

F1 RACING

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LAUDA, SCHUMACHER... SEB?

VETTEL AND FERRARI'S FUTURE

Why the legend is in his hands



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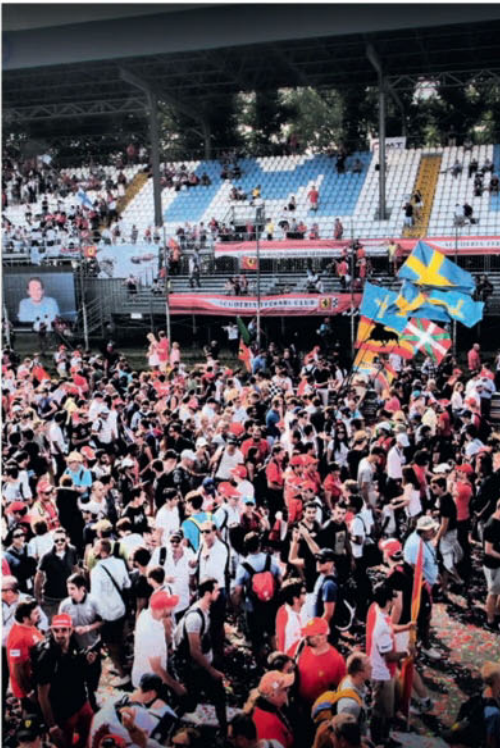
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Demonstrating his inimitable driving style to Peter Windsor



A bitter loss, so keenly felt



Follow Anthony on Twitter: @Rowlinson_F1

Formula 1 arrived in Budapest teary-eyed, emotional, raw. The week before the race, many drivers and other members of the F1 fraternity had attended the funeral of Jules Bianchi in Nice. Several acted as pall-bearers. And if the solemn scenes on the Côte d'Azur were not on the scale of mass public lamentation witnessed after the death of Ayrton Senna, the sport's last racing-related driver fatality in 1994, still there was a sharp pang of loss within the F1 community at Jules' passing.

Seeing pictures of Bianchi's grief-stricken father, Philippe, finally having to acknowledge the loss of a beloved son after nine months of hoping he might miraculously emerge from his coma, was a reminder of the terrible price motorsport can exact on those unlucky enough to experience its darkest side.

Thankfully, those days are far more infrequent now and immediate changes to some of F1's race procedures in the wake of Bianchi's accident at last year's Japanese Grand Prix, such as the introduction of the Virtual Safety Car, have helped make it still less hazardous. But the risk of death, to put it bluntly, endures, and that elemental fear factor remains one of the magnetic draws of motor racing for those bold enough to participate.

This doesn't mean that F1 drivers (or any others racing in myriad categories worldwide) are cavalier thrill-seekers, careless of their lives, ignorant of their

mortality. To a man, they welcome safety improvements such as the helmet visor strip introduced following Felipe Massa's freak accident at the Hungaroring in 2009; or circuit modifications such as those made to the heavily revised Mexican GP track (see page 72), that minimise the chances of an accident ever happening.

At the very same moment, however, every racing driver on earth feels a sense of heightened existence from guiding a fast machine to its limit: all will tell you, it's a thrill like no other. Test pilots, BASE jumpers, big-wave riders, freeclimbers... they're all addicted to the adrenaline rush of performing at the very edge of possibility. Gilles Villeneuve would talk about "squeezing the fear" when he raced, in a much more perilous F1 era; James Hunt would routinely vomit from nerves before a grand prix start. And while the sport's immediate dangers are less apparent now, that aspect of taking on an epic challenge, looking it in the eye and staring it down, hasn't changed. It's what Formula 1 is.

Romain Grosjean spoke eloquently on this topic at the pre-Hungarian GP Thursday: "It's in our nature to take risks," he said, "and when you drive, especially a Formula 1 car going so quickly around a corner, you need to be 100 per cent in the car and not thinking about what could happen if... It's a dangerous sport and [Jules' death] was a hard way to remember that. But when the helmet is on and the visor is closed, it's racing 100 per cent. That's what we have always done and it's what racing drivers will always do."

Any comfort, then, such as it may be offered, is this: Bianchi died chasing his dream; doing what he loved.



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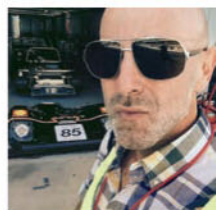
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Max Peef
Italian snapper captured the magic and majesty of Monza

Even without racing cars, the Autodromo Nazionale Monza has a special aura. Max Peef captured the incredible beauty of F1's most revered circuit (p90).



Pino Allievi
Enzo Ferrari's trusted writer on the Scuderia's new hero

Pino Allievi is an expert on Ferrari, making him the ideal man to assess how Sebastian Vettel is faring in his first season at Maranello (page 40).



Adrian Myers
Packs his bags for another F1 Racing covershoot

Photographers need plenty of equipment for a photoshoot – but Adrian's super shots of Sebastian Vettel (p40) prove that the heavy lifting is rewarded.

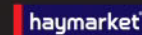


Peter Windsor
Analysing Hamilton's driving style while drifting sideways

Peter strapped himself into a Mercedes-Benz for an up-close look at Lewis Hamilton's incredible car control. His unrivalled insight begins on page 64.



Thanks to Alberto Antonini, Nicole Carling, Stephen Carpenter, Max Constanduros, Russell Day, Anna Doble, Fiona Fallon, James Gilbride, Alex Hocking, Dan Leach, Hannah Lee, Bradley Lord, Chris Murray, Adrian Myers, Sophie Ogg, Anthony Peacock, Britta Roeske, Hayley Smith, Steven Tee, Fabiana Valenti, Tabatha Valls Halling, Nikki Vassiliadis, Claire Williams, Steve Wright



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JULES BIANCHI

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The unwelcome but not unexpected news arrived via an email sent in the small hours of Saturday 18 July: Jules Bianchi had passed away at the Centre Hospitalier Universitaire in Nice, nine months after his accident at the Japanese Grand Prix on 5 October 2014.

Jules was born into a family already familiar with the tragedies as well as the triumphs associated with motor racing. His great-grandfather Roberto was a Scuderia Ferrari mechanic in the 1930s, later moving to Belgium – along with his family – in the service of the jazz-trumpeter-turned-racing-driver Octave John Claes. Roberto's sons Lucien and Mauro would become successful racing drivers in their own right; Lucien won both the 1962 Sebring 12 Hours and the 1968 Le Mans 24 Hours.

There were just two hours to run at Le Mans in 1968 when Mauro crashed the Alpine 220 he was sharing with Patrick Depailler. He was on an out-lap after an extended pitstop to change a front brake disc and the starter motor, and as he braked for the Esses the car turned sharply to the right and went straight into the barrier. The recently filled fuel tank burst and the car caught fire, burning Mauro's hands and face. Lucien won in the Gulf-sponsored Ford GT40 he shared with Pedro Rodríguez, but a year later the Alfa T33 he was driving at the Le Mans test weekend suffered a mechanical failure and departed the road at speed on the Mulsanne Straight. He was trapped in the car as it caught fire, and died. He was 34.

Mauro quit motor racing, but his son, Philippe, later ran a kart circuit in Antibes after the family relocated to the south of France. There Philippe's son Jules got his first taste of motorsport and decided that he liked it.

Within three years of driving a kart for the first time Jules made his international debut, at the age of 13, driving for the Maranello Kart team. A change to the Intrepid team in 2004 resulted in Jules winning the French national title and taking second place in the Junior ICA European Championship. Returning to Maranello for 2005 – appropriate, given his later status as a Ferrari Junior – he won the Asia-Pacific Formula A championship and the ICA Copa Campeones Trophy (beating, among others, Jaime Alguersuari and Jean-Eric Vergne). Later, he won the ICC WSK International Series and was runner-up in the Formula A World Cup.

He won the French Formula Renault 2.0 championship in 2007, his first year in car racing, and in 2008 he began a relationship with the crack ART Grand Prix squad which, along with co-owner Nicolas Todt (later Jules'

manager) would ultimately convey him to Formula 1. In Jules' rookie year in the Formula 3 Euro Series he finished third as team-mate Nico Hülkenberg lifted the title, but at the end of the season he beat Hülkenberg to the win in the Masters of F3 race. The following season he took the Euro Series title by a 39-point margin in a field packed with competitive drivers, including Valtteri Bottas, Christian Vietoris, Alexander Sims, Roberto Merhi, Sam Bird and Stefano Coletti.

But as he set foot on the rungs just below F1, Jules' career trajectory began to stall. It was a time, he later reflected, in which he put himself under too much pressure to win, and he became involved in too many accidents. In 2010 he fractured a vertebra at the Hungarian round of the GP2 Series, and while he returned sooner than expected, the season was already a write-off. The following season was little better, so with Bianchi now part of Ferrari's young driver programme, Todt elected to place his charge in the Formula Renault 3.5 championship for 2012.

Away from the scrutiny of F1 Jules thrived and would have won the FR3.5 title but for an incident with rival Robin Frijns at the final round. Frijns was punished for the contact but not, Bianchi believed, enough – after all, Frijns beat him by 189 points to 185. By then Jules had signed as Force India's test driver, but the offer of a 2013 race seat evaporated weeks before the start of the season. Once again his career hung in the balance, so he seized the offer of the Marussia drive gladly. Bit by bit he continued to rebuild his reputation, driving with speed and maturity and never conducting himself with the air of entitlement you might expect of a driver with Ferrari patronage. Though he dreamed of racing for the Scuderia, he never let it divert him from doing his best for Marussia and treating his colleagues with courtesy and respect. The media conferences held by back-of-the-grid drivers are seldom well-attended by journalists seeking front-page news, but the regulars who visited Jules' were kept informed and entertained by his insight, modesty and impish wit. His talent was rewarded with just one points finish, but he was capable of so much more.

Following the accident at Suzuka, family, friends, colleagues and fans had adopted the hashtag #JB17 as an emblem of hope on social media. That hope has now been dashed. As a gesture of respect the FIA has retired Jules' race number, 17.

Stuart Codling





Parade

On a charge Qualifying for the 2014 Monaco Grand Prix, and hopes were high within Marussia. Jules Bianchi had shown good pace all weekend and it looked as if he could get a Marussia into Q2 on merit. It was not to be: a differential problem limited him to 21st on the grid, but both team and driver truly believed they could challenge for the top ten in Sunday's race...

Where Monte Carlo, Monaco **When** 2.14pm, Saturday 24 May 2014

Photographer Glenn Dunbar/LAT

Details Canon EOS-1DX, 35mm lens, 1/16th at F11





GUCCI

VALENTINO

VALENTINO

REMEMBER HIM THIS WAY



Parade

In his element Around the Formula 1 paddock, Jules Bianchi was a popular, if somewhat quiet figure. He was a different character when strapped into an F1 car, his committed, intelligent driving style securing backing from Ferrari – and high expectations for what should have been a golden future

Where Red Bull Ring, Austria **When** 10.12am, Friday 20 June 2014

Photographer Charles Coates/LAT

Details Canon EOS-1DX, 600mm lens, 1/250th at F4.5



REMEMBER HIM THIS WAY





Parade

Realising his potential The tight streets of Monaco allow a talented driver to overcome the deficiencies of their car. Jules Bianchi did just that in 2014, when his determined charge in a chaotic race was rewarded with ninth place – the first points finish, both for driver and his Marussia team

Where Monte Carlo, Monaco **When** 2.05pm, Sunday 25 May 2014

Photographer Charles Coates/LAT

Details Canon EOS-1DX, 300mm lens, 1/800th at F10



“He was a special driver and a special person”

Some of the many tributes to Jules Bianchi from the F1 paddock



“I first met Jules in 2002 at a kart race in Spain. He was coming from France and normally when you are young and come to a track you have never raced, it’s very hard to be quick. I was really surprised to see a guy who was really quick immediately. After that, I followed him closely. He was always the driver – the reference. In Formula Renault in 2007 he won straight away; his first year in the championship. It was pretty incredible. For me, he was the biggest talent I saw in motorsport. He was the best driver that I raced against.” **Roberto Merhi**

“He has left an indelible mark on all our lives, and will forever be part of everything we have achieved, and everything we will strive for going forward. We are incredibly grateful that we were able to provide Jules with the opportunity to show the world what he could do in a Formula 1 car. We knew we had a very special driver on our hands from the first time he drove our car in pre-season testing in 2013. It has been an honour to be able to consider him our race driver, our team-mate and our friend.

“Jules was a shining talent. He was destined for great things in our sport; success he so richly deserved. He was also a magnificent human being, making a lasting impression on countless people all over the world.” **John Booth, Manor Marussia team boss**

“He was a great friend. I first met him when he was still racing in karts, because we had the same manager. He was a fantastic boy, very nice, very humble and an amazing driver. Unfortunately in Formula 1 he didn’t have the opportunity to race in a competitive car, to be able to show his talent. He showed us anyway by finishing in the points in Monaco – it was an amazing thing that he did in that race.” **Felipe Massa**

“Destiny is probably the only thing you can’t fight, for the rest Jules is the biggest fighter and most talented driver that I met.”

Jean-Eric Vergne

“Jules Bianchi was a member of the Ferrari family and was the racing driver we had chosen for the future, once the collaboration with Kimi Räikkönen came to an end. We cared a lot for this boy – you could already glimpse his talent for racing. We wanted him to grow up in our team. He would be the one driving for Ferrari after the experience in GP2 and after some fine performances in F1 and in some tests that had our technicians very impressed. A bitter destiny has instead taken him away from us, leaving an indelible mark and a great pain inside us.”

Luca di Montezemolo, former Ferrari chairman

“I will be carrying Jules with me in my prayers for the rest of my driving days. I know he’d want us to race as hard as he did, and so I will.” **Lewis Hamilton**

“RIP Jules Bianchi. It was a pleasure and a privilege to have known him in his all too short life.” **Martin Brundle**

“I spent time with him in the Ferrari Academy. You could see Jules was a very special driver but also a very special person who everyone liked. He was very humble and very human. He was a special driver who didn’t have the opportunity to show what he could do in F1. It was just enough to realise that he was a potential champion for the future. He was just a very, very special driver.” **Sergio Pérez**

“I cannot pick a favourite memory because I’ve got too many. The first time I heard his name was back in 2003. He was a much better driver in karting than I was; he was a bit younger, so he followed me into the categories I’d done and he won everywhere. I will never forget... we race for Jules.” **Romain Grosjean**

“You were the little brother I had always dreamed to have. Sharing those last ten years with you has been an immense privilege. I will miss you.” **Nicolas Todt, Bianchi’s manager**

“I’ll never forget you and the good times we had. Going to miss you bro.” **Daniel Ricciardo**

“The sport has lost one of the most talented drivers of this generation, from a family that has such a strong presence in the history of the sport. Jules Bianchi was a popular personality in F1, possessing the best of both human and sporting qualities. The FIA recognises the courage with which he conducted his last fight, in the company of his loving family.” **FIA statement**



DRIVER-AID BAN 24



BOTTAS TO FERRARI? 28



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F1 INSIDER

NEWS ■ OPINION ■ ANALYSIS

ANALYSIS

Lessons learnt from Bianchi's fatal crash

Safety improvements continue, but F1 accepts the sport can never be made completely risk-free

Formula 1 bosses are determined to keep working to reduce the sport's dangers in the wake of the death of Jules Bianchi, while accepting that it can never be completely safe.

A series of changes have been introduced following Bianchi's accident during last October's Japanese Grand Prix, in which he suffered severe head injuries when he collided with a tractor vehicle that was recovering another car. Bianchi died in hospital in Nice on 17 July, having never regained consciousness following the crash.

BALANCING SAFETY WITH SPEED

The Grand Prix Drivers' Association issued a statement saying: "It is at times like this that we are brutally reminded of how dangerous racing still remains. Despite considerable improvements, we, the grand prix drivers, owe it to the racing community, to the lost ones and to Jules, his family and friends, to never relent in improving safety."

F1 commercial boss Bernie Ecclestone, meanwhile, vowed that: "We must not let this ever happen again."

However, there is a widespread acceptance throughout F1 that some level of risk is an inherent part of the sport's appeal, both to its audience and its participants.

Leading figures within the sport plan to make the cars five or six seconds a lap faster in 2017, which can be done without compromising safety.

This is because it would merely bring the cars back to the speeds at which they were running ten or so years ago, when safety measures were less advanced than they are now.

F1 race director Charlie Whiting used the crash between Force India's Sergio Pérez and Williams's Felipe Massa in last year's Canadian Grand Prix to illustrate these contradictions when speaking at the FIA Sport Conference in Mexico in the week before Bianchi's death.

Whiting said: "Entering the last lap they had a big accident, tyre barriers went everywhere and the cars were very badly damaged, but the drivers emerged unscathed and I think that's what everyone comes to see."

"We need to make sure there is that element of danger but that no one gets hurt; that's really our function."

SAFETY STEPS TAKEN

Several steps to increase safety have already been taken following Bianchi's accident. The cockpit area of the cars has been strengthened with the addition of strips of a composite material called Zylon, and, to avoid the risk of cars hitting heavy recovery vehicles, the Virtual Safety Car system (VSC) was introduced.

Officials have decided that the VSC is the best compromise for situations such as the Bianchi accident, where a car has gone off but can be recovered relatively quickly. The other option





The Virtual Safety Car is a new safety feature introduced in the aftermath of Bianchi's accident

would be either to send out the real Safety Car, or to stop the race.

Research into extra head protection for drivers is ongoing, but a report into Bianchi's accident published last December concluded that for an incident of such violence anything considered so far would be ineffective. The same goes for putting protective 'skirting' around recovery vehicles to prevent cars going underneath them.

The report said: "It is not feasible to mitigate the injuries Bianchi suffered by either enclosing the driver's cockpit, or by fitting skirts to the crane. Neither approach is practical due to the very large forces involved in the accident between a 700kg car striking a 6500kg crane at a speed of 126km/h [78mph]."

"There is simply insufficient impact structure on an F1 car to absorb the energy of such an impact without either destroying the driver's survival cell, or generating non-survivable decelerations."

'ALWAYS A DANGER'

In the wake of the death of Ayrton Senna, former FIA president Max Mosley was instrumental in creating a new mindset within F1, in which striving to improve safety is a constant.

Mosley said: "The only positive side is that 30 or 40 years ago this happened a couple of times a year. This is the first fatality in the last 20 years. All the work various people have done has paid off. But then it's no good pretending F1



The death of Jules Bianchi in July, following his crash last October, has inspired a raft of safety changes

NEWS DIGEST

The month's big stories at a glance

1.7.15 Former Caterham technical director Mark Smith joins Sauber in the same role **4.7.15** Mercedes motorsport chief Toto Wolff says the firm is willing to discuss ways to allow Renault and Honda to boost their engine performance **10.7.15** The FIA releases a provisional 21-race 2016 calendar, with the season-opener in Australia scheduled for 3 April

21.7.15 Reports emerge that there will be just two pre-season tests in 2016, with no in-season testing permitted



24.7.15 Former GP2 champion Fabio Leimer takes part in an F1 weekend for the first time, driving in F1 at the Hungarian GP with Manor Marussia **25.7.15** Fernando Alonso says he could be tempted to switch to "other categories" in the future because current rules mean F1 isn't as exciting as it used to be

is safe because it isn't. There's always a danger something will go wrong.

"You can never get a zero probability of injury, but I think we've minimised it. You can always improve safety. One can always try to anticipate these sort of things, rather than wait until after the accident.

"The lesson learnt is that if you have a rule where they have to slow down on a double-waved yellow flag, then you have to enforce it strictly. That lesson has been learnt. Apart from that, it was a textbook way of doing things.

"Drivers sometimes forget about dangers because, thank god, we don't have many injuries and deaths. The feelings start to grow that it's safe. It isn't safe, as they're racing small cars in a restricted area at speeds sometimes in excess of 200mph. That can never be safe. But you can take an awful lot of precautions."

PHOTOS: CHARLES COATES/LAT; GLENN DUNBAR/LAT; ALASTAIR STALEY/LAT

Pit-to-car radio use to be limited from Spa onwards

Clampdown on driver aids will start to take effect at the Belgian Grand Prix, to make drivers more responsible for their own racing

The push to reduce driver aids in Formula 1 will begin in earnest at the Belgian Grand Prix, with restrictions on assisted starts and pit-to-car radio communications. Further limits will be introduced for the 2016 season.

The move comes after the F1 Strategy Group decided to reduce the impression that drivers were 'managed' from the pits too much at races.

Mercedes boss Toto Wolff explained: "Racing drivers are the main cast of the show, so let's put more responsibility back to them. We want more variability and less predictability. In order to achieve that, maybe there should be a less

Clutch bite-point finds can no longer be changed immediately prior to the race start



scientific approach to racing, and the race driver be responsible for his racing."

To enforce this, the FIA has turned to Article 20.1 of the Sporting Regulations, which dictates that the "driver must drive the car alone and unaided". This catch-all regulation was first introduced by former FIA president Max Mosley in 1993, and has proved useful to the governing body over the years as they have sought to restrict use of electronic systems.

Two main areas of car operations will be affected from the Belgian Grand Prix onwards. On start procedure:

- The clutch bite point must not be changed from the time the driver leaves the garage until after the start of the race.
- The driver is not to use any bite-point finder electronics, and the system itself.

This is to prevent the current practice of modifying the clutch bite in the lead-up to the race, often using data from reconnaissance laps.

Pit-to-car radio during the formation laps will be limited to:

- Indication of a critical problem with their own car, or a problem with a competitor's car; instruction to pit to fix or retire the car; marshalling information; notification of a slippery track; requirement to swap position with other driver.

F1 to stage its longest-ever season in 2016

With the return of the German GP and the addition of Azerbaijan to the schedule, F1 is set to hold a staggering 21 races next year

A provisional Formula 1 calendar published by the FIA in July has revealed that the number of grands prix staged in 2016 could increase to 21 – one more than the all-time record of 20 races held in 2012.

The additional two races are accounted for by the inaugural European Grand Prix in Azerbaijan's capital Baku, and the return of the German GP at Hockenheim. These two races are scheduled to run consecutively, with Azerbaijan on 17 July and Germany on 31 July. That timetable is partly influenced by the desire of the Azerbaijan government to emphasise that the country is a part of Europe.

There are still doubts about the long-term future of the German race. Hockenheim and the Nürburgring have rotated the event in previous

years, but the Nürburgring still has financial problems, and Hockenheim chiefs say they can't afford to host the race every year. Hockenheim has said a strong attendance at the 2016 event is necessary if F1 is to "have a future" in Germany.

The Russian GP will move from October to May, while Malaysia moves from March to September, to run back-to-back with Singapore.

Hockenheim bosses state that a strong attendance at the 2016 German 2016 is necessary to secure the event's future



2016 F1 calendar (provisional)

Australia Melbourne	3 April
China Shanghai	10 April
Bahrain Sakhir	24 April
Russia Sochi	1 May
Spain Barcelona	15 May
Monaco Monte Carlo	29 May
Canada Montréal	12 June
Britain Silverstone	26 June
Austria Spielberg	3 July
Azerbaijan (Europe) Baku	17 July
Germany Hockenheim	31 July
Hungary Budapest	7 August
Belgium Spa-Francorchamps	28 August
Italy Monza	4 September
Singapore Marina Bay	18 September
Malaysia Sepang	25 September
Japan Suzuka	9 October
USA Austin	23 October
Mexico Mexico City	30 October
Brazil São Paulo	13 November
Abu Dhabi Yas Marina	27 November

PHOTOS: ALASTAIR STALEY/LAT. SAM BLOXHAM/LAT



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Red Bull pin hopes on Renault engine upgrade

Renault plan major upgrade for Russian GP that could take former world champions Red Bull to within 20bhp of Mercedes

Red Bull are pushing Renault hard to press on with building a new engine that will close the performance gap to the leading power units.

Renault are around 50bhp behind Mercedes and Ferrari, having failed to make any real progress with their engine over the winter.

A single-cylinder engine run on the dynamometer at Renault Sport's base at Viry-Chatillon near Paris has shown an improvement of in the region of 2-4 per cent. If this translates to the full-size six-cylinder engine, it would bring Renault to within 20-35bhp of the Mercedes engine.

This would enable Red Bull to run their cars without the aerodynamic compromises required on most tracks because they are down on power. That might be just enough for them to challenge Ferrari and Williams for best-of-the-rest status behind Mercedes.

Renault Sport boss Cyril Abiteboul has promised a significant change for the better. "There will be an improvement to the engine, an upgrade in the course of this season," he said, "and I really hope this will be the type of upgrade that is visible not just to our customers and performance engineers but to everyone – including me."

The upgrades are aimed at improving the combustion process of the Renault engine, which both parties accept is its major shortfall compared to Mercedes.

Red Bull are keeping up the pressure, both privately and in public. Over a difficult 18 months, the former world champion constructors have frequently and severely criticised the engine partner with whom they won four consecutive world title doubles.

Red Bull team principal Christian Horner says the earliest the upgrade can be expected is at the Russian Grand Prix. "They now have some strategic decisions about implementation, and the direction they want to take their development for the rest of this season – and that has an impact on next year," Horner said.

"Of course it tests our patience. Like any competitive team we want performance yesterday, and with engines the lead time is a lot longer than with the chassis. Patience is something that we are not really good at. We want to have performance as soon as possible.

"From where the concept is at the moment you are looking at least at a couple of months. It needs to happen this year – but also what we learn this year will help us next season."

An impatient Red Bull have had to compromise on aerodynamics this year to make up for the lack of power from their Renault PU



PHOTOS: ALASTAIR STALEY/LAT; CHARLES COATES/LAT; SAM BLOXHAM/LAT

PASSNOTES

Your essential F1 briefing #18 Tie



Name Tie
Age 400 years, give or take a decade
Appearance Not as controversial as its absence

Sorry sir, you can't come in here without a tie.

What outrage is this? Don't you know who I am?

Hold on. I'll put out an announcement over the PA: "Ladies and gentlemen, if anyone in the proximity of the help desk can assist, there is a gentleman here who doesn't know who he is."

I'll not suffer any more of this ghastly velvet-rope malarkey. Anyhow, I'm a Marxist on that front – Groucho rather than Karl – and I wouldn't join any sort of club that would have me as a member.

That's a good thing, because as Lewis Hamilton discovered, you may be a world champion, but you won't get inside the Royal Box at Wimbledon clad in inappropriate garb.

Quite right. There are standards to be kept, even in these *declassé* times. But I don't read the gutter press, so I wasn't aware of this grotesque sartorial solecism.

Well, according to the Daily Mail: "Hamilton was due to sit alongside Benedict Cumberbatch and Anna Wintour to watch Novak Djokovic clinch his third Wimbledon title in a nail-biting final against Roger Federer. But the driver was sent away by officials after turning up in a rather colourful ensemble, which included a bright floral shirt."

You could have some fun with the headline there. "Now is the Wintour of our discontent," etc. No?

No. It was "Lewis Hamilton is BARRED from Centre Court's Royal Box because he wasn't wearing a jacket and tie."

Let me guess – rather than incisive journalism, this article consisted of photographs culled from Instagram, quotes lifted from Twitter, a sneering sense of class entitlement, and a sidebar populated with stories about female celebs posing naked or in unflattering clothing.

Jackpot! You win a cigar.

The only way you can make my day worse is by telling me he wore slip-on shoes and no socks.

I'll get my (stylishly cut) coat.

Do say Suits you, sir.

Don't say Is that your old school tie?

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Bottas favourite to replace Kimi at Ferrari

Ferrari claim underperforming Räikkönen's future is "in his own hands" as they consider their options for 2016

Williams driver Valtteri Bottas has emerged as the leading contender for a race seat at Ferrari next year, should the Scuderia choose to drop Kimi Räikkönen.

As *F1 Racing* went to press, Ferrari were insisting that "nothing had changed" with regard to their 2016 driver line-up. That is a reference to a public statement from Ferrari president Sergio Marchionne that Räikkönen's future "is in his own hands", in the context of the team's desire for him to up his game and be consistently closer to team-mate Sebastian Vettel, particularly in qualifying.

Ferrari have an option to retain Räikkönen for 2016, but have not yet decided whether to take it. After showing interest in Bottas last year, their focus then switched to Daniel Ricciardo, and they made a tentative attempt to prise him away from Red Bull in 2014. Ricciardo signed a new contract with Red Bull over the winter, committing him to the team until the end of 2018. Buying him out would be extremely expensive and difficult.

Williams, however, are believed to have decided that they will sell Bottas, for whom they have an option, for the right price. But the two teams have reached an impasse in negotiations and Ferrari have decided to delay a decision on Räikkönen's future until later in the summer.

If Bottas leaves for Ferrari, a possible replacement would be Jenson Button. The 2009 world champion is under option to McLaren for 2016, but there is no guarantee they will keep him on alongside Fernando Alonso. McLaren have three options already under contract – Jenson Button, reserve driver Kevin Magnussen and Belgian rising star Stoffel Vandoorne – and have not yet decided whether they will go for the expensive proven option in Button, or a cheaper one with a longer potential future.

Williams also have former Ferrari racer Felipe Massa under option for next season, and are keen to keep him on.

Williams' Valtteri Bottas could replace Kimi Räikkönen at Ferrari next year as team-mate to Sebastian Vettel



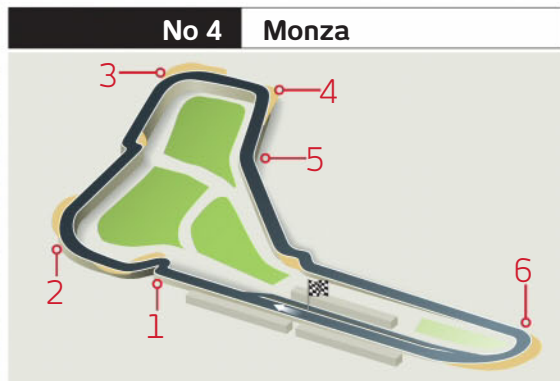
ILLUSTRATION: ALAN ELDRIIDGE. PHOTO: SAW BLOXHAM/LAT

FACT FILE



ON THE TURN

Every corner tells a story...



1 PRIMA VARIANTE

Quite literally, this was the first 'variant' – a term Italians often use for a chicane. It was built into the track to lower speeds into the fast first turn. It's also known as the Variante del Rettifilo, because it is at the end of the main straight.

2 CURVA BIASSONO

This flat-out right-hander was originally named Curva Grande when the circuit was built in 1922, but in 1927 it was renamed after the nearby municipality of Biassono. Most people still tend to refer to it as the Curva Grande, though.

3 LESMO 1

Originally surrounded by forest, it was named Curva delle Querce – Curve of the Oak. In 1927 it was renamed Curvetta di Lesmo – a short turn (a *curvetta*) near the town of Lesmo. It later changed name again in conjunction with the next turn.

4 LESMO 2

Changed in 1927 from Curva dei 100 Metri (the distance from entrance to exit) to Curva del Bosco dei Cervi (curve of the wood deer), after the animals in the former royal hunting park.

5 CURVA SERRAGLIO

This bend – more of a kink, really – takes the name from the king's hunting lodge, which was located nearby when the park was first constructed in 1808.

6 PARABOLICA

Monza's final turn was initially known only as Curveta. The turn was later changed into two 90° right-handers split by a 60-metre straight. During this era, it was colloquially known as Curva Porphyry, after the small igneous rock cubes used for the track surface in the corners. In 1955 the section was reconstructed back into a single turn in its present shape, adopting a name that accurately describes its trajectory.

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NEWS

McLaren push Honda for improved power units

Eric Boullier says poor performance "hurts commercially" with Honda hybrid system thought to be to blame for lack of power

The first visible tensions have begun to emerge in the relationship between McLaren and Honda as the two continue to struggle at the back of the grid, halfway through the first season of their renewed partnership. McLaren racing director Eric Boullier has admitted that the car's lack of competitiveness is damaging. He said he was reminding Honda "every day that we need to be successful as soon as possible".

He added: "The damage is easy to understand. You establish the brand with your success and by repeating it. McLaren have a number of wins and championships and have established their excellence. Commercially it hurts because a lot of companies are interested in joining us, but some question the lack of results – and I don't think we can wait for very long any more."

"We put pressure on Honda, they put pressure on us. Maybe more on them so far because we need to have more performance. Everybody knows this, they know this, we know this. It is true there is a timing issue because Honda are in F1 but their main business is selling cars. But we

are in F1 to win races. We have to make sure the timings of both projects are aligned."

The Honda engine is thought to be the biggest factor in McLaren's lack of performance. Insiders say it is as much as 150bhp down on the Mercedes and Ferrari units. It is further behind in races than in qualifying because its hybrid system does not recover energy sufficiently for it to run fully boosted on consecutive laps. That means that between 80 and 90 per cent of the car's lap-time deficit to Mercedes is down to the engine.

Honda received good news when the FIA passed plans to give them an extra engine. Both Fernando Alonso and Jenson Button had already been given penalties for using fifth and sixth power unit elements. The 'free' engines were fitted to both cars in Hungary, and McLaren scored their best result of the year, with Alonso finishing fifth and Button ninth. The result was a boost, but it was largely down to the many race incidents, and not a sign of improved form.

Honda have promised McLaren an upgraded engine in time for the Belgian GP at Spa.



The MP4-30 is thought to be 150bhp down on the Mercedes, but Honda promise an upgrade by Spa

F1 STUFF

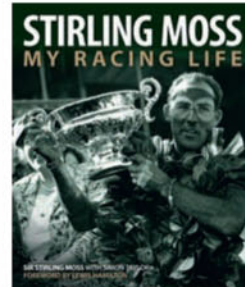


SONY A6000

This compact hybrid camera (from £509) offers DSLR quality, with rapid autofocus. Its built-in WiFi has let our friends at photo agency LAT use it to upload shots to their site during races – with good results so far. www.sony.co.uk

LEGO SPEED CHAMPIONS

This new range (from £12.99) of high-performance road cars and F1 machinery includes a McLaren-Mercedes pitstop set with a brick-based MP4-29 (£29.99), and a huge Ferrari F14T with transporter set (£79.99). www.lego.com



STIRLING MOSS: MY RACING LIFE

Sir Stirling's career has been well-documented, but it's always illuminating to hear from the man himself. This book (£50) features first-person accounts and 300 stunning photos. www.evropublishing.com

PADDOCK TO PODIUM

It's rare to hear the stories of the people who run F1 cars. This book (£24.99) is the autobiography of mechanic Max Rutherford, one of Jackie Stewart's chief mechanics in his 1969 title-winning year. www.chatters.co.uk

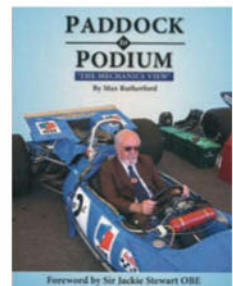


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PETER WINDSOR

RACER'S EDGE

Authority, wit and intelligence
from the voice of *F1 Racing*

The starts at Spa... I always look forward to the starts at Spa. They were spectacular on the old circuit, when they were downhill before Eau Rouge; and on the new track they've been coloured by the seduction of *La Source*. Many have been the start-line dramas; several the big, first-corner shunts.

This year, if you please, there's added spice: a new technical regulation, restricting the adjustability of the cars' clutch bite points, will be enforced for the first time. Everyone in the pitlane seems to agree that this will make the start procedure even more 'hit and miss' – and I use the word 'even' here because, although Mercedes have had start-line problems in the past three races (Austria, Silverstone, Hungary) they were heading the start-line performance table – based on distance covered over the first four seconds – prior to Hungary. There's plenty of inconsistency out there, in other words.

Quite why Mercedes – more specifically Lewis Hamilton – have been having issues, is a column in itself. As the engineers tell it, clutch management is 'linear' and thus is skewed heavily by something unforeseen, such as an additional formation lap, during which the clutch may overheat. Both Ferraris made great starts in Hungary, which suggests that they

Spa set for more spectacular starts

have a more accurate bite-point map within the variables, although being on the clean side of the grid helped at the Hungaroring. For the record, the teams' own start-line results, prior to Hungary, showed Mercedes on top from Williams, Sauber and Ferrari.

"Yes, I think things will be a little more hit-and-miss at Spa," says Steve Bryan of AP Racing, who make the clutches for most of the F1 teams. "Until Spa, the engineers have had the opportunity to do quite a few bite-point 'learns' through the course of the weekend; they can then get the driver to trim those after they've left the pitlane. From Spa onwards, the engineers won't be able to do that any more. There will be no external adjustment of the bite point. The driver can still trim it but the team can't advise him over the radio how to do that."

The question, I think, is whether this rule change will be helpful to teams like Ferrari – who obviously know what they're doing off the line when outside issues come into play – and/or to drivers like Felipe Massa, who in both his Ferrari and Williams careers has displayed enormous sensitivity and feel within the realms of bite-points, clutch- and wheelspin. He's been the best individual starter in F1, in other words, over a long period, by a clear margin, even if he did line up incorrectly in Hungary.

My guess is that the new regs will nullify the advantage of the more consistently fast starters: the 'misses' will become unavoidable and more frequent, given the law of averages, and thus the overall level of start-line performance will be reduced slightly. The lesser beings, by contrast, will find the playing field a little more even... or no less bumpy, if you see what I mean.

The essence of the rule change is to take away gizmos and increase the human element. To the extent that the humans in the garage will no longer control the bite point on the lead up to the grid this



is correct. Whether the humans in the cars will then be able to play a greater role in the proceedings is debatable: they'll be at the mercy of the pre-set points, which, as I say, will no longer necessarily be as accurate, but they can make adjustments based on gut feel.

Most drivers react to the lights within the 0.21-0.22 sec range. That won't change – and nor will the wheel- and clutch-spin elements associated with an inaccurate bite point, although some drivers are better than others at separating clutch- from wheel-spin.

So watch out. Spa's starts have usually been spectacular; this year, serious speed differentials may appear up and down the grid... and we all know what they can lead to. It doesn't seem so long since 2012. Romain Grosjean squeezed Lewis Hamilton into the pitwall and bounced over the roll-hoop of Fernando Alonso's Ferrari. Bang went Fernando's championship.

And remember 1998? The track was soaked but the start was standing. DC lost it at La Source, triggering a 12-car shunt down the hill. Tyrrell driver Toranosuke Takagi's words will live in infamy: "I saw the cars crashing ahead of me, so I put my foot down harder and tried to aim for the gaps..." Then there was Spa 2001. Williams contrived not only to have their pole-sitter, Juan Pablo Montoya, lose his engine on the line but also to have their second car, that of Ralf Schumacher, up on the stands even as the formation lap began.

"At Spa, many have been the start-line dramas; several the big, first-corner shunts"



Some of Spa's most spectacular race starts to date (top to bottom): DC triggers a 12-car shunt down the hill after losing control at La Source in 1998; Juan Pablo Montoya's Williams engine fails on the grid, sending him to the back of the pack in 2001; and the terrifying moment in 2012 when Romain Grosjean's Lotus bounced off the roll-hoop of Fernando Alonso's Ferrari



PHOTOS: STEVE ETHERINGTON/LAT; LAT ARCHIVE; SUTTON IMAGES

Spa's opening laps can also be momentous: in 1963, when the race started on the downhill section before Eau Rouge, Jim Clark swept from the middle of the third row to the front in the space of 100 metres. He was clearly ahead, throwing up plumes of spray, as he apexed through Eau Rouge. Peter Arundell, Clark's team-mate, led from P4 in 1964; and in 2011 Nico Rosberg led from P5 in the Mercedes.

Add Spa's closing phases – the 1964 race, when Gurney, Hill and McLaren all ran out of fuel, handing victory to Jim Clark – or 1957, when the first three crossed the line with major problems (Brooks, the winner, with a broken Vanwall gearbox; Hawthorn's Ferrari with a blown engine; Scott-Brown's Vanwall with broken suspension) – or 1968, when Bruce

McLaren gained his revenge as Amon, Surtees and Stewart all came up short – and you have a circuit that invariably defies convention.

Jim Clark hated Spa, yet he won there four times and on a fifth occasion, in 1967, he took pole by three seconds, topped 200mph on the straight and averaged 147mph over one lap. All without seat belts in a pre-wing Lotus 49.

Michael Schumacher drove his first F1 race at Spa, scored his first win there, equalled Fangio's record of five titles there, secured a seventh championship there and has won the race six times – more than any driver ever.

Jordan finished one-two at Spa in 1998; Dan Gurney won at Spa with the gorgeous Eagle-Weslake; Pedro Rodríguez and Chris Amon fought a classic in 1970, nudging Chris

into taking the Masta Kink flat-out in a *March 701*, of all things undrivable; Andrea de Cesaris led until half-distance for Alfa in 1983 in the Ducarouge Alfa; Force India took the pole there in 2009 and nearly won the race. Then there was Mika Häkkinen's pass on Michael in 2000 – and Kimi Räikkönen's win in 2004. All Spa specials: and there are many more.

None were better, though, than the drive of my late journalistic colleague, Paul Frere, who was asked, last minute, by Enzo Ferrari to replace Luigi Musso at the 1956 Belgian GP. Having reluctantly agreed, and having promised only to try to finish, the good Paul brought the factory D50 home in second place in front of his home crowd.

Call it a clutch race on clutch circuit. **F1**



Pat Symonds explains
THE SCIENCE BEHIND...
Debriefs

F1 TECH

What is the purpose of briefings and debriefs?

Long before arriving at a circuit, engineers will already have discussed what they hope to achieve from each session and how they hope to achieve it. From this plan, individual programmes will be drawn up, which outline to the second what time the cars should leave the garage, what the tyres and fuel loads will be and what the relevant engine settings to use are for each lap.

At the end of each session, a debrief takes place, in which the engineers go through what they have learned in a structured way. As well as inspection of data and lap times, there is also a structured questioning of the driver to ensure his views are adequately represented.

Are briefings and debriefs always carried out in an open environment?

They are. All meetings are at prescribed times and drivers and engineers alike will be fined if they are late for any of them – at least that’s the way we work at Williams. The meetings are conducted in a structured manner, with each person speaking in turn. The driver and engineer may also speak privately after the meeting, but any decisions they make will be brought up at a further meeting in the evening where the total vehicle performance is discussed. In this way, any changes that are planned for one car will be seen by the team working on the other.

How do you make use of data in debriefs?

Debriefs occur immediately after running, so we refer only to the generalities of the data. Obviously lap times are an important element, as is tyre temperature and aerodynamic performance. Before setup decisions are made, which is often late on a Friday evening, every aspect of the recorded data will have been examined. This is done by performance engineers and those who specialise in certain areas such as aerodynamics, control systems or power units. Technicians will also examine

the data from the many complex car systems, looking for any abnormalities that may require components or systems to be replaced.

So there are no secrets between team-mates?

You can never be completely sure and some drivers are less forthcoming than others. It is the duty of the senior engineers within the team to discourage this because even though a driver’s biggest rival is his team-mate, for the teams it’s their overall position in the constructors’ championship that matters most.

What is ‘terrible’ to one driver may be ‘not very good’ to another. How do you get a true picture?

In spite of the copious amounts of data we record and the objective conclusions we try to draw from that information, a driver’s opinions are always subjective. For this reason, we have him use a scale of one to five when rating his car’s handling and performance. I have attempted in the past to produce charts to help the driver give consistent opinions about the car’s handling. This is similar to a system used by test pilots called the Cooper-Harper scale. In our case, a score of one indicates that the car balance is acceptable, while a score of five suggests it’s impossible to get the car to do what the driver expects it to. Some drivers will use the scale well, whereas others may let their emotions cloud the precision of their judgement.

How much competition exists between the two sides of the garage?

All drivers regard beating their team-mate as the first objective in establishing the competitive pecking order. If the cars are built to an identical specification, then it is up to the drivers to show that they make a difference. From a team’s point of view this can be a double-edged sword. Healthy competition ensures that drivers push each other to really find the limits, but if that competition becomes underhand then the effect

on team morale can be as destructive as the loss of points that will surely follow.

During practice is information transferred between cars?

Yes. One of the roles of the chief engineer is to ensure that all programmes are coordinated and any results communicated to the entire team. So if, for example, one car had carried out a test where they had increased the front camber and the result of that change was an improvement in lap time, the chief engineer would notify the race engineer on the other car. They would then decide whether to deviate from the programme to take immediate advantage of the result or wait and apply the change later.

Do the drivers always play fair, or do they practise mind games against their team-mates?

I wish I could say that drivers always put their team first, but that’s not always the case. Equally, a team may favour one driver by always ensuring he has the latest parts or the best power unit. A



good team will try to provide equal opportunities to drivers of similar ability, and if the drivers get on well then this yields the best outcomes. Even so, I have seen many attempts from drivers to disguise their true potential. One I worked with was particularly adept at pushing hard for one part of a lap at a time, never stringing a full lap together until qualifying, leaving his team-mate mystified as to how he suddenly found an extra half-second just when it mattered. **F1**

INSETS: GETTY IMAGES; GLENN DUNBAR/LAT/CHARLES COATES/LAT



Engineers and drivers will discuss the performance of the car before and after a session. These discussions may be private, but will always be picked up in official debriefs

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Cockpit savvy from the 1996 world champ, exclusively in *F1R*

An anyone who knows me knows I am partial to a bit of golf, even if the feeling is not mutual. Yes, I know what you're thinking: golf is boring and what has it got to do with the maximum-adrenaline, fast-moving, high-flying world of F1? A friend never fails to let me know his views on golf: "like watching grass grow"; "a game for taxi drivers"; "an old man's sport". Well, first off, it is watching grass grow. Second, sorry if you are a taxi driver, but I bet you play golf. And finally, I'm not old. I'm 54, which I consider to be "The New 16". As was 53.

I will admit, though, that you could not get two sporting disciplines so far apart. But there is a connection. Hear me out.

A golfing great, Ben Hogan, said of his own sport that it was the least instinctual sport of all. By which he meant that whatever you felt you should be doing was probably wrong. Speed sports are instinctual, reactive. Golf is passive. I confess that I find golf very, very hard, probably because I try to steer the club as it approaches the ball at 100mph. But the big problem is consistency. From one minute to the next, I can't be certain how I will perform. This induces uncertainty and doubt, which in the context of sport is disaster, but in F1 it could be fatal. Imagine approaching a corner

In F1 or golf, you're gonna need balls

at 150mph and having an attack of the yips? You'd never get in the car. The only example I can think of is Niki Lauda parking his car in Fuji in 1976, although I do remember getting twitchy when in F3000 there was a spate of tyre blow-outs during a race. I stupidly carried on. It's the braver man who stops.

Golfers don't typically get injured to such a degree as Niki in the course of a round of golf, and yet they talk of 'nerves', terror and the psychological pressure of the game. I mean, what could possibly happen? You lose your ball? Miss a two-foot putt? Do me a favour.

And you can't blame your equipment (that's what a caddie is for). The old bludgeon (golf club) is built to take abuse and is rarely defective. There are only three parts; the head, the shaft and the grip. Nope. You'll have to find another scapegoat. The ball? Hmmmm. Perhaps not the ball.

In F1 there are thousands of moving parts, any one of which might destroy your day. In golf there is nowhere to hide when it all turns to doggy-do. Which it will. And when it does, people turn away, people laugh, but worse, much worse, people try to help. Aghhh! No sympathy, puh-lease!

In F1, if you get it wrong, you thank your lucky stars if you live to fight again. Tragically, some don't, as we have so painfully been reminded only recently.

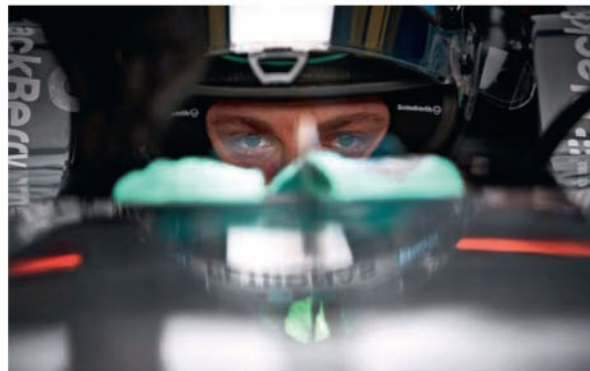
Today, the talk is of Tiger Woods being 'destroyed' as a golfer. Can you imagine being the greatest living golfer, almost invincible, and suddenly, not, any more? It's like Martha Argerich (no, I hadn't heard of her either) coming onto the stage, only managing to play chopsticks and making a mess of it. How? Why? What is going on? How can someone forget how to do it just like that?

The answer is clear: it's all in the mind. But what is in the mind? Voices? A virus? A

delusion? What should be in the mind, if it's all in the mind? Nothing? Now there's a thought. Or rather, there's not a thought.

So the question is: why don't racing drivers have off days (or years) like golfers? They must do. I did. But I didn't let on. I could just continue to change the setup and look at the data for clues. Thankfully, they didn't have data that could look inside my head.

A good deal of work has been done, though, on sports psychology. There are things we know will help, even if you still have to deal with what golfers term 'LOFT' (Lack Of Talent). In motorsport we have what is referred to as 'The Nut Behind the Wheel' – a derogatory term that is yet to offend a driver. They tend



"The real greats love this kind of pressure. They live for the moment of truth. No more hanging around talking. This is it"

to feel rather proud of being called 'nuts' or 'crazy'. Imagine a sports psychologist advising a driver that the aim here is to become totally berserk. That *would* be crazy, right?

But the truth is that in both golf and F1, the competitor has placed themselves in a high-pressure environment that could have a very significant effect on their social and financial standing. Give that sport massive global audiences and there aren't many who could be placed under the spotlight without feeling a little bit 'Is it warm in here, or is it just me?'

Of course, the real greats love this kind of pressure. They live for the moment of truth. No more hanging around talking. This is it. Judgement day. Bring me my spear: O clouds unfold! Bring me my chariot of fire!

That sort of thing. **F1**

"Unlike golf, in F1 there are thousands of parts, any one of which might destroy your day"

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DIETER RENCKEN

POWER PLAY

The stories F1's bigwigs would rather you didn't know...

“We should have...” – the most overused phrase heard in contemporary F1 circles. Those three words convey the confusion sown by the sport's governance system, which relies on the sort of last-minute brinkmanship that falls squarely in the game-theory category most recently practiced by bleary-eyed politicians debating 'Grexit'.

Whenever a team find themselves disadvantaged by ill-defined regulations – sporting or technical – the immediate retort is invariably: “We should have thought of this when framing the rules, but now it's too late and we're stuck with it.”

Take the current engine regulations: Conceived during V8 engine price freezes in 2009 under the previous FIA administration, the proposal was chopped, then changed. Configuration switched from in-line 4 to V6; high-pressure fuel systems reformulated and turbo specifications amended; and then introduction was delayed a year. Yet, incredibly, at no stage did any party to the process consider imposing price caps.

This despite the severe financial crisis in which F1 found itself at the time, a period of exodus by manufacturers, sponsors and sole-tyre supplier alike; a period of huge downsizing

“We should have...” F1's eternal refrain

across the sport; the time of contentious Resource Restriction Agreements and the imposition of cost caps on prevailing engines – yet this most elementary of components was never considered, let alone discussed!

Of course, those who now justify the estimated £20m two-car team annual costs of the engines – something like 250 per cent up on the (admittedly crude) V8s of old, despite being supplied at a discount of up to 50 per cent if Renault's engine department budgets are any guide – do so on the basis that the state of the global economy was then unknown. Lehman Bros and AIG had collapsed; the US dollar gone way south.

Now, of course, the universal refrain from majors such as Red Bull and independents Lotus, Force India and Sauber alike is: “We should have capped power unit prices,” with the FIA now pledging to reduce engine bills.

“Here, I take the responsibility of probably not having secured a maximum cost to teams. It's something we will address; it's better late than never,” FIA president Jean Todt said recently – although, to be utterly fair to him, he assumed power after the original proposals were formulated, and the FIA plays just one part in the overall decision-making process.

In fact, when the engine regulations were approved in mid-2011 – before the formation of the undemocratic Strategy Group, which

Caterham's collapse, in part due to the high cost of engines, has reduced Renault's income stream now that they supply only Red Bull and Toro Rosso



panders to six teams – all teams held an equal vote on the Formula 1 Commission, including such as Caterham and Marussia (later to plunge into liquidation, with their engine partners among the largest creditors) and all current independents. Included here, too, are most circuit owners and F1 CEO Bernie Ecclestone, who, as a group, are the most vociferous critics of F1's current power units.

There is, though, every possibility that cost caps imposed back then would have dissuaded the likes of Mercedes, Renault and Honda – and Ferrari, although an exception could well be made for the Scuderia due to their structure – from committing to the units, for their business cases were based on recovering certain levels of income from customers.

To retrospectively impose cost caps will create displeasure in boardrooms in Stuttgart, Paris and Tokyo – plus Fiat's towers in Turin – for any reduction in income would need to be subsidised by said manufacturers at a time when the sport's popularity is clearly waning.

In addition, Caterham's collapse means Renault, now supplying just the two Red Bull teams, has one less income stream – crucial given the high fixed-cost components of power units – having planned for four teams to defray cost. Further exits will impact correspondingly on engine suppliers already carrying some rather busy red books. Once again F1 finds itself betwixt rock and hard place.

The root cause lies in the sport's inability to take timely, thought-through decisions ahead of deadlines. When these loom large, it hurriedly frames expedient compromises for last-minute drafting by disgruntled rule makers, then forces these through, usually via archaic measures such as fax votes.

Has F1 learned from its experiences? Having announced ambitious changes for 2017 – 1,000bhp engines; wider tyres bolstered by low-profile sidewalls; ground effect and 'beefy' bodywork – under the current regulations these must be agreed by 28 February 2016, yet current debates revolve around ground effect versus standard floors, and whether fuel-tank capacity should be increased.

Here's betting 2017's stock phrase will be: “We should have delayed by a year...”

“Now, of course, the universal refrain is:
‘We should have capped power unit prices’”



Santander

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VETTEL^{AT} FERRARI

following a legend; chasing a legacy

Piero Ferrari met him a long time before he joined the team. They had a private chat, which was enough to leave Piero intrigued. "There's something about him," he said. "It's not often you meet a driver who is so considerate and reasoned in his thought processes. I liked him. You never know, one day he just might end up driving for us..."

And now, Sebastian Vettel is a key protagonist in the latest chapter of Ferrari, which has the aim of recreating the dominant glory days of the Michael Schumacher era. One German takes the baton from another. Of course, if we widen the net, there was a high-profile German-speaking Ferrari champion before Schumacher: Austrian Niki Lauda,

Like his hero, Michael Schumacher, Sebastian Vettel has been lured to Maranello by the immense challenge of restoring Ferrari to its former glory. But while absorbing himself in the Scuderia's rich history, Vettel is also looking at how he will be remembered in the future

who sparked the team's first golden era in the 1970s. The second one began when Schumacher arrived in 1996. The third is yet to happen.

I've watched nearly all of Vettel's victories in Formula 1. I've often been caught up in the emotion, and even more often admired him. But I was curious when I found out that after joining Ferrari, in the

WORDS PINO ALLIEVI
PHOTOS ADRIAN MYERS

final few months of 2014, he stayed overnight at a special house on the infield of Fiorano. It was a place I knew well, even though the last time I was there was February 1988, just over five months before the *Commendatore* died. We were editing the four volumes of *Ferrari Tales*, which chronicled the most important episodes of the Old Man's life. →

Enzo Ferrari was meticulous, occasionally argumentative, and often ironic: he threw himself into the project, with very strong views about the design and layout of what would become his final testament, with contributions from many of the drivers he had employed. The work that took place in that small house on the Fiorano infield where Vettel chose to sleep would begin in the small office on the ground floor. After lunch, we would retire to the sitting room, where there were comfortable sofas, a big table for meetings, a bookcase and a television. Once coffee had been taken, the *Commendatore* always insisted on a drop of whisky. "Try it, it's very good," he always urged. "Jackie Stewart sends it to me every year."

When I found out, years later, that the room had been made into a bedroom, where Michael Schumacher slept from time to time, it seemed like heresy. But time and people change, and even Piero Ferrari – who remains devoted to his father's memory – said: "Things evolve: you can't remain constantly trapped in a vision of how everything once was. It's only right to move on."

Vettel first slept in the 'little house' last November. It has become normal for Ferrari's champions to stay there, with Vettel the current occupant of Schumacher's bed.

Two Germans have entered Maranello's most intimate history. When Michael arrived, he knew very little of Ferrari's heritage. Sebastian is the opposite, having immersed himself in the legend – he has been buying books about Ferrari on eBay, to better understand what it must have been like back in the 1950s and '60s. Two world champions, who at the age of 27 decided to reinvent themselves with the team that boasts the most history and emotion of them all. Because although Enzo Ferrari has been dead for 27 years, his presence is still found in every corner and office at Maranello: a lingering inspiration and critic, whose philosophy is law.

Many people have compared Vettel's first months at Ferrari with those of Michael Schumacher, but I believe his inauguration at the team is more reminiscent to that of Fernando Alonso, during the winter of 2009-10.

Back then, despite Kimi Räikkönen's title two years earlier, there was a sense that things were sliding out of control within Ferrari, and radical changes were afoot. The old guard from the Schumacher era were disappearing and, at the time, Stefano Domenicali's senior management team was nowhere near as well known.

Alonso took a gamble on Ferrari entering a new era of success, with him at the helm. The technical and economic resources were in place and Luca di Montezemolo was eager to emerge as an architect of triumph. Alonso, with the advantage of his perfect Italian, was a frequent and enamoured visitor to the *Gestione Sportiva*, keeping a close eye on every phase of the F10's development. He had questions, suggestions and intense conversations with the engineers, while he almost immediately knew all the mechanics by name.

As the team celebrated their traditional Christmas lunch together, Domenicali said: "Fernando is an exceptional character, blessed with



FERRARI'S FIRST GOLDEN ERA

THE LAUDA YEARS

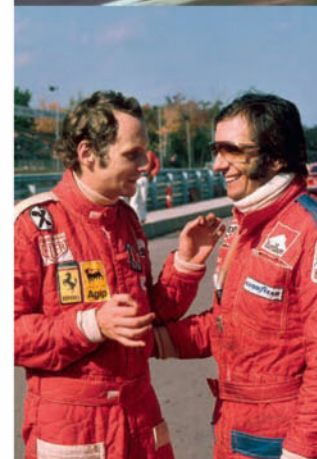
1974	Race starts 15	Poles 9	Wins 2	Position 4th
1975	Race starts 14	Poles 9	Wins 5	Position Champion
1976	Race starts 14	Poles 3	Wins 5	Position 2nd
1977	Race starts 14	Poles 2	Wins 3	Position Champion

the sort of technical ability I never imagined. What he brings to the team is absolutely immense."

When Alonso won the first race of 2010, in Bahrain, Ferrari knew they had the driving phenomenon that they had always hoped for; di Montezemolo's praise for Alonso filled not only the sports pages but also made the national news.

This is a snapshot of what has happened to Vettel, too, lured to Maranello to bring a world title back to Italy. Vettel won on his second time out in Malaysia, creating enormous expectation – and probably premature hope – within a team that was still new, with a completely fresh structure.

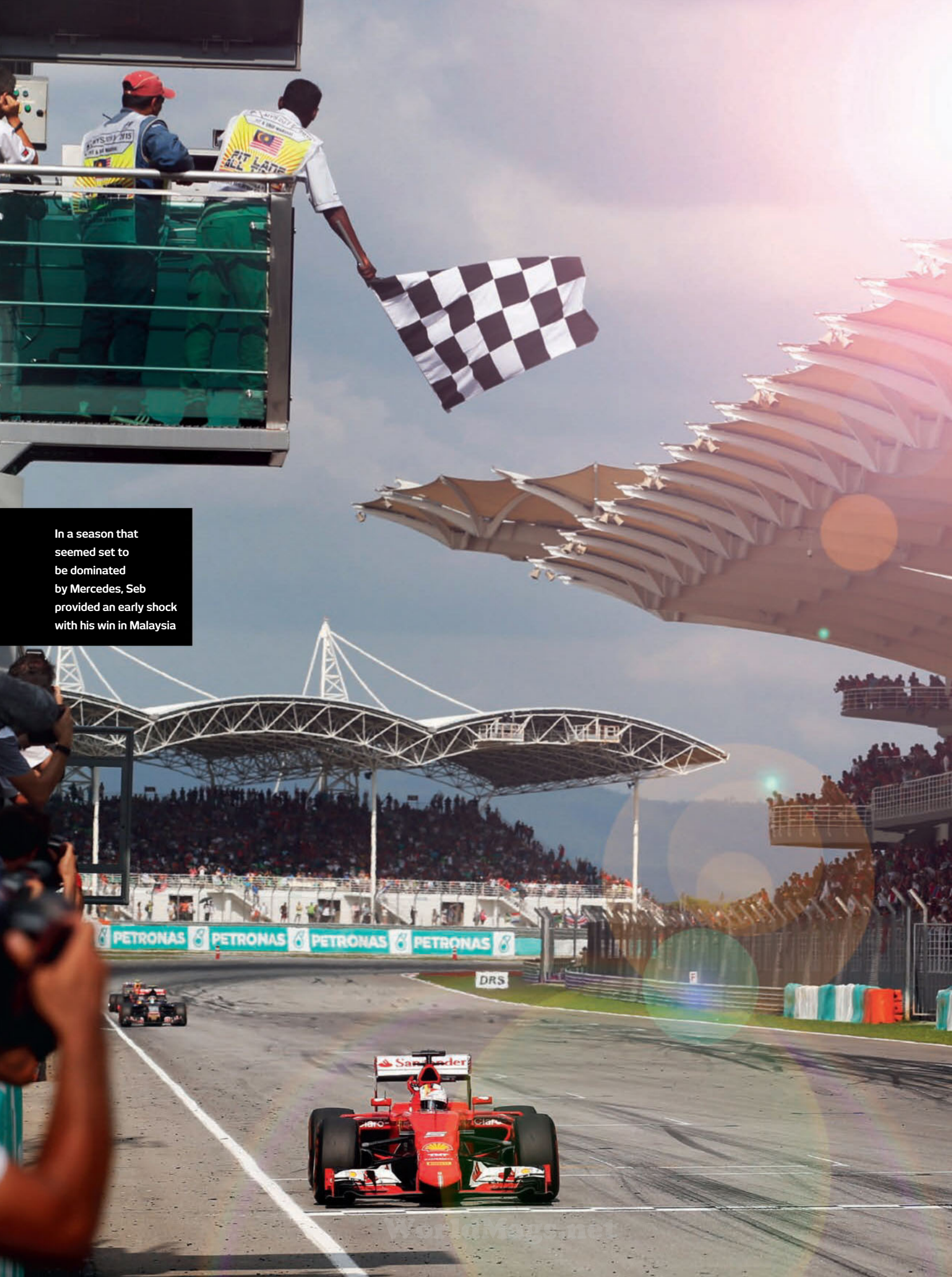
Within a few months the expectations were carefully managed, but the esteem in which Vettel is held has not receded. Sergio Marchionne, Ferrari chairman since October 2014 and CEO of the Fiat Chrysler Group, describes Vettel thus: "Sebastian is an amazing person on whom we can absolutely count at every race. He's tenacious and aggressive, with a uniquely analytic view of each race. And he contributes a huge amount to the team, but in a very easy-going way. When I talk with him, I don't have the feeling that I am talking to somebody as young as he is, →



"Sebