pasini scoring five poles.

Dominique Aegerter also grabbed an on-the-road win in torrential conditions at Misano, but this was later taken away from the Suter rider for an oil irregularity.

Of the rookie contingent, it was another Rossi protege, Francesco Bagnaia, who was the most impressive, scoring four podiums on his way to fifth in the points ahead of Pasini.

Reigning Moto3 champion Brad Binder also turned heads at the end of the season with a trio of podium finishes. That elevated the South African to eighth in the points, but he could have been higher without the disruption of breaking his arm in pre-season testing.

Morbidelli took eight wins on his way to the title



Catalunya

1 Dovizioso

2 Marquez

3 Pedrosa

Dovizioso became Ducati's first back-to-back race winner since 2010, pulling away from Marquez and Pedrosa to a 3.5s lead after an early scrap. Lorenzo had again led early on, this time ending up fourth. The works Yamahas endured another nightmare race – both Rossi and Vinales were beaten to the flag by Zarco and Folger.

Netherlands

1 Rossi

2 Petrucci

3 Marquez

Rossi took advantage of tricky weather conditions to seal his first MotoGP victory in more than a year, but he was pushed all the way by Petrucci, who fell just 0.063s short of a maiden win. Marquez completed the podium, battling his way past Crutchlow and Dovizioso. Vinales lost the points lead to Dovizioso by crashing out at mid-distance.

Germany

1 Marquez

2 Folger

3 Pedrosa

Marquez ended a five-race winless streak and retook the points lead, but only after overcoming a strong challenge from home hero Folger, who took his sole podium finish of the season in second. Pedrosa completed the top three, ahead of Vinales and Rossi in another subdued race for them. While Folger shone, Zarco was ninth.

Czech Republic

1 Marquez

2 Pedrosa

3 Vinales

Marquez began the second half of 2017 as he ended the first, with a masterclass in mixed conditions. The key to his win was an earlier pitstop than his rivals, which gave him a 20s lead that he nursed to the finish. Pedrosa and Vinales completed the podium, while Rossi picked off Crutchlow for fourth. Dovizioso was the top Ducati in sixth.

Austria

1 Dovizioso

2 Marquez

3 Pedrosa

At a track where Ducati was expected to win, Dovizioso delivered, but only after a sensational duel with Marquez that went down to the very final corner – Marquez tried to lunge up the inside, but Dovizioso took a wider line and beat his rival to the finish on traction. Pedrosa was third, while Zarco again upstaged the factory Yamahas in fifth.

Great Britain

1 Dovizioso

2 Vinales

3 Rossi

Dovizioso retook the lead of the points with a fourth win, boosted by an engine failure for Marquez, who had been in the thick of the lead battle until then. Rossi led most of the way, but was passed by both Dovizioso and Vinales with three laps to go, ending up third. Crutchlow narrowly missed out on securing a home podium in fourth.

LAT IMAGES

helped by a two-day post-race test at Motorland Aragon. Iannone led home Rins in a Suzuki four-five at Motegi, before figuring strongly in the fight for victory the next weekend at Phillip Island. Rins also turned heads with a superb run to fourth at Valencia, a glimpse as to what could have been for the rookie had his season not been so compromised by injury. That revival was enough to move Suzuki comfortably clear of Aprilia and KTM in the manufacturers' standings, and its failure to score a podium finish means it now regains the technical concessions it lost after 2016.

Aprilia had a rollercoaster of a year that started with new signing Aleix Espargaro taking sixth in Qatar. But, barring another sixth place late in the year in Aragon, that was as good as it got amid a litany of mechanical failures for the RS-GP and crashes by the Spaniard late in the season. On the other side of the Aprilia garage, Sam Lowes's season never really got going. He was rarely given the same spec of machine as Espargaro, and after a string of disappointing results he was duly informed that Aprilia would be exercising its option to end his two-year deal 12 months early. The Briton heads back to Moto2 next year.

Not helped by Espargaro having to skip the penultimate round of the year at Sepang, Aprilia was eventually beaten to fifth in the manufacturers' points by KTM, which could be considered something of an embarrassment for the firm. But the speed at which KTM progressed through 2017 took everyone, even its own riders, by surprise.

Bradley Smith and Pol Espargaro started the year firmly entrenched at the back of the grid, but by Le Mans, helped by a new 'big-bang' engine (KTM began the season with the only 'screamer'-style motor on the grid), Espargaro put the RC16 into Q2, the first of seven occasions he would reach the top 12 in qualifying. A succession of solid points finishes followed, although the same could not



Above: third in Argentina was Crutchlow's season best. Below: Mir ended his dominant Moto3 campaign with second at Valencia

be said for Smith, who came under increasing pressure from test rider Mika Kallio after the Finnish veteran starred in wildcard showings at the Red Bull Ring and Aragon. But a late announcement that Smith will remain a KTM race rider next season marked a turning point for the Oxfordshire-born man, who took a season-best grid slot of seventh at Motegi and finished the last three races of the year solidly inside the points.

The grid's two other British riders endured mixed fortunes. Cal Crutchlow failed to add to the two wins he took last year for LCR Honda, and was beaten by both Zarco and Pramac's Danilo Petrucci to the honour of top independent in the points with just a single podium finish in Argentina to his credit.

Petrucci's Pramac team-mate Scott Redding suffered an alarming drop-off in form in the middle of the season, struggling to make an impact on a GP16 Ducati designed with the now-banned winglets in mind. He was lucky therefore to get picked up by Aprilia for 2018 when the Italian marque decided to dispense with Lowes's services. ❦



P51 RESULTS AND TOP 10 DRIVERS

MIR MAKES HIS MARK

IN HIS SECOND YEAR IN MOTO3, LEOPARD RACING Honda rider Joan Mir dominated the 2017 season, coming close to equalling one of Valentino Rossi's records in the process.

Mir fell one short of matching the 11 wins scored by Rossi in the 1997 125cc season, but did manage to secure the title with two rounds to spare and had a deal to join crack Moto2 squad Marc VDS by the middle of the season.

His nearest challenger was Romano Fenati, who rehabilitated himself this year, after being thrown out of Rossi's team in 2016, with a trio of race wins. The Italian didn't have the consistency to live with Mir over the course of the year, but did at least secure a Moto2 graduation of his own, along with his Snipers team.

Aron Canet was another rider who began the year regarded as a potential title contender, but two DNFs in the first half of the season left him with a mountain to climb. But ultimately finishing third overall with three wins means he'll be next year's highest-placed returnee.

Among Canet's chief rivals will be Jorge Martin, who took pole nine times before finally winning a race at the Valencia finale, impressive sophomore Fabio di Giannantonio and Enea Bastianini, who replaces Mir at Leopard.

In a year dominated by Honda riders, there were slim pickings for the other two marques, KTM and Mahindra.

KTM had to be content with a sole victory all year, which came courtesy of Andrea Migno at Mugello, while Mahindra mustered just one podium (at Motegi) in its final Moto3 campaign.



San Marino

- 1 Marquez
- 2 Petrucci
- 3 Dovizioso

Victory for Marquez in dreadful conditions at Misano moved him back level at the top of the points with Dovizioso. Petrucci led the bulk of the race after Lorenzo crashed from the lead early on, but had no answer for Marquez on the last lap. Dovizioso was third, 10s back, while Vinales – the sole works Yamaha rider with Rossi absent – was fourth.

Aragon

- 1 Marquez
- 2 Pedrosa
- 3 Lorenzo

Marquez landed an important blow in the title race, taking a fifth win of the year as Dovizioso could manage no better than seventh, losing 16 points. Pedrosa made it a Honda one-two, with Lorenzo back on the podium for the first time since Jerez. But the star of the show was Rossi, who was fifth despite his broken leg, just behind Vinales.

Japan

- 1 Dovizioso
- 2 Marquez
- 3 Petrucci

Fans were again treated to a duel of the highest quality between the title protagonists, with Dovizioso getting the upper hand over Marquez on the very last lap in heavy rain. Petrucci led early on but faded to third, while Iannone beat Rins to fourth to lead a Suzuki mini-revival. Vinales was ninth, as Rossi crashed.

Australia

- 1 Marquez
- 2 Rossi
- 3 Vinales

This was the race where the title was really won for Marquez, as he overcame a ferocious scrap with Rossi, Vinales, Zarco and Iannone to win for the sixth time and give himself a 33-point lead. Dovizioso was up against it after running wide on the second lap, and in the end he could manage no better than 13th on a disastrous day for Ducati.

Malaysia

- 1 Dovizioso
- 2 Lorenzo
- 3 Zarco

Dovizioso realistically had to win at Sepang to keep his title hopes alive, and in Ducati's most dominant display of 2017 he did just that, leading home Lorenzo after the Spaniard nearly crashed out in the wet. Marquez took the cautious approach, giving up the fight against Zarco for third, while Rossi and Vinales trailed home seventh and ninth respectively.

Valencia

- 1 Pedrosa
- 2 Zarco
- 3 Marquez

In a dramatic season finale, Marquez took the spoils, but came perilously close to crashing with an outrageous save. Dovizioso had to win to overturn Marquez's advantage, but crashed out moments after Lorenzo fell. The drama overshadowed a great battle for the win, in which Pedrosa edged out Zarco on the last lap.

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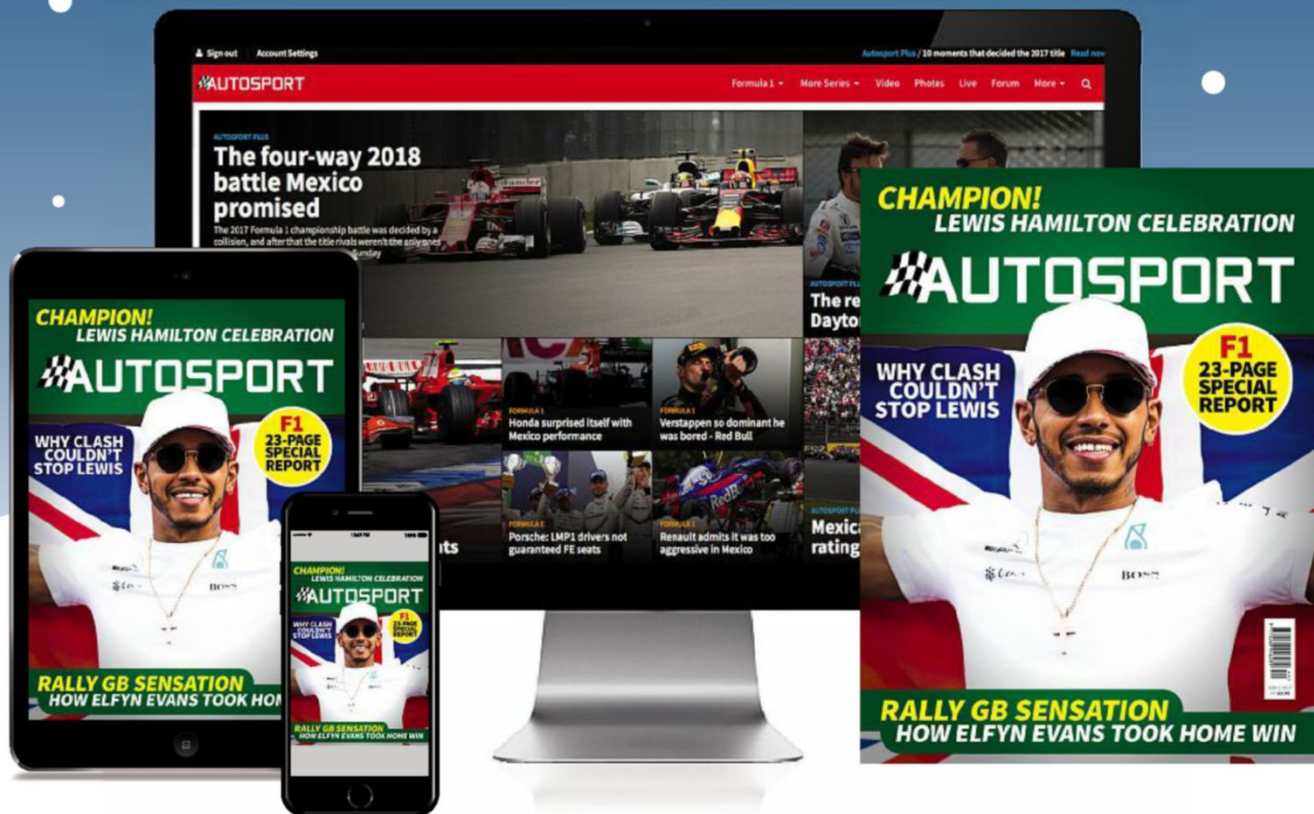
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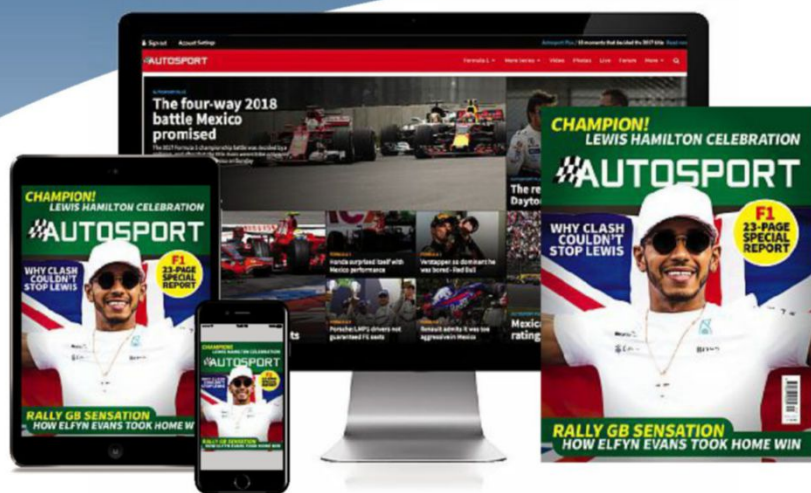
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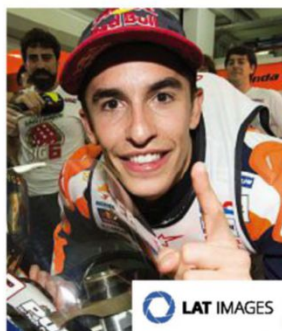
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AUTOSPORT'S TOP 10 DRIVERS



MARC MARQUEZ

It was easy to overlook the fact that Marquez had to come from 37 points back after six races, such was his superb form in the second half of the year. Assuming he stays healthy and motivated, he'll be figuring in many future 'greatest' discussions.



ANDREA DOVIZIOSO

What more can be said about his heroic season, one that brought Ducati so close to its first MotoGP title in 10 years? Perhaps more impressive than the Italian's exceptional victory tally of six was the manner in which those wins were achieved.



VALENTINO ROSSI

A lone victory may not sound like much to write home about for a man who was once grand prix motorcycling's dominant force, but Rossi generally made more of the Yamaha than Vinales when it was struggling, even if he lacked that early speed.



JOHANN ZARCO

Ambitious, unafraid, capable of giving great feedback and possessing a gift for throttle control, Zarco was MotoGP's most impressive rookie since Marquez. Small wonder Yamaha wanted him to be a central part of its post-season test plans.



MAVERICK VINALES

It may seem harsh to rank a rider who scored three victories so low, but Vinales was thrown off his stride by a combination of the new front tyre introduced at Mugello and the chassis changes. Ultimately, his season fizzled out ignominiously.



DANI PEDROSA

Usually nowhere to be found when temperatures dropped, Pedrosa's two wins were frustrating reminders of his huge potential, as well as confirmation that there is – for now – no better wingman for Marquez than Honda can call.



JORGE LORENZO

Lorenzo suffered his first winless GP campaign, but deserves credit for the way in which he got down to the business of trying to match his smooth riding style with a Ducati reluctant to carry the corner speed he was so accustomed to at Yamaha.



DANILO PETRUCCI

Petrucci had a new sense of determination this year, boosted by Ducati granting him a full factory GP17. Nobody would argue that it made the wrong choice, as the former Superstock 1000 champion led races not once, not twice, but three times.



POL ESPARGARO

He had the measure of team-mate Bradley Smith during KTM's impressive debut season. Much like in his final year at Tech3, there were few obvious standout rides, just quietly impressive consistency peppered with frequent Q2 appearances.



JACK MILLER

The irony of Honda opting not to renew Miller's factory contract this year is that he enjoyed his most impressive campaign yet, despite no repeat of his 2016 Dutch TT victory. Leading the opening laps at Phillip Island was a particular highlight.

RIDERS' CHAMPIONSHIP

POS	RIDER	BIKE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	PTS
1	Marc Marquez (E)	Honda	4	R	1	2	R	6	2	3	1	1	2	R	1	1	2	1	4	3	298
2	Andrea Dovizioso (I)	Ducati	2	R	6	5	4	1	1	5	8	6	1	1	3	7	1	13	1	R	261
3	Maverick Vinales (E)	Yamaha	1	1	R	6	1	2	10	R	4	3	6	2	4	4	9	3	9	12	230
4	Dani Pedrosa (E)	Honda	5	R	3	1	3	R	3	13	3	2	3	7	14	2	R	12	5	1	210
5	Valentino Rossi (I)	Yamaha	3	2	2	10	R	4	8	1	5	4	7	3	-	5	R	2	7	5	208
6	Johann Zarco (F)	Tech3 Yamaha	R	5	5	4	2	7	5	14	9	12	5	6	15	9	8	4	3	2	174
7	Jorge Lorenzo (E)	Ducati	11	R	9	3	6	8	4	15	11	15	4	5	R	3	6	15	2	R	137
8	Daniilo Petrucci (I)	Pramac Ducati	R	7	8	7	R	3	R	2	12	7	R	R	2	20	3	21	6	13	124
9	Cal Crutchlow (GB)	LCR Honda	R	3	4	R	5	R	11	4	10	5	15	4	13	R	R	5	15	8	112
10	Jonas Folger (D)	Tech3 Yamaha	10	6	11	8	7	13	6	R	2	10	R	NS	9	16	-	-	-	-	84

11 Jack Miller (Marc VDS Honda) 82; 12 Alvaro Bautista (Aspar Ducati) 75; 13 Andrea Iannone (Suzuki) 70; 14 Scott Redding (Pramac Ducati) 64; 15 Aleix Espargaro (Aprilia) 62; 16 Alex Rins (Suzuki) 59; 17 Pol Espargaro (KTM) 55; 18 Loris Baz (Avintia Ducati) 45; 19 Tito Rabat (Marc VDS Honda) 35; 20 Karel Abraham (Aspar Ducati) 32; 21 Bradley Smith (KTM) 29; 22 Hector Barbera (Avintia Ducati) 28; 23 Michele Pirro (Ducati) 25; 24 Mika Kallio (KTM) 11; 25 Sam Lowes (Aprilia) 5; 26 Katsuyuki Nakasuga (Yamaha) 4; 27 Sylvain Guintoli (Suzuki) 1; 28 Michael van der Mark (Tech3 Yamaha) 0; 29 Takuya Tsuda (Suzuki) 0; 30 Hiroshi Aoyama (Marc VDS Honda) 0; 31 Broc Parkes (Tech3 Yamaha) 0.

The career maker

Mercedes' DTM involvement with the McLaren Autosport BRDC Award goes much further than providing a cool tin-top

By Scott Mitchell, Autosport Plus Editor

[@ScottAutosport](#)

Commitment, professionalism and dedication – three words it is no surprise to hear linked with Mercedes. The German manufacturer has been a successful player throughout motorsport for decades, most recently (and obviously) demonstrated by its monopoly of the Formula 1 drivers' and constructors' championships for the past four seasons.

Impressive, to say the least, but not the reason Mercedes' commitment, professionalism and dedication is brought into focus here. The team is not the Brackley-centred behemoth, rather a small testing crew that's set up camp at a chilly Silverstone in late October. On this occasion the car receiving the plaudits is not the Mercedes F1 W08 Hybrid, rather the Mercedes-AMG C63 DTM. And the feat is not a brace of F1 titles, but a key part in the selection process of the McLaren Autosport BRDC Award.

For those of you unfamiliar with the process, 'MABA' is the annual end-of-season contest, kickstarted in 1989 (and won by future multiple grand prix winner David Coulthard) to identify a talented young driver and give them a valuable boost in their pursuit of F1 and a professional career in racing. The winner is decided after an intensive on and off-track evaluation process, the peak of which is two days of testing at Silverstone in MSV Formula 2, Mercedes DTM and McLaren GT3 cars.

McLaren has been a title partner since the beginning – its GT arm contributes two GT3 cars to the test days (see p56) – and Mercedes joins MSV in being another crucial supplier of machinery. Derek Warwick chairs a judging panel that comprises two-time British

Touring Car champion Jason Plato, 1997 Award winner Andrew Kirkaldy, former leading McLaren engineer Mark Williams, commentary guru Ian Titchmarsh, Autosport magazine editor Kevin Turner and Autosport Plus editor Scott Mitchell. They were assisted this year by 2008 winner Alexander Sims as a guest judge.

Part of the prize, certainly the show-stopping element, is the McLaren F1 test, and that by extension puts the British F1 team front and centre when it comes to the Award. And as the Award exists to reward major single-seater talents, the MSV F2 cars are the most easily and obviously identified part of the tests. That means, externally at least, the Mercedes contributions can be overlooked at times.

The Mercedes part of the Award is valuable for four reasons. First, in name alone. Mercedes' reputation in motorsport needs no explaining. Whether it is its current position at the very top of the tree, or its history in sportscar racing, or the DTM, or the US, Mercedes is a known quantity: efficient, dedicated, successful. To have it as part of the Award, as Warwick puts it, is "unbelievable" as it reaffirms the Award's stature and credibility as the ultimate test for young drivers. "I believe it is very unusual to see this kind of commitment, especially at the end of a long season," says Warwick. "It also helps us to see the diversity of the drivers and how they cope with different disciplines."

That brings us to the second reason – it's an extremely valuable testing tool. A DTM car is an incredible piece of kit, and its deceiving tin-top aesthetics bely the poised, precise machine underneath. It may look like a touring car, but this is a serious weapon that has upper-GT levels of performance. And it's not just the car itself that's significant. The team, led this year by Albert Lau, offers detailed analysis for judges to assess – including sector-by-sector improvements, corner-by-corner handling breakdowns and detailed comments from the engineers and benchmark driver (this year it's Gary Paffett, who won the Award in 1999). Laptimes progression, and a comparison to previous reference laps around the circuit and constant evaluation of track conditions, offer a meaningful delta to compare the finalists. Drivers are rated on their pace, improvement, feedback, data use, attitude and communication with the team. In short, no stone is left unturned to evaluate performance – which makes special efforts in the car, like that of Sims in 2008, not only extremely memorable but also >>



Former Award winner and DTM champ Paffett was on hand to help



The 2017 finalists



**ENAAM
AHMED**

AGE 17

Ahmed moved from Douglas Motorsport to Carlin for his second year in BRDC Formula 3. He won the 2016 Autumn Trophy, then dominated the main championship, scoring 13 victories on his way to the '17 crown.



**MAX
FEWTRELL**

AGE 18

After taking the 2016 British Formula 4 title, the Renault Sport Academy driver stepped up to the Formula Renault Eurocup. Driving for Tech 1, Fewtrell took a race victory and finished sixth in the standings.



**HARRISON
SCOTT**

AGE 21

A 2014 Award finalist, Scott earned his place this year by dominating the Euroformula Open championship. Driving for RP Motorsport, he scored 12 victories and was only beaten twice during the campaign.



**DAN
TICKTUM**

AGE 18

The Red Bull Junior driver joined Arden in the Formula Renault Eurocup this year. The team was new to the series, but Ticktum took a win. He also impressed in GP3 at the end of the year and won the Macau Grand Prix.

The prize up for grabs...

Since a revamp prior to the 2016 edition of the McLaren Autosport BRDC Award, the winner has the opportunity to secure a prize of much greater tangible value.

McLaren decided to increase its involvement in the initiative to find and assist the best of

Britain's junior driving talent, which started in 1989. As well as the chance to land a role in the full-movement Driver In Loop Simulator and time alongside professional simulator driver and 2006 Award winner Oliver Turvey, a spot on McLaren's driver fitness programme will be made available.

This package – won for the first

time by Lando Norris, who used it to become an official McLaren junior and then the Formula 1 team's official reserve driver, getting in the MCL32 at the Hungaroring (right) – includes regular physical assessment and targeting, and access to the Woking squad's gym facilities.

McLaren will also provide a sponsorship masterclass and the chance to impress potential backers or reward established sponsors with the use of the Technology Centre HQ, and arrange for the winner to spend a session with respected driver coach Rob Wilson.

The McLaren package comes alongside the offer of a McLaren F1 test drive and full BRDC membership for the winner. As part of its commitment, McLaren also increased its role in the selection process, with fitness and simulator assessments.



Norris chats to the 2017 finalists at Silverstone



potentially crucial in deciding the outcome of the Award.

Third, it's an extremely popular part of the Award. Autosport speaks to each driver before they're announced as a finalist, and a common question is, 'Which part are you most looking forward to?' – the answer is almost always the DTM car. As Warwick says: 'The car always looks amazing, and the smile it brings to all the drivers – including me! – and how they all talk about it is great'.

As 2015 MABA winner Will Palmer put it: 'I'd heard before that the DTM car was an amazing car to drive, with an unbelievable amount of grip for what is in reality a touring car. I definitely found that to be the case at the test!'

The fourth reason is that the Mercedes/Award relationship is give and take – in return for its immense support, Mercedes has been able to identify young drivers to support and take on. Award winners Dario Franchitti (1992) and Paffett got DTM race opportunities with Mercedes as a result, and in Paffett's case the relationship led to a remarkable 14-year stint in the German series, which he won in 2005. Jamie Green ('02) and Paul di Resta ('04) moved into European Formula 3 with Mercedes support, then switched to the DTM with them – di Resta won the title in '10, then spent three years racing with the Mercedes-powered Force India team in F1. Now, at the end of '17, he's vying for a return to grand prix racing with another Mercedes customer (Williams) after four seasons back in the DTM with the German marque.

George Russell, the 2014 Award winner, was made an official Mercedes junior at the end of '16, tested for the F1 team earlier this year in Hungary and was given two Friday practice outings with Force India at the end of a GP3-title-winning season with a view to an official reserve-driver role next year. It goes beyond winners too. Susie Stoddart (now Wolff) earned a DTM opportunity after back-to-back MABA finalist appearances in '03 and '04, while



Tom Kimber-Smith's '03 performance earned him Mercedes engine support into the '04 F3 season.

All those opportunities are not simply down to the Award 'brand' alone. It's down to Mercedes. Without that early exposure, that hands-on experience of what these drivers are capable of, those doors would probably never have opened. Forging relationships is key in racing and the long-running link between the McLaren Autosport BRDC Award and Mercedes is hugely valuable.

The opportunities of winners and finalists over more than a decade have not been lost on those drivers, nor anyone else involved in the process. 🏁

Di Resta took the 2010 DTM title after impressing during his Award test running



LAT IMAGES



Throwing the finalists a useful curveball

Driving a GT3 car takes the drivers well out of their comfort zone – it tests their skill set, and is a reminder that all roads don't always lead to F1

By Kevin Turner, Editor

🐦 @KRT917



The GT3 element of the McLaren Autosport BRDC Award is often underrated – by the finalists themselves and by those on the outside. But it shouldn't be. The 500bhp machine poses a range of different challenges that can be revealing about a driver.

Most finalists haven't driven with a roof over their heads before and, with the DTM car being likened to a single-seater with a roof, the McLaren tends to push the finalists further outside their comfort zones. First, there's the extra weight, and then there are all the driver aids, such as ABS.

"GT3 adds something to the Award," agrees CRS boss Andrew Kirkaldy, whose team developed the GT3 McLaren MP4-12C and its successor, the 650S. "Drivers tend to say it's the furthest removed car to what they're used to and that has thrown up some interesting things over the years."

Some drivers quickly learn to use the gizmos to their advantage and to adapt to the new discipline. Often the Award winners are among those, but it's not unusual for others to shine in the McLaren.

Ben Barnicoat was a finalist in 2014 and '15. He stunned with his GT pace, though with times kept secret, it's not

Most finalists unfamiliar with a roofed racer



LAT IMAGES

always immediately obvious to the drivers how well they've done. But the fact that Barnicoat became a Strakka McLaren driver in this year's Blancpain GT Series is a pretty good clue.

"The first time I drove the GT car [in the Award test] it was an eye-opener," says the 20-year-old. "There's a lot more weight than a single-seater and it moves around on you. You really get thrown around. It was a challenge.

"When I came back the second year I was able to put it all on the table and I really enjoyed it. I knew that I must have done quite well because Andrew wanted to get me to sign a contract before I tested again!" >>

BEROUD/USA



BUILDING ON McLAREN'S CHAMPIONSHIP SUCCESS

"There are lots of different manufacturers and cars that people recognise. The whole reason for the GT3 project was to help sell road cars. And to do that you've got to be winning."

Andrew Kirkaldy's CRS operation has been involved in McLaren's 21st-century GT project since the beginning. The MP4-12C was a success – Hexis Racing duo Frederic Makowiecki and Stef Dusseldorp came within a point of taking the 2012 FIA GT1 World Championship – and the 650S has been even better.

"We won 10 championships around the world last year," says Kirkaldy. "That's been fantastic for us because we got no funding from McLaren – it's got to work commercially."

Predictably, the 650S built on the knowledge gained with the MP4-12C. It has more downforce, but increasing pace wasn't the main target for the new-for-2015 racer.

"The MP4-12C was very early in the road-car [programme], it had to be done quickly and it was the first project like that

we'd done," explains Kirkaldy.

"It was developed solely with Pro drivers, so it was more edgy than an Am driver might like. With the 650 we developed it with the gentleman driver in mind. Reliability and driveability were the things we focused on. It's all about getting the gentleman driver as close to the professional as you can."

Tweaks to the category's Balance of Performance keep the teams and manufacturers

"It's about getting gentleman drivers as close to the pros as possible"

on their toes, but the 650S's best moment so far came in 2016. Rob Bell, Come Ledogar and Shane van Gisbergen took the 3.8-litre twin-turbo machine to the Blancpain GT Endurance Cup title, against opposition from Aston Martin, Audi, Bentley, BMW, Ferrari, Lamborghini, Mercedes, Nissan and Porsche.





THE CAR YOU HAVE TO NAIL

The Williams JPH1B Formula 2 car has been a cornerstone of the McLaren Autosport BRDC Award since it arrived in 2010. The chance to have all the finalists on track at the same time – thereby negating differences in conditions – has made the playing field as level as possible and given the judges clear data.

The aim of the Award is to find potential Formula 1 stars, so delivering in the single-seater is crucial if the finalists are to be in contention for Award success.

A Pirelli tyre-development programme provided more-durable F2 rubber for 2017, not bad for a car that has been out of front-line racing for five years. That underlines the commitment from the MotorSport Vision team that runs the cars, as do the reams of data (times, data logging, video – when required) it provides the judges.

Running this year started in the wet, but dried gradually, creating a challenging and interesting slicks-in-the-damp session on

day one. Used rubber was employed for the early running to help the drivers familiarise themselves with the car and conditions, before new slicks were bolted on, though Silverstone didn't completely dry before the F2 running gave way to the DTM and GT in the afternoon. The finalists were always released at regular intervals to minimise the chances of them tripping over each other around the Grand Prix circuit.

Boost was introduced for much of day two, to add to the drivers' already high workload. After more familiarisation laps on older rubber, two runs on new tyres with boost took place before a final non-boost 'consistency' session. Instead of aiming to set the single best lap, the target for this final 10-lap run was to record the fastest elapsed time, simulating a short race without the obvious risk of wheel-to-wheel competition.

The results of all runs are taken into account for the final decision, which will be announced at the Autosport Awards this Sunday.

Drivers, cars and judges line up at Silverstone



Like the Mercedes DTM runs, showing well in the McLaren can bring important opportunities. "That test opened up doors for me," adds Barnicoat. "When you don't win the Award, people say it can still help you and you think, 'Yeah, right.' But it really has helped."

Kirkaldy believes this is a key reason why the 650S is a strong part of the Award. "I think getting the GT3 involved has been important because so many drivers go down that path – it's

"GT3 is important. It's a realistic opportunity to be a professional driver"

a realistic opportunity to be a professional racing driver," he says. "So many young drivers are going into GT3. It has become an aspirational formula.

"It's great to see these young kids come along and become professional drivers – for a few years there were so few opportunities."

Kirkaldy won the Award in 1997 and has been involved



with the process one way or another – often as a judge – for many years. He brought the MP4-12C to the tests in 2011, when it was brand new, and the current 650S arrived in '14.

“I benefited from the Award and I felt if there was a way of putting something back in I would,” says Kirkaldy. “That’s the personal side. From the professional side it’s also good to get a glimpse of these young drivers in the car.”

Two years ago, a longer ‘consistency’ run was added to the McLaren element of the Silverstone test. Interestingly, while the quickest of the young hotshoes can match, or even edge ahead of, benchmark driver Rob Bell on one-lap pace, they struggle to maintain that level over a longer period.

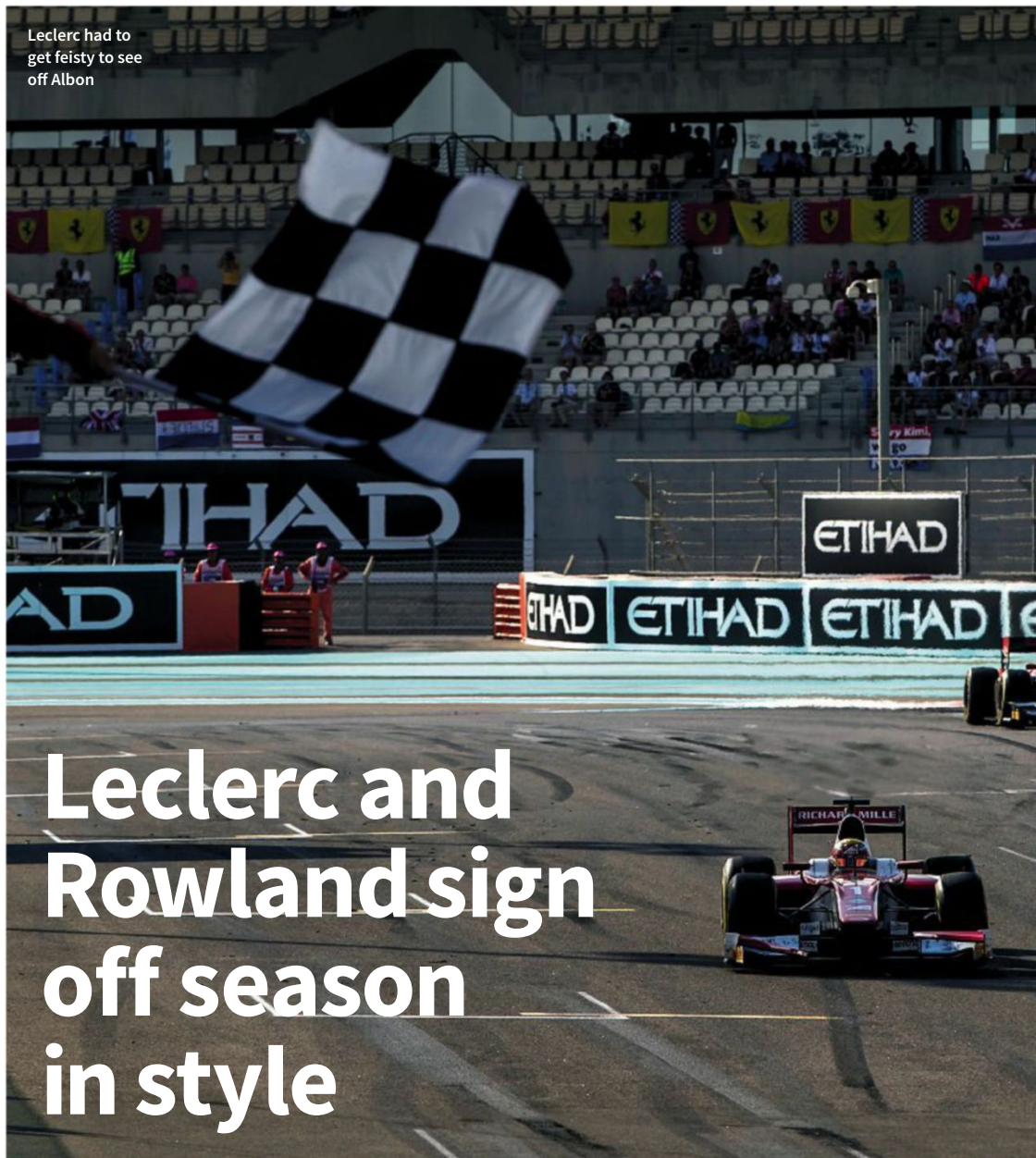
Barnicoat does not find this a surprise. “The speed wasn’t an issue, but the race run I had to learn,” he says. “The stints are much longer than in single-seaters and you have to make the one set of tyres last.”

One thing the tests can’t simulate easily is how the drivers work with co-drivers to find a compromise set-up that works well for both, a key element to endurance competition. But the new challenges the GT3 provides, over both short and long distances, give the judges an extra layer of information. And the drivers a useful insight into another branch of motorsport.

It seems almost impossible that Barnicoat will be the last driver to use the McLaren test to launch a GT career. 🏆

GT kingpin Kirkaldy (left) won Award in 1997





Leclerc had to get feisty to see off Albon

Leclerc and Rowland sign off season in style

FORMULA 2
YAS MARINA (UAE)
NOVEMBER 25-26
ROUND 11/11

IN A PARALLEL UNIVERSE, THE 2017 Formula 2 season could look rather different to the official results that were set in stone at the Abu Dhabi season finale.

Charles Leclerc – the runaway already-crowned champion – officially has seven wins and eight poles to show for his spectacular rookie season. But if just a few things had gone differently, he might have had even more. Had Prema Racing not mistakenly used a non-compliant brass shim in his diffuser for qualifying at the Hungaroring, he'd at least have one more pole – the outright record for the category and most in a row – and possibly another win. He lost another victory when his plank was found to have worn too much at Spa – possibly his finest drive of 2017.

For Oliver Rowland, too, the 'other' F2 season looks different. While he benefited from Leclerc's qualifying woe in Hungary, the DAMS driver also lost out at Spa – forfeiting third due to the same plank infringement. In Abu Dhabi, it was his turn to lose an outright win as post-race-one scrutineering found his car had finished with

a skid block below the required thickness. The 25 points he lost on Saturday night, which Rowland was "so sad" to see disappear but "very proud" to have earned in the first place, were enough to give Artem Markelov – consistent all year in his Russian Time machine – second place in the final drivers' standings.

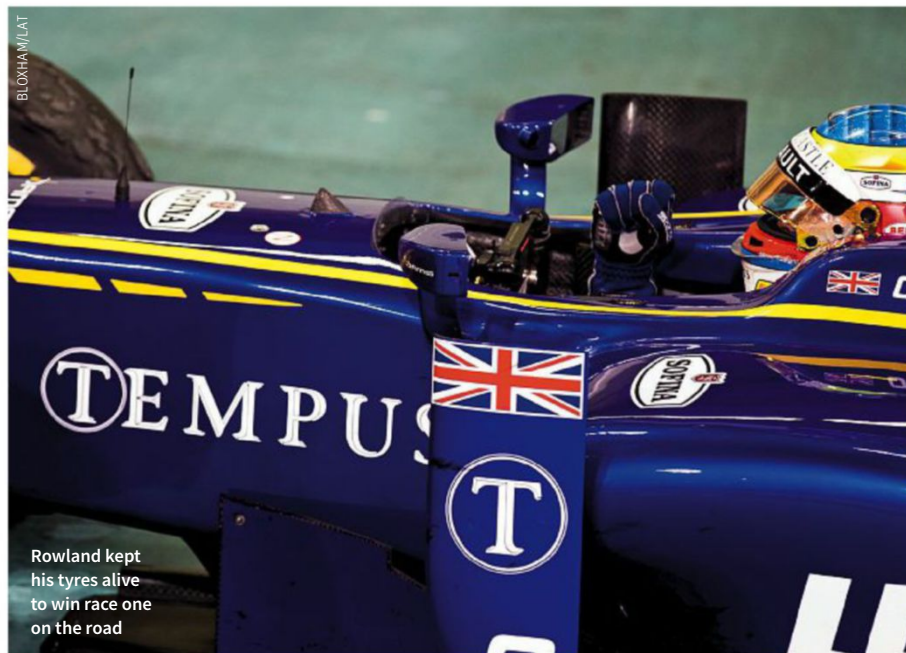
Add in the penalties in Baku that cost Rowland more precious points and Leclerc what would have been a famous double win, plus Luca Ghiotto being penalised at Monza, and some will ask if a little shine has been taken off the season.

But, really, it hasn't. Leclerc capped a simply scintillating season with a dramatic race-two win in Abu Dhabi and Rowland can be proud of his driving across the year – ending with a memorable weekend in the Middle East.

Markelov made his own little piece of history by taking his first GP2/F2 pole ahead of Nyck de Vries, Antonio Fuoco and Rowland, with Leclerc only sixth in qualifying after "having the right balance for the first and second sectors, but the tyres didn't hold on in the third."

Race one was a captivating affair of opposing tyre strategies, with Markelov and Rowland spearheading the more conventional super-soft-to-soft approach and de Vries and Leclerc attempting the reverse.

In the end, each approach had one winner, but



Rowland kept his tyres alive to win race one on the road

AT A GLANCE

RACE 1

- 1 Markelov Russian Time
- 2 Leclerc Prema
- 3 Ghiotto Russian Time

RACE 2

- 1 Leclerc Prema
- 2 Albon ART
- 3 Latifi DAMS

P67 RESULTS

GP2 AND F2 ROOKIE CHAMPS



**2005
NICO
ROSBERG**



**2006
LEWIS
HAMILTON**



**2009
NICO
HULKENBERG**



**2017
CHARLES
LECLERC**

WINS	■■■■■
POLES	■■■■
FASTEST LAPS	■■■■■

WINS	■■■■■
POLES	■
FASTEST LAPS	■■■■■■■

WINS	■■■■■
POLES	■■■
FASTEST LAPS	■■■■■

WINS	■■■■■■■
POLES	■■■■■■■■■
FASTEST LAPS	■■■■■

it was Rowland who scored the victory on the road. Leclerc led for much of the middle phase, but, once he had dispatched Markelov with a decisive pass into the Turns 8/9 chicane shortly after their pitstops, Rowland's superior pace won out. Add in the fact that he beat Markelov – master of making the Pirellis last in tough circumstances – comfortably, and it made it arguably his finest drive at this level.

Even before the stewards intervened to shake up the race-one classification, there was a mystery to solve. After his late-race charge on the super-softs was halted when he unexpectedly encountered degradation that “felt like a puncture”, Leclerc had virtually stopped within sight of the line and Fuoco swept by to take third. Team orders was the answer. “I didn’t have any problems,” Leclerc explained. “It [was] just a team order because Antonio is still playing in the championship to be the second rookie. So they asked me to let him past.” That Leclerc obeyed shows a willingness to be a team player – never a weakness – but his frustration at doing so thankfully shows his competitiveness, which is surely unlikely to be suppressed in the future. The whole situation was ultimately rendered pointless as Fuoco joined Rowland in being thrown out of race one for finishing with front tyres that were below the minimum

specified pressure and ends the year as the third highest rookie in the standings behind de Vries.

Race two was breathless. Alexander Albon led the way after polesitter Jordan King – later to bow out of F2 with a puncture-induced retirement, courtesy of Markelov – made a slow start. Albon carefully and brilliantly kept DAMS’ Nicholas Latifi out of DRS for much of the race, while Leclerc produced yet another great charge.

The Ferrari junior made light work of catching and dispatching de Vries, Nobuharu Matsushita and Latifi in the closing laps, and had Albon under intense pressure on the final tours. With DRS suspended to allow the marshals to clear away Louis Deletraz’s stranded Rapax car at Turn 14, Leclerc and Albon entered a final-lap showdown nose to tail. In a stunning sequence, Leclerc clipped Albon’s left-rear as they ran through the Turn 7 hairpin, backed off before attacking again on the following straight, and somehow squeezed through on the inside on the run to Turn 8 amid piles of marbles, with Albon defending fiercely. “If I did it again there would be some stuff I would maybe do [differently],” ART Grand Prix driver Albon said afterwards, but second and a beautifully judged drive was a fine way to end a year in which he struggled with set-up issues and, mid-way, had to endure the pain of a broken collarbone.

The GP2/11 car’s final race was a memorable one. In addition to the heroics of Leclerc and Albon, Latifi led home Matsushita, Ghiotto and Markelov – fifth and sixth clinching the 2017 F2 teams’ title for Russian Time. Rowland shone too, rocketing from last to seventh with a series of fine passes before getting stuck behind Markelov, who had inherited his race-one win.

With an old car and star departing – Leclerc is expected to graduate to F1 with Sauber – new contenders will come to claim the crown in the halo-shod F2 2018 machine. Formula 3 European champion Lando Norris got a head start in the second-tier category with a one-off appearance for Campos Racing. An engine problem thwarted him in race one, but he put in a battling drive to take ninth on the road in race two, although a 5s time penalty for leaving the track and gaining an advantage dropped him to 13th.

In the race two cool-down room, the champion was quick to spot where Norris had finished. If the Briton can emulate Leclerc in 2018 and then graduate to F1, a fine future rivalry could be on the cards.

Ultimately, the ‘other’ 2017 F2 results may shine just a little brighter for Leclerc and Rowland, but the season we got was still pretty special nevertheless.

ALEX KALINAUCKAS

Kari keeps ART from perfect race one record



AT A GLANCE

RACE 1

- 1 Kari Arden
- 2 Russell ART
- 3 Maini Jenzer

RACE 2

- 1 Boccolacci Trident
- 2 Tveter Trident
- 3 Ticktum DAMS

➔ P67 RESULTS

GP3 SERIES
YAS MARINA (UAE)
NOVEMBER 25-26
ROUND 8/8

“YOU CAN’T WIN THEM ALL,” SAID GEORGE Russell after coming up short in the first race of GP3’s Abu Dhabi season finale.

Much like the 2014 season prevents ART Grand Prix from having a perfect collection of GP3 teams’ titles (see below), Arden International and Niko Kari stopped the French squad from claiming every single race-one win of 2017.

Things had started perfectly for Russell, who did give ART the full house of race-one pole positions by topping qualifying for the fourth time this year. But at the beginning of the first

race, he was on the receiving end of two excellent passes that demoted him to third.

Off the line, Russell made a worse start than Leonardo Pulcini and had to defend hard against the Italian on the run to Turn 1. That cost the pair momentum on a tighter line into the left-hander, and Kari swept by to seize the lead. “I said to myself, ‘Because the guys were on the inside, I will try my best to go around the outside’, and it worked,” he explained afterwards.

Russell, who later bemoaned that pole was on the right-hand side of the grid – “it might be something to speak with the FIA about in the future” – then lost out to Pulcini at Turn 11. “Again there wasn’t much I could have done,” he said. “I braked where I thought I could brake, he braked a bit later and did a great pass, so it’s a bit

annoying to be on the end of two good overtakes.”

The trio edged clear of the pack – dragging Jenzer Motorsport’s Haas Formula 1 junior Arjun Maini along in their wake. Kari, who is losing his Red Bull backing at the end of this season, gradually extended his lead over Pulcini, but had to weather two virtual-safety-car periods before sealing his first GP3 win.

The first was caused by Marcos Siebert pulling off the track at the Turns 5/6 chicane with a broken transmission. At the restart, with Kari scampering clear, Russell tried to dive down the inside of Pulcini at the penultimate corner. But the gap disappeared and the Mercedes junior – who did what Charles Leclerc struggled to do F1 practice-wise in 2016 and successfully swapped a Force India for his ART GP3 car to

ART'S GP3 TEAM TITLE

Since the formation of GP3, one team has dominated. With five drivers’ titles and seven out of eight teams’ crowns, the French squad has made the third-tier category virtually its own. Only Carlin’s win in 2014 prevents a clean sweep.



2010

With five wins, four of them in the higher points-paying race one, future Sauber and Haas F1 driver Esteban Gutierrez takes the first GP3 drivers’ title. The Mexican, alongside team-mates Alexander Rossi and Pedro Nunes, helps give ART the teams’ title ahead of Status Grand Prix.



2011

Another future F1 driver helps ART clinch its second GP3 double: Valtteri Bottas. The Finn and his team-mates Nunes (who is replaced by Richie Stanaway) and James Calado – the drivers’ runner-up – give ART six wins to finish ahead of Arden and Marussia Manor.



2012

In the second year of ART’s tie-up with Lotus, Mitch Evans denies it the drivers’ title, but Daniel Abt, Conor Daly and Aaro Vainio (four wins between them) clinch a third successive GP3 teams’ championship for the squad ahead of the New Zealander’s Arden squad.



2013

After going back to its full ‘Grand Prix’ moniker for this season, ART can’t stop Arden’s Daniil Kvyat from taking the title that led to his angst-filled F1 career. Daly is joined by Facu Regalia (above) and Jack Harvey and the trio takes another four wins to again beat Arden to the teams’ prize.



Russell fought Pulcini for much of race one



Boccolacci added a win to his two other 2017 podiums

take pole on Friday – bounced over the kerbs and went wide. “It was a little bit naughty,” he said when discussing the incident afterwards.

But a second VSC – this time required when Giuliano Alesi stopped on track at the exit of Turn 14 because of damage he’d picked up when Nirei Fukuzumi clattered into the back of him in the lap-one melee – gave Russell the chance to retake second. When the neutralisation ended, the Briton blasted by Pulcini. “He might have been in the wrong gear or something and I cruised past him,” Russell mused.

From there, Russell could not get close to Kari and the 18-year-old took the win by 2.7 seconds. Pulcini’s left-rear tyre let go on the main straight on the penultimate lap, which gifted Maini third, and Pulcini was classified down in 17th.

A maiden GP3 victory was a fine reward for Kari after a difficult 2017 season for the Finn and his Arden squad. “We have been struggling all year,” he summarised. “[We have been working to] find a good set-up on the car to improve everything – finally we’ve done it, and for the first weekend it really worked. I’m really happy, the car was really good.”

The second race finished with another first-time winner as Trident’s Dorian Boccolacci backed up the speed he has shown in qualifying all season with a fine drive to victory. After tracking his reverse-grid-polesitting team-mate Ryan Tveter early on, the French driver used DRS to blast by on the run to Turn 11 on lap three of 14 – just getting things stopped with two wheels still on the track deep into the corner.

“This achievement was not easy,” Boccolacci said after coming home ahead of Tveter and Dan Ticktum. “We had to work a lot, especially on races because it was my weak point – my qualifying was always good. Finally, I understood how to manage the tyre and also be fast – I won this race and finished on a good point.”

Ticktum finished his 2017 season on another good note. One week after his stunning Macau Grand Prix win, he capped his GP3 end-of-year cameos with a maiden podium – albeit not without controversy. The DAMS-run Red Bull junior put two daring passes on Alessio Lorandi and Steijn Schothorst on Yas Marina’s second straight, but was given a five-second time penalty for gaining an advantage off-track in the second. He passed Tveter to overcome the difference – his charge aided by Kari and Schothorst clashing in an incident for which the stewards blamed Kari. “Overall it was positive,” said Ticktum, who kept third by 1.4s over Russell. “But it was a shame to get the penalty.”

Jack Aitken had an uncharacteristically quiet weekend, qualifying down in 15th and taking 14th in race one, unable to move up the order after his car was damaged by flying debris. But the Renault academy driver did clinch the runner-up spot in the standings as Fukuzumi’s struggles – he eventually finished 15th in race one and 14th in race two after going off – meant the points gap between the pair was not closed.

ALEX KALINAUCKAS



2015

After the Alex Lynn and Carlin-led aberration of 2014, ART hits back with its first GP3 double in four years. Esteban Ocon leads the line with Marvin Kirchhofer (who picks up five of the team’s six wins) and Alfonso Celis Jr, and takes the drivers’ title ahead of Luca Ghiotto. Trident finishes second.



2016

Charles Leclerc and Alexander Albon give the team its first one-two in the drivers’ standings since Bottas and Calado. Nirei Fukuzumi and Nyck de Vries complete the line-up, with de Vries helping ART grab nine race wins across the season. Arden finishes second again, albeit 291 points behind.



2017

George Russell, Jack Aitken and Fukuzumi combine for a total of seven wins. Anthoine Hubert can’t provide one of his own, but does help the team clinch a seventh teams’ title (ahead of Trident) and a 1-2-3-4 in the drivers’ standings. Russell is a dominant champion as the team sweeps qualifying.

Rossi wins, Arduzzo adds to lead

SUPERTC2000
GENERAL ROCA (RA)
NOVEMBER 26
ROUND 11/12

MATIAS ROSSI RETURNED TO THE winner’s circle one year after his last series win, also taken at General Roca.

Standings leader Facundo Arduzzo claimed pole on Saturday, prior to Rossi steering his TTA Toyota Corolla to victory in the qualifying race, ahead of reigning champion Agustin Canapino and Damian Fineschi.

Rossi also led away at the start of the main event, with front-row neighbour Canapino (Chevrolet) vying for the lead from the onset, while Arduzzo (his Renault demoted down the grid due to the division’s handicap system) swiftly went for Esteban Guerrieri and fourth.

The safety car was first deployed early on, when Luciano Farroni’s Ford ignited, after which Arduzzo’s main title rival, Mariano Werner, continued to battle it out with two of Arduzzo’s Renault team-mates, Leonel Pernia and Luis Jose di Palma, for sixth. This argy-bargy between di Palma and Werner ended in tears (scuppering most of Werner’s title hopes in the process), as suspension damage in Werner’s car led to him burying the Peugeot in the gravel trap at half-distance, bringing the safety car out.

Canapino tried in vain to overtake Rossi until the end, while Arduzzo motored on to fourth, behind Fineschi, and thus consolidated his points lead.

TONY WATSON

RESULTS

1 Matias Rossi (Toyota Corolla) 31 laps in 55m36.704s; 2 Agustin Canapino (Chevrolet Cruze) +0.842s; 3 Damian Fineschi (Ford Focus); 4 Facundo Arduzzo (Renault Fluence); 5 Matias Munoz Marchesi (Peugeot 408); 6 Ignacio Julian (Renault).

Points **1 Arduzzo 191**; 2 Mariano Werner 155; 3 Rossi 152; 4 Canapino 151; 5 Leonel Pernia 139; 6 Emiliano Spataro 136.5.



Rossi fends off Canapino at Turn 1

INTERVIEW WITH THE OWNER

JENS MOETEFINDT

“After I was finished with school, my father said, ‘I want to stop working when I am 50, will you make it longer for me?’ So I said, ‘Sure, I want to run it.’”

When Jens Moetefindt took over the eponymous trailer dynasty in 2004, he had an enormous challenge on his hands. Entrusted with protecting and building upon more than 20 years of history, started in his father Philipp’s garage in east Germany, Jens could have been forgiven for adopting a risk-averse approach while he learned the ropes, but that couldn’t have been further from reality.

Under his stewardship, Moetefindt has gone from strength to strength, from a company that exclusively traded in handmade products to become Europe’s leading manufacturer of high-quality trailers, renowned for providing solutions that optimise unrivalled precision

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engineering and are tailored to the specific requirements of individual users.

As a regular competitor in VLN Endurance events on the Nurburgring Nordschleife, Jens knows from first-hand experience that his customers require practicality and ease-of-use in their trailers. This, combined with Jens’ innate understanding of the materials – their properties, and strengths and weaknesses – from his studies in applied metallurgy, ensures no stone is left unturned in Moetefindt’s pursuit of excellence.

Having invested in specialist tools and overseen the grand opening of a state-of-the-art manufacturing plant near Hamburg in 2015, Jens has streamlined the production process by incorporating adaptable components that

can be used across different product lines, from vehicle transporters to promotional vehicles.

“We developed special components that we can use from 750 or 1500 kilos up to 20 tons, for example the floor,” explains Jens.

“It’s a bit like Lego – you can make it bigger, smaller, longer, wider, harder, softer and so on.

“You have to work out what customer A needs and what customer B needs and go from there. If customer A wants this and customer B wants that, although they are far apart they will still have certain components in common, so I can use this to satisfy both of them.”

Just as the company grew by word of mouth in its early days as Philipp, a farmer by trade, began selling trailers to order, today the business continues to grow in much the same way, not least when Jens is at the race track.

“I have always enjoyed racing on the Nordschleife, it’s a lot of fun,” says Jens. “But it’s not always possible to focus 100% on the racing as I have drivers from other teams knock at the door and ask me to box 25 because they want to buy a trailer!”

Moetefindt will continue to push the boundaries of innovation to new levels in 2018 and has ambitious plans to showcase its ground-breaking automatic suspension technology by securing a Nordschleife lap record for a car towing a trailer, with a professional driver behind the wheel.

It’s a feat that has never been attempted before, but if history is anything to go by, Moetefindt isn’t one to shirk a challenge.

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Whincup ended the year with a fourth win



Whincup takes the title after thriller

AUSTRALIAN SUPERCARS
NEWCASTLE (AUS)
NOVEMBER 25-26
ROUND 14/14

JAMIE WHINCUP IS NOW A SEVEN-time Supercars champion after a truly remarkable weekend of racing on the streets of Newcastle.

The Red Bull Holden driver had gone into the finale on the brand-new street circuit with a 30-point advantage over title rival Scott McLaughlin.

By Saturday night, however, Whincup's title hopes were in tatters. Having been caught up with Nissan driver Michael Caruso on the first lap, Whincup had found himself in the wall and not only out of contention for victory, but struggling to score at all. He did manage to get back in the race, 13 laps down, and scored a handful of points after being classified 21st, but the net outcome was that race winner McLaughlin suddenly had a 78-point lead heading into Sunday's deciding event.

It was a simple equation: 11th or better would secure McLaughlin a maiden title,

regardless of where Whincup finished. When the DJR Penske Ford driver bagged pole on Sunday, and Whincup was just fifth, it seemed like it was all but done.

The first stint of Sunday's 250km race didn't look promising for Whincup either. While McLaughlin and Shane van Gisbergen bolted away at the front in the opening laps, he sat behind David Reynolds and Mark Winterbottom.

Then on lap 14 everything changed. McLaughlin was hit with a drivethrough for arriving in the pitlane too fast for his first stop, dropping him outside the top 20. At the same time, Whincup suddenly found himself in what was effectively third, and one of the guys ahead of him was team-mate van Gisbergen. It meant he just had to clear Reynolds, and he'd be given free passage to the lead.

McLaughlin made decent progress on his way back to 11th, while Whincup couldn't quite clear Reynolds's Erebus Holden. But just as the momentum seemed to be headed back to McLaughlin, the New Zealander clattered into the left-rear corner of 11th-placed Simona de Silvestro. He was given a 15-second time

penalty to be served at his next stop, and wound up outside the top 20 again.

By that stage Whincup had jumped Reynolds during the second round of stops and, with 36 of the 95 laps to go, van Gisbergen waved him by into the lead. As that happened, McLaughlin was 15th, still needing to climb four places. By the time the next safety car arrived he was 13th, with just Garry Rogers Motorsport pair Garth Tander and James Moffat between himself and the title.

After surviving a restart shunt that left him with left-rear damage, McLaughlin set off after the GRM Holdens. But he was quickly playing both attacker and defender, with Whincup's other team-mate Craig Lowndes on a charge after using the final safety car to switch to new Dunlops. It came down to the final lap. Having finally cleared Moffat to move into 11th position, he then had Lowndes storming up on the inside on the run to Turn 2 to try to relegate him back to 12th.

McLaughlin moved left, forcing Lowndes into the inside wall before bouncing across the track and into the tyres on the outside. McLaughlin crossed the line 11th, but was hit with a post-race drivethrough that dumped him to 18th and ensured Whincup's dramatic title.

ANDREW VAN LEEUWEN

McLaughlin made hard work of finale



RESULTS

Race 1 1 Scott McLaughlin (Ford Falcon) 91 laps in 2h00m01.7051s; 2 Fabian Coulthard (Ford) +2.4430s; 3 Tim Slade (Holden Commodore); 4 Lee Holdsworth (Holden); 5 David Reynolds (Holden); 6 Chaz Mostert (Ford). **Race 2 1 Jamie Whincup (Holden)** 95 laps in 2h00m09.8054s; 2 Shane van Gisbergen (Holden) +4.4812s; 3 Reynolds; 4 Rick Kelly (Nissan Altima); 5 Michael Caruso (Nissan); 6 Nick Percat (Holden). **Points 1 Whincup 3042;** 2 McLaughlin 3021; 3 Coulthard 2812; 4 van Gisbergen 2769; 5 Mostert 2748; 6 Mark Winterbottom 2208.

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RESULTS ROUND-UP

FORMULA 2 CHAMPIONSHIP

ROUND 11/11, YAS MARINA (UAE), NOVEMBER 25-26
RACE 1 (31 LAPS – 106.913 MILES)

1	Artem Markelov (RUS) Russian Time	59m34.767s
2	Charles Leclerc (MC) Prema Racing	+16.265s
3	Luca Ghiotto (I) Russian Time	+25.438s
4	Nyck de Vries (NL) Racing Engineering	+27.181s
5	Nicholas Latifi (CDN) DAMS	+29.697s
6	Nobuharu Matsushita (J) ART Grand Prix	+31.974s
7	Alexander Albon (T) ART Grand Prix	+34.618s
8	Jordan King (GB) MP Motorsport	+40.639s
9	Sergio Sette Camara (BR) MP Motorsport	+43.305s
10	Louis Deletraz (CH) Rapax	+52.356s
11	Gustav Malja (S) Racing Engineering	+1m01.198s
12	Alex Palou (E) Campos Racing	+1m04.596s
13	Norman Nato (F) Arden International	+1m12.209s
14	Santino Ferrucci (USA) Trident	+1m21.496s
15	Sean Gelael (RI) Arden International	+1m23.795s
16	Roberto Merhi (E) Rapax	-1 lap
EX	Oliver Rowland (GB) DAMS	+6.679s
EX	Antonio Fuoco (I) Prema Racing	+16.250s
R	Lando Norris (GB) Campos Racing	5 laps-engine
R	Nabil Jeffri (MAL) Trident	0 laps-driveshaft

Winner's average speed 107.667mph. **Fastest lap** Albon 1m50.314s, 112.623mph.

QUALIFYING

1 Markelov 1m47.181s; 2 de Vries 1m47.387s; 3 Fuoco 1m47.575s; 4 Rowland 1m47.617s; 5 Nato 1m47.676s; 6 Leclerc 1m47.692s; 7 Ghiotto 1m47.753s; 8 Matsushita 1m47.759s; 9 Sette Camara 1m47.824s; 10 Palou 1m48.127s; 11 Latifi 1m48.201s; 12 Deletraz 1m48.212s; 13 Norris 1m48.404s; 14 King 1m48.476s; 15 Ferrucci 1m48.538s; 16 Gelael 1m48.609s; 17 Malja 1m48.671s; 18 Merhi 1m48.794s; 19 Jeffri 1m50.201s; EX Albon 1m47.957s.

RACE 2 (22 LAPS – 75.853 MILES)

1 Leclerc 41m36.188s; 2 Albon +1.293s; 3 Latifi +3.207s; 4 Matsushita +4.105s; 5 Ghiotto +4.952s; 6 Markelov +14.758s; 7 Rowland +15.446s; 8 Sette Camara +24.795s; 9 de Vries +29.261s; 10 Merhi +29.689s; 11 Fuoco +29.912s; 12 Palou +30.999s; 13 Norris +31.564s; 14 Gelael +38.714s; 15 Ferrucci +39.605s; 16 Jeffri +43.310s; 17 Malja +49.659s; 18 Nato 19 laps-DNF; R Deletraz 18 laps-accident; R King 11 laps-puncture.
Winner's average speed 109.394mph. **Fastest lap** King 1m51.315s, 111.610mph.

GRID FOR RACE 2

Decided by result of Race 1, with top eight finishers reversed.

CHAMPIONSHIP

1 Leclerc 282; 2 Markelov 210; 3 Rowland 191; 4 Ghiotto 185; 5 Latifi 178; 6 Matsushita 131; 7 de Vries 114; 8 Fuoco 98; 9 Nato 91; 10 Albon 86.



GP3 SERIES

ROUND 8/8, YAS MARINA (UAE), NOVEMBER 25-26
RACE 1 (18 LAPS – 62.048 MILES)

1	Niko Kari (FIN) Arden International	37m28.944s
2	George Russell (GB) ART Grand Prix	+2.748s
3	Arjun Maini (IND) Jenzer Motorsport	+7.532s
4	Dan Ticktum (GB) DAMS	+13.745s
5	Alessio Lorandi (I) Jenzer Motorsport	+25.884s
6	Steijn Schothorst (NL) Arden International	+29.890s
7	Dorian Boccia (F) Trident	+34.339s
8	Ryan Tveter (USA) Trident	+35.815s
9	Kevin Jorg (CH) Trident	+36.374s
10	Bruno Baptista (BR) DAMS	+37.837s
11	Anthoine Hubert (F) ART Grand Prix	+40.003s
12	Juan Manuel Correa (USA) Jenzer Motorsport	+41.362s
13	Raoul Hyman (ZA) Campos Racing	+50.566s
14	Jack Aitken (GB) ART Grand Prix	+57.811s
15	Nirei Fukuzumi (J) ART Grand Prix	+1m15.635s
16	Tatiana Calderon (CO) DAMS	+1m20.614s
17	Leonardo Pulcini (I) Arden International	16 laps-puncture
R	Giuliano Alesi (F) Trident	9 laps-accident damage
R	Marcos Siebert (RA) Campos Racing	3 laps-transmission
NS	Julien Falchero (F) Campos Racing	

Winner's average speed 99.323mph. **Fastest lap** Fukuzumi 1m57.544s, 105.696mph.

QUALIFYING

1 Russell 1m54.751s; 2 Pulcini 1m55.073s; 3 Kari 1m55.157s; 4 Ticktum 1m55.289s; 5 Maini 1m55.466s; 6 Fukuzumi 1m55.484s; 7 Boccia 1m55.533s; 8 Hyman 1m55.583s; 9 Hubert 1m55.594s; 10 Lorandi 1m55.605s; 11 Schothorst 1m55.610s; 12 Tveter 1m55.684s; 13 Calderon 1m55.772s; 14 Jorg 1m55.774s; 15 Aitken 1m55.823s; 16 Alesi 1m55.909s; 17 Baptista 1m56.088s; 18 Siebert 1m56.485s; 19 Falchero 1m57.015s; 20 Correa 1m56.597s.

RACE 2 (14 LAPS – 48.244 MILES)

1 Boccia 27m38.145s; 2 Tveter +5.581s; 3 Ticktum +8.510s; 4 Russell +9.981s; 5 Hubert +13.169s; 6 Maini +18.681s; 7 Jorg +19.557s; 8 Aitken +20.745s; 9 Alesi +22.389s; 10 Baptista +23.501s; 11 Hyman +23.946s; 12 Correa +26.766s; 13 Kari +27.323s; 14 Fukuzumi +27.607s; 15 Calderon +28.814s; 16 Falchero +31.359s; 17 Lorandi +1m17.433s; 18 Schothorst 13 laps-accident; R Siebert 1 lap-mechanical; R Pulcini 0 laps.
Winner's average speed 104.742mph. **Fastest lap** Fukuzumi 1m57.662s, 105.590mph.

GRID FOR RACE 2

Decided by result of Race 1, with top eight finishers reversed.

CHAMPIONSHIP

1 Russell 220; 2 Aitken 141; 3 Fukuzumi 134; 4 Hubert 123; 5 Alesi 99; 6 Boccia 93; 7 Lorandi 92; 8 Tveter 78; 9 Maini 72; 10 Kari 63.



CHRISTMAS

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GIFT GUIDE

2017

Subaru Impreza Group A Rally Car

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Owners' Workshop Manual



An insight into the design, engineering and competition history of Subaru's iconic rally car

Haynes Group A Impreza manual is the perfect gift for rally fans

Celebrating 25 years since the Subaru Impreza first entered World Rally competition in 1993, a new manual from esteemed motoring publisher Haynes takes a unique look under the skin of the legendary rally car.

The Subaru Impreza Group A Rally Car Owners' Workshop Manual is a comprehensive guide to the anatomy and history of the car, which earned huge worldwide appeal thanks to its rallying success and its iconic sound and appearance – notably its

distinctive '555' livery.

Before the Impreza hit the world rally stages and started winning in the mid-1990s, few people outside of Japan had even heard of Subaru cars. But in partnership with the expertise of Prodrive, Subaru used its endeavours in the World Rally Championship to create a brand appeal that endures to this day.

The manual examines all rally Imprezas but focuses on the Group A car in which the late Colin McRae won the World Rally Championship

in 1995. The book also includes extensive personal recollections from the car's former drivers including Markku Alen, Ari Vatanen and two-time World Rally champion Carlos Sainz.

Written by award-winning motorsport journalist Andrew van de Burgt, the manual takes a detailed look at the car's anatomy, including its chassis, suspension, brakes, engine and gearbox – all of which came together to make the car such an awesome force in rallying.

The Subaru Impreza Group A Rally Car Owners' Workshop Manual is priced at £22.99 and is available from www.haynes.com, along with many other motorsport titles

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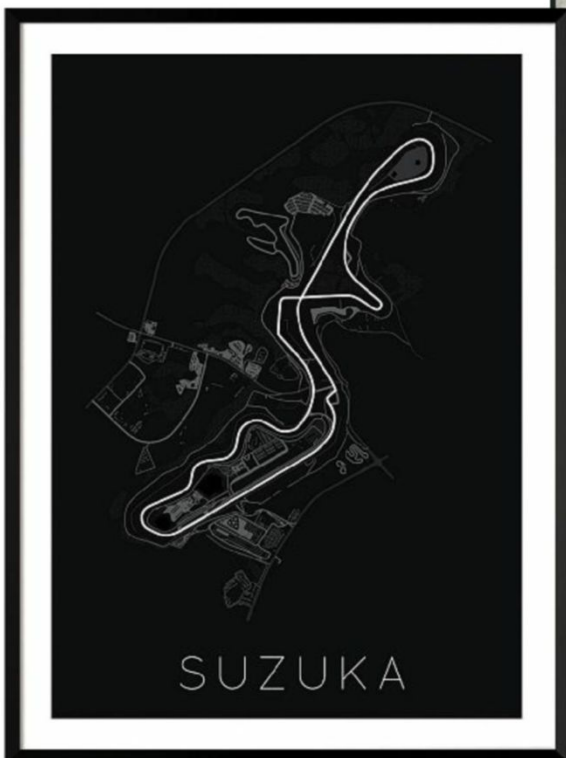
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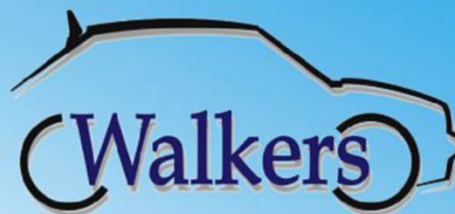
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




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HERITAGE FORMULA FORD SERIES

New Formula Ford series set to bring back early-'90s cars

A NEW HERITAGE FORMULA FORD SERIES FOR pre-1993 cars has been launched for 2018 by Walter Hayes Trophy creator James Beckett.

Cars from the final years of FF1600's original heyday – before the old-faithful Kent engine was replaced by the Zetec powerplant for 1993 – have become increasingly scarce in recent seasons. Pre-1990 designs have maintained a home in the BRSCC Northern series, although numbers in this class have been in decline and it is no longer guaranteed standalone grids. Later designs such as the Van Diemen RF90 and Swift SC92 have been disappearing from FF1600 paddocks as they became too old to be frontrunners against contemporary cars.

"I believe the time is right and it's a bit of a gap in the market," said Beckett, whose series will be run in collaboration with MotorSport Vision Racing and is likely to encompass four rounds. "If you're running a Swift 93

or Van Diemen RF90, you're running in races where you can make up the numbers but not where you can win.

"There will be a small number of races in 2018 with a growing potential for 2019 and beyond. I don't see why we can't have a really good series in two or three years. This is something I'm pretty excited about."

Beckett hopes that Heritage FFord will be a suitable tribute to the final pre-Zetec period. "I can't force people to run their cars in period colour, but I want them to look right and be right and to have a little presence in the paddock," he said.

Brian Soule, whose Souley Motorsport team dominated the 2017 National series' pre-'90 class, called the plan "a great concept".

Beckett also intends to continue with Champion of Brands FF1600 and the SuperSeries, although he pledged to "rework" the latter.



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The unstoppable Walter Hayes Trophy aside, James Beckett's recent FF1600 initiatives have had a mixed reception and sometimes felt like answers to questions no one was asking. That is not the case with Heritage FFord, the 'homelessness' of the much-loved 1990s cars having vexed FF1600 paddock veterans.

Beckett's FF1600 ideas are always evocative. But there were too many small grids, and there would've been more without the personal loyalty Beckett commands among FF1600 racers. Creating a calendar that means teams don't have to choose between Heritage and BRSCC series must be a priority.

In its golden era, FFord's structure was always more octopus than pyramid – a multiplicity of rival national series, regional championships and categories for different ages of cars. That diversity and flexibility was why it thrived. That spirit can be part of FF1600's current renaissance too, and Heritage FFord should fit that jigsaw snugly.

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HISTORICS British GT runners-up Jon Minshaw and Phil Keen tested Minshaw's Jaguar XJR-9 at Donington Park last week, prior to the V12 car going for a rebuild. "Jon would like to race it and the plan is for him to do the Le Mans Classic next year, with me possibly in his Porsche 956," said Keen. Minshaw added: "It finished Le Mans in 1988 with Danny Sullivan, Davy Jones and Price Cobb and then came back to the UK, having previously raced in the US in Castrol livery." **Photograph by Peter Scherer**

EQUIPE GTS AND PRE '63

Equipe GTS kicks off at Goodwood

A RARE CHANCE TO DRIVE ON THE Goodwood circuit will kick off the Equipe GTS and Pre '63 series ahead of an expanded race calendar in 2018.

Equipe GTS has achieved large grids this year, so organisers of this and its new sister Pre '63 series have decided to add a Goodwood trackday on March 5 prior to the new season.

"It will cover GTS and Pre '63 and will be a nice warm-up for the season," said series co-organiser John Pearson. "We will limit numbers because if you get too many, you don't get much track time."

The racing will then begin on April 7 at

Silverstone, with each weekend having at least one GTS and one Pre '63 race.

An additional ninth race weekend, a second visit to Brands Hatch, has also been added to the calendar.

"With the interest we've had for GTS this year we thought we could carry an extra race meeting as well," added Pearson. "We have retained some of the really nice stuff like the Silverstone Grand Prix Circuit and a double-header at Brands Hatch. Zandvoort went down really well too so we will go back there."

The new-for-2017 Three Hour Relay race returns, but will move from Silverstone to Donington Park.



MX-5 SUPERSERIES

New MX-5 series for Mk3 overspill

A NEW MAZDA MX-5 SUPERSERIES WILL cater for drivers unable to compete on the new-for-2018 TCR UK bill next season.

The British Racing and Sports Car Club's Mazda MX-5 SuperCup Championship – which uses Mk3 cars – will join the TCR package next year, but a number of drivers who raced in the SuperCup in 2017 will be prevented from taking part due to likely grid-capacity issues, prompting the separate SuperSeries to be created for the Mk3 class.

The decision gives Mk3 drivers more options in deciding where they want to race and will help to keep costs down, as many teams who run Mk3 cars also manage Mk1 machinery in the Mazda MX-5 Championship, with which the new SuperSeries will share the BRSCC billing, as the SuperCup did before.

Mazda MX-5 coordinator Mandy Andrew said: "The reason we are running the SuperSeries is there is such a demand to race Mk3s that the SuperCup on the TCR package can't accommodate them all. The SuperSeries will allow teams who run both Mk1s and Mk3s to continue doing so at the same meetings."

Imola to open Historic F1 season

DEBUTS AT IMOLA IN ITALY AND MOST in the Czech Republic are among the highlights of the twin FIA Masters Historic Formula 1 (1966-85) and Sportscar championships, which will race at famous European circuits, including Dijon, in 2018.

Masters Historic Racing's European tour opens at the Motor Legend Festival at Imola on April 20-21. The Most Historic GP event is on June 22-24, while Dijon hosts the seasonal finale on October 12-14.

The championships run on home soil twice, at Brands Hatch on May 26-27 and the Silverstone Classic on July 22.

All five Masters competitions – including its Endurance Legends prototype and GT series piloted at Spa in September – are on the Silverstone bill. MEL will also run at Imola, Brands and Spa and is likely to find a fifth slot at the Nurburgring. Its Pre-'66 Gentlemen Drivers GT series enjoys a full programme at selected venues.



Brands Historic event returns in May 2018

HAWKINS

CLASSIC SEBRING 12 HOURS

Bikesports champion to Sebring

750 MOTOR CLUB BIKESPORTS champion Stefano Leaney will share Neil Primrose's Lola B2K/40 in this weekend's HSR Classic 12 Hour event at Sebring.

The 24-year-old, successful in a Radical-Suzuki PR6 this year, will race the ex-Gunnar Jeannette car, powered by a

three-litre 380bhp Nissan V6 engine.

"I've not driven the Lola yet, or the Sebring circuit, but we've done simulator work at iZone," said the West London-based recruitment company boss.

"We're facing some very serious opposition, including

Audis, Courages, Pescarolos and ORECA's with star drivers."

Travis drummer Primrose and American Tim Gaffney finished third in class D1 in the recent Classic 24 Hour event at Daytona earlier this month, but 1999-2004 cars are pitched together on the Floridian airfield circuit.



Bray (76) is hoping to return to fight for MX-5 title

JOHN MILES AWARD

Bray wins £1000 and entry fees

MX-5 CUP RACER ALI BRAY HAS WON the 750 Motor Club's John Miles Young Driver Award after his first full season of car-racing competition.

Bray took his self-run Mazda to second overall behind Ben Short. Bray wins a £1000 cash prize and subsidised race fees, and hopes to use that to battle Short again next year.

"This year I was on such a tight budget, I scrimped and saved, using second-hand tyres from some of my other customers that they'd handed me down," said Bray, who is rebuilding his car for next year. "It was great to get out in the car and prove I'm not just a mechanic."

The award is given by the 750MC in honour of racer-turned-engineer Miles.

IN BRIEF



LAWRENCE

BEAST OF TURIN IS SET TO EXCEL

The mighty 'Beast of Turin' will star at the London Classic Car Show at ExCel from February 15-18 by being driven on the event's Grand Avenue. The 107-year-old 28.5-litre land speed record Fiat (above), restored by Duncan Pittaway, will be one of 60 specials appearing on the automotive catwalk.

BRITISH GT/F3 CALENDAR REVEALED

British GT and the BRDC British Formula 3 Championship will share seven rounds in 2018, including Oulton Park, Rockingham, Snetterton, Silverstone GP, Spa-Francorchamps, Brands Hatch GP and Donington Park. The Silverstone GP layout will also be used a further time by British Formula 3 as the series' final round in October.

MONOPOSTO QUALIFYING CHANGES

The Monoposto championship will revise its qualifying format at double and triple-header rounds for next season, basing second and third-race grids on fastest laps in the previous race.

TERRY DRURY: 1939-2017

Autosport is saddened to report the death of Terry Drury after a short illness. Drury started racing in the 1960s when working as a development engineer at Ford and he later built the famous 'Supervan', a modified Ford Transit powered by a 5-litre V8 engine. He was a Special Saloon pioneer with big-engined Anglias and Lotus Cortinas, and his race team later entered Ford GT40s and mounted a BTCC campaign with Alfa Romeo. After a break from the sport he recently returned to paddocks with his sons Steven and Jack, and built a race-winning Ford Falcon.

PADMORE TESTS SPECIAL LOTUS 77

Historic Formula 1 champion Nick Padmore tested a famous Lotus 77 at Donington Park last week (below), returning the car to a track with a special place in its history. In May 1977, when the circuit reopened, then-track owner Tom Wheatcroft completed a celebration lap sitting on the sidepod alongside Gunnar Nilsson. The moment was recreated by Tom's son Kevin when the track returned to service in 2010.



WALKER

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McLaren Automotive racing into the future

By Marcus Pye, the voice of club racing

[@autosport](#)

AN INVITATION TO THE McLAREN TECHNICAL Centre (MTC) is not one to be missed. Guided tours of the jaw-dropping racing facility outside Woking were a fascinating part of the McLaren Autosport BRDC Award process when I was on the judging panel.

But it's the group's Automotive Division that has really been going places in recent years. Its supercars are selling like the proverbial hot cakes, a staggering 13,000 having thus far been hand-crafted to order. Indeed, with more mouthwatering models in the pipeline, customer appetite continues to grow!

Last week's trip to its HQ took me to the McLaren Thought Leadership Centre for the launch of its driver-development programme. Its title suggests a place of worship and on entering this typically dramatic semi-submerged circular edifice, subtly fed by light wells, it quickly becomes apparent that it's dedicated to the adoration of speed. Particularly referenced to fast cars.

Introduced to the media, Jordan Albert, Charlie Fagg, Michael O'Brien and Lewis Proctor probably pinched themselves for a reality check.

The quartet will share a brace of GT4-spec 570S models in the 2018 British GT Championship and have a winter to prepare for an exciting, hopefully future-defining, chapter in their fledgling professional racing careers. Having the ambition and financial might of McLaren Automotive – which was feted as winner of the coveted *Sunday Times* Top Track 250 Award for medium-sized businesses in the UK in London that evening – behind them, with Rob Bell as mentor, could mean the sky's the limit.

While his younger co-inductees arrived from traditional sporting backgrounds, I was interested

in the selection of O'Brien, who I've seen a lot of in historic racing over recent seasons.

Yes, Michael is the son of former FF2000, F3 and Touring Car racer Mike, whose Speedsport team prepares McLaren Automotive CEO Mike Flewitt's F2 McLaren M4A, but he's absolutely proven himself in the hurly-burly of Historic FF1600 where the racing was incredible this year – and was super-quick in the McLaren tests at Paul Ricard, in alien cars at a circuit new to him.

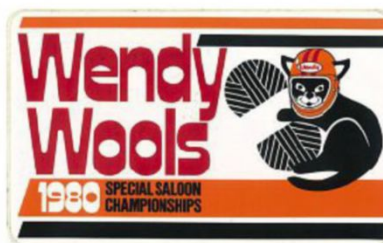
I reported every HSCC HFF championship round and was impressed by Michael's cool head and attitude. He won two, plus both stand-alone races at the Silverstone Classic, and finished second seven times (often by hundredths of a second), but, having suffered a deflated tyre in the finale, missed the title by a point.

Having won in BRDC Formula 4 and, this season, in the SsangYong Racing pick-up series, he didn't mope at this misfortune. By then, though, this engaging and personable young man had a tantalising glimpse of the way forward. And grabbed it with both hands.

The financial world has changed radically and the relative cost of racing has escalated since the 1950s and '60s when wealthy mentors, often buoyed by lucrative trade bonuses, picked up promising young drivers on merit and gave them a leg-up to the next level. Others from overseas were helped, often to a limited degree beyond a title that might help attract financiers, by sporting federation-supported Driver to Europe schemes. Since then, MABA and the Racing Steps Foundation have done great things in keeping talent afloat in single-seater formulae, but it's also great to see McLaren starting from a wider focus to showcase its core product. 🏁

WENDY WOOLS RETURNS TO RACING

Wendy Wools, the brand that became synonymous with Special Saloon racing as sponsor of the BARC's championships from 1978-88, is returning to support the Classic Sports Car Club's popular Special Saloons and Modsports revival series next season. Four double-header races are planned. Fixture content across the CSCC's calendar will not be firmed up until next month, but the series will be a major draw at the Club's domestic seasonal finale at Mallory Park, a traditional class stronghold, on October 6-7. Owned by Carter & Parker of Guiseley until '91, when the company was acquired by Thomas B Ramsden



& Co (Bradford) Ltd, market leader Wendy – named after the Peter Pan character, through a family association with author JM Barrie – remains proudly rooted in West Yorkshire. Forty years since Wendy Wools' first circuit



racing involvement, 2018 also marks the brand's 90th anniversary. In the late '70s, Wendy also backed the F2 Marches of British Hillclimb and Sprint champion David Franklin, whose wife Deborah owned a wool shop in Bristol.

Christmas gift guide

With just a few weeks left to complete your shopping before the big day, here are some of the best motorsport gifts on the market in 2017



JENSON BUTTON LIFE TO THE LIMIT

RRP £20

ISBN-10: 1911600346

Button's autobiography is must-read if you're a fan of the 2009 world champion or a general F1 supporter. It does lack detail in the more controversial elements of his career – particularly the Williams/BAR contract wrangling – and there is rather a lack of criticism of Honda's power units at the very end of his F1 career. But the insight he does provide is very enjoyable and he doesn't hold back on his opinions of Flavio Briatore and Sir Richard Branson. Told faithfully in the wry-humoured voice that Button is known for, the book charts his career from karting to the present day, with the first third focused on his karting exploits with late father John. This is one of the book's real strengths and the love and devotion between the pair are clear. Button mentions a friend remarking after his father's death in 2014 that he hadn't "grieved him enough" – hopefully, having to reflect on their time together in writing the book has helped that process.

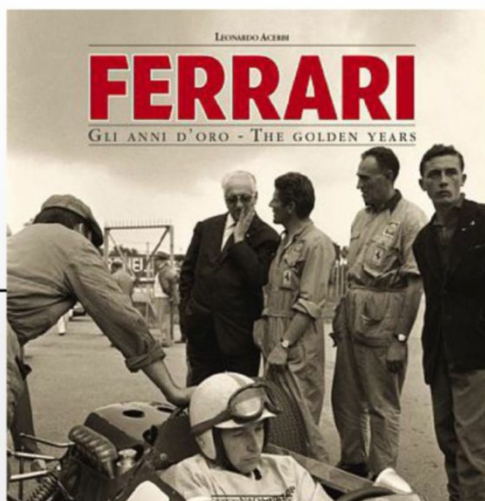


FERRARI THE GOLDEN YEARS

RRP €60

ISBN-10: 8879116746

This is the latest instalment in Leonardo Acceri's collection of Ferrari books and celebrates the Italian marque by delving solely into its history while founder Enzo's hand was on the tiller.

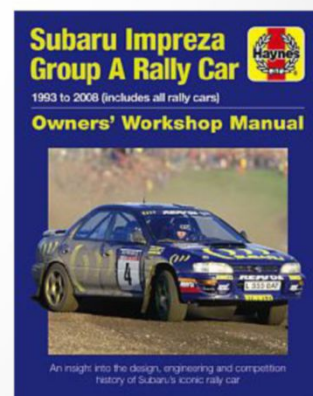


MARIO ANDRETTI A LIFE IN PICTURES

RRP €40

ISBN-10: 8879116827

This book covers Andretti's entire career through hundreds of pictures, and is accompanied by text from many of the interviews he has given over the years, brought together by author Mario Donnini.



SUBARU IMPREZA GROUP A RALLY CAR

RRP £22.99

ISBN-10: 1785211102

This Haynes Owners' Workshop Manual charts Subaru's motorsport history, homing in on the iconic Group A Impreza and its 11 WRC wins. The images showing the simplicity of the cockpit are superb.



PROJECT CARS 2

RRP £49.99
PS4 and Xbox One

The franchise that only came to fruition thanks to online crowdfunding returns with a second title. Project Cars 2 has reprogrammed AI and a reworked handling model with a greater focus on controller-play. There's also total freedom in multi-class racing that provides more of a sandbox feel.



F1 2017

RRP £49.99
PS4 and Xbox One

The latest instalment in Codemasters' flagship Formula 1 series features major improvements to the all-important handling model. Classic cars also return (for the first time since the 2013 edition) and there's a plethora of career mode challenges and other new game modes designed to suit a wider range of tastes.



GT SPORT

RRP £49.99
PS4 only

The latest game in the hyper-successful Gran Turismo series does away with a traditional offline career mode – controversially – and replaces it with a focus on online racing that is blessed by the FIA. The game features 162 cars (as per its launch spec) and has beautiful graphics that will be familiar to many long-time players of the series.



AUTOMODELLO EAGLE INDYCAR MODELS

RRP £120-150

European model collectors are well catered for when it comes to Formula 1 and sportscars, but Indycars can be a little harder to come by. That's why Automodello's new

model of the 1981 Eagle is so welcome. The car, with its soon-to-be-banned 'Boundary Layer Adhesion Technology' aerodynamics, was the last Eagle to win in

Indycar, at Milwaukee in the hands of Mike Mosley (#48, above). There are three models: Mosley's car signed by All American Racers founder Dan Gurney, the Riverside pole

winner signed by driver Geoff Brabham, and Chip Mead's white and blue, White Castle-liveried #49 car (above). Each model is limited to less than 200 pieces and they're not

cheap – ranging from \$159.95 to \$194.95 (around £120-150) – but they make for an unusual edition of a fascinating car for any collection.

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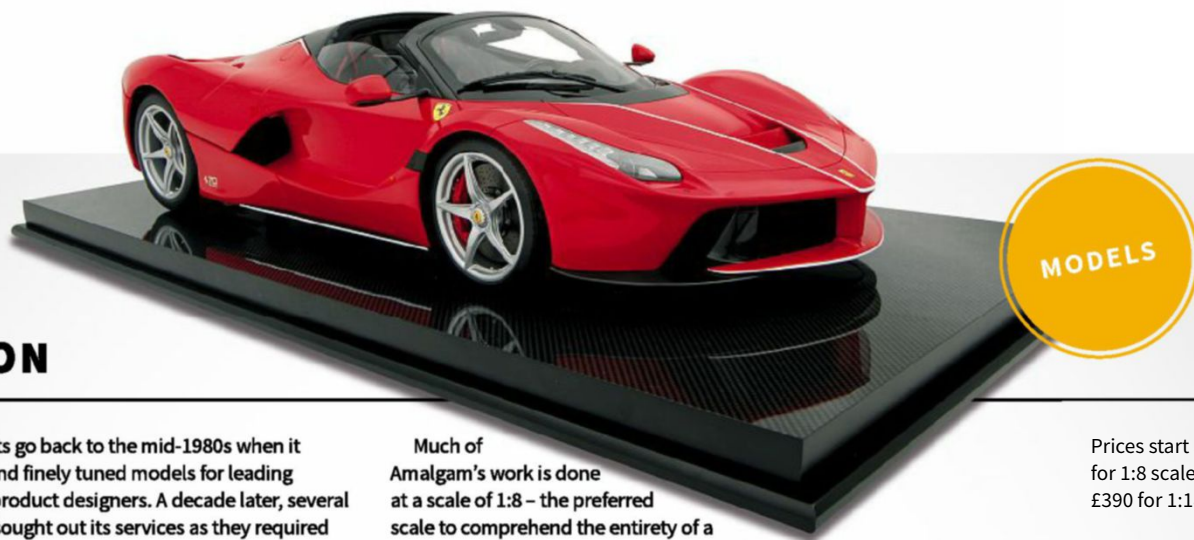


DREW GIBSON

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drew-gibson.co.uk

Limited to just 150 units,
Drew Gibson's 2018
calendar brings together
12 beautiful images
from the 2017
sportscar season.

AMALGAM COLLECTION



Amalgam Collection's roots go back to the mid-1980s when it began creating complex and finely tuned models for leading European architects and product designers. A decade later, several leading Formula 1 teams sought out its services as they required detailed models of their cars – supplied at 1:8 and 1:4 scale.

By 2000, Amalgam was supplying Ferrari's F1 team with models for all its major stakeholders – from its drivers through to its senior team management, partners and investors. The Italian marque's then chairman Luca di Montezemolo also asked Amalgam to recreate many of its most famous car designs.

Amalgam continues to model F1 and classic road cars for the teams and collectors. In addition, the company now creates models to order, including bespoke replicas for supercar owners. These unique replicas of an owner's real car are detailed right down to the stitching on the seats and the licence plates, and are delivered in around 12 weeks from receiving the specification.

Much of Amalgam's work is done at a scale of 1:8 – the preferred scale to comprehend the entirety of a design at a quick glance while also showing minute details. In 2017, Amalgam has created the first models in its rapidly growing collection of luxury presentation 1:18 Ferrari and Porsche models.

"Our models are dedicated to achieving a level of accuracy, precision and excellence that raises the finished replica to a level far beyond anything previously created," says Amalgam's founder Sandy Copeman. "In line with the mobile art objects they represent at scale, the value and price of our work are high, but the workmanship is extraordinary, and with so few examples of each model created, the value along with the pleasure will surely endure."

Prices start at £4575 for 1:8 scale models and £390 for 1:18 models.

For more information:
amalgamcollection.com

HOW THE MODELS ARE CREATED

At the core of Amalgam Collection is a highly skilled team of model-makers with a passion for car design and motorsport. The team takes around three months to research and create the master patterns for each of its 1:8 scale cars. The aim is to make the finest possible display models at that scale, while capturing the beauty and spirit of the original car.



1 To start with, a pattern is made for every component of the model, using a wide range of traditional engineering and pattern-making skills, alongside techniques such as laser cutting and computer numerical control (CNC) machining. Epoxy pattern board, the material used by the race teams to create patterns for carbon composite components, is used for the large components, and acrylic or brass is used for the smaller items.

2 The patterns are then used to make moulds from clear silicon rubber, into which prototyping-quality resin will eventually be poured to cast the components. These moulds reproduce even the

most complex details and textures, providing high levels of accuracy in the casts.

3 To cast each component, carefully measured quantities of two-part prototyping resin are mixed, and then poured swiftly into the mould. The mould is quickly placed under vacuum to remove any air bubbles before it cures and then each piece is left to fully cure before they are demoulded. Each piece is then fettled and fine-sanded ready for priming.

4 The master tyre patterns are CNC machined in pattern board to the exact specification and tread pattern used on the original car, which is done using computer-aided design

(CAD) data provided by manufacturers. After hand-finishing and detailing, the master tyre models are put into silicon moulds and each piece is cast with a two-part liquid rubber.

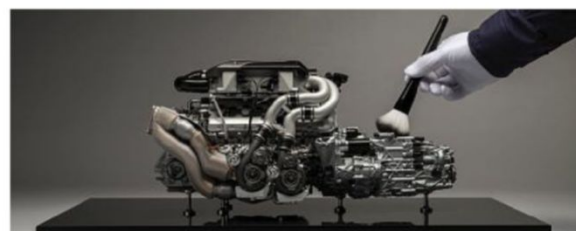
5 For suspension and some other small components, patterns are created in brass and these are used to create a vulcanised rubber mould. Molten pewter is poured into the mould while it is spinning at high speed and the centrifugal force drives the liquid metal into every small detail of the mould. The resulting white metal cast components are carefully fettled and polished, and, if they are to be painted, they join the resin parts to be prepared for spray painting.

6 To ensure complete authenticity and accuracy in its paint finish, Amalgam uses the manufacturer-specified paints. Each component is hand-sprayed with several coats of primer, then a colour base coat, and finally several coats of lacquer.

7 To get the desired gloss finish prior to assembly, the body and components are flatted with cutting paste and carefully hand-polished using a lamb-wool buff.

8 For race cars, Amalgam uses the team's original design data to produce artwork for the decals. It takes both screen-printing and litho printing to ensure high print quality and accuracy.

9 The final step involves a team of around six skilled model-makers assembling the cars, usually in batches of five or 10. Each model takes between 250 and 450 man-hours to put together.



WHAT'S ON

LAT IMAGES



Capturing motorsport's enduring

"IN A WORLD LIKE FORMULA 1 that is so visual, images are so important," says double world champion Fernando Alonso. "We're extremely lucky to work with LAT."

That's the first voice you hear in the latest motorsport.tv documentary *LAT Images: An Enduring Legacy*, which premieres on Saturday. Readers of Autosport will be very familiar with LAT's remarkable motorsport archive, which appears throughout the pages of this magazine every week. But many will be less familiar with the story behind this remarkable organisation.

From LAT's origins in the 1960s to its current position as motorsport's pre-eminent photographic agency, the whole story is told by this documentary. The juxtaposition of modern technology used by the company today and what was available to founder Michael Tee in the past is striking.

An explanation of how photographs taken trackside can be sent to the UK office, edited, captioned and then sent on to clients – a process

taking as little as 30 seconds – is in stark contrast to Michael Tee's tale of getting photographs back from the 1968 South African Grand Prix. That race, unusually, was held on a Monday and, with the last flight that evening departing just 30 minutes after the race, it required some determination – and the assistance of a helicopter – to get the shots back in time.

Michael Tee, and son Steven, who

Fangio on the limit at the 1957 French GP is LAT founder Michael Tee's favourite shot, while Senna's celebration in the Estoril rain in '85 (below) is son Steven's number one choice

heads up LAT today, are the stars of the documentary. Both have had long and illustrious careers photographing motorsport, meaning one of the highlights of the documentary is each choosing their favourite shot.

Tee Sr chooses his iconic shot of Juan Manuel Fangio sideways in a Maserati 250F at Rouen.

"I think my favourite picture was of Fangio at Rouen because it was not just a car doing 150-160mph with the tail hanging out," he says. "But on the left-hand side you had a bank, which went straight up, and on the right-hand side, because the road had been cut into the hillside, there was a 30-foot drop down. To be doing that knowing that if you lost it, unless you were very lucky, you would [lose] your life – you realise at that particular moment it was not just the skill, and all the rest of it, but it was the pure bravery of believing that you had that sort of ability."

As for Tee Jr, he goes for a more recent iconic shot of another great.

"If I had to pick one, I think it would



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HOT ON THE WEB THIS WEEK

WHINCUP SEIZES SEVENTH TITLE

Search for Thrilling finish to 2017 Virgin Australia Supercars Championship in Newcastle

Pukka edge-of-the-seat stuff in the closing laps of the final round of the Supercars championship as the third penalty for DJR Penske Ford man Scott McLaughlin tips the title in favour of Triple Eight Holden's Jamie Whincup.

INTERNATIONAL MOTORSPORT

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WORLD TOURING CAR CHAMPIONSHIP

Rd 10/10

Losail, Qatar
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TV Live Eurosport 2,
Friday 1815

ASIAN LE MANS SERIES

Rd 2/4

Fuji, Japan
December 3

EUROPEAN RALLY CHAMPIONSHIP SEASON REVIEW

TV Eurosport 1,
Friday 1000



be the 1985 Portuguese Grand Prix – Ayrton Senna winning his first [race] in the rain,” he says. I luckily managed to capture the moment he came into the parc ferme area. He’s half out of the car, Peter Warr’s ecstatically looking at him, and there are two mechanics in the background leaping up and down. That moment is encapsulated in that photo.”

There’s much more to the documentary, narrated by James Allen, which also offers a behind-the-scenes glimpse of the physical LAT archive itself. Packed with millions of images, it’s a treasure trove that preserves the visual history of the sport. And it’s important that this is taken care of. After all, as McLaren boss and Motorsport Network chairman Zak Brown says, “the sport wouldn’t exist without photographs.”

EDD STRAW

TV LAT Images: An Enduring Legacy premieres on motorsport.tv at 8pm Saturday and is also available to stream on the motorsport.tv website

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ON SALE THURSDAY

F1 SEASON REVIEW

All the stories
from 2017



FROM THE ARCHIVE

Only Peugeot and Lancia made the long trip south for the 1986 Rally New Zealand, and Markku Alen led for much of the event, despite alternator problems aboard his Delta S4. Ultimately, Alen was forced to give best to a charging Juha Kankkunen, who tore through the final leg back into Auckland to win by more than a minute in his 205 T16 E2.

www.mcklein.de

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MY FIRST MOTORSPORT MEMORY



DUNBAR/LAT

LAT IMAGES



TOM ERRINGTON

@tomgerrington

GRIPPED BY THE ACTION AT SILVERSTONE IN 2008

A pedal car version of a Michael Schumacher Ferrari – albeit with considerably less power and questionable aerodynamics – was fairly prominent during my early years, but it took a trip to the 2008 British Grand Prix to get me into motor racing.

Although motorsport had taken a back seat at first, my dad shared two life-long followings with me: Newcastle United and Formula 1. Throughout the early 2000s, it was Alan Shearer scoring for fun and Schumacher dominating grands prix.

As a fairly active kid with no karting track within sight, I was more absorbed in other things, such as video games – including *Colin McRae Rally* on the PlayStation 1. There was, though, the odd trip to watch national racing at Donington Park with my family, and moments spent flicking through *F1 Racing* after my dad had finished with it. I'd ask him lots of questions during races, but I never sat through a full one or completed an issue. Attention wasn't a strong point.

But the howling V8s and the spray in their wake in a classic race at a soaking Silverstone made 13-year-old me realise what I was missing out on. Dad's birthday present got him plum seats in the stands, while I got the better view from the banking opposite the national pits straight alongside a school friend. We even arrived early enough to get right up to the front.

The sheer noise and speed of an F1 car instantly stole my attention. I was enthralled watching the masterful drive of Lewis Hamilton and the multiple spins of Felipe Massa's Ferrari, which made my pedal car look stable. After growing up watching Scuderia dominance, Massa's exploits remained memorable, but so were the talents of Rubens Barrichello, Kimi Raikkonen and Fernando Alonso in the wet that day.

That should have kickstarted my fandom and career aspirations, but then I inconveniently moved to South Carolina. In and among the NASCAR fanatics I now went to school with, I spent large chunks of boring lessons making my first visits to Autosport.com and reading *F1 Racing* to pass the time, catching up on the gripping Brawn GP story to get me through 2009.

It would be nine years until I went to a second grand prix, and five after moving back to the UK, but Monza was worth the wait. Experiencing the atmosphere created by the tifosi this year reminded me just how easily F1 can grip you when you're there in person. 🏁

AUTOSPORT

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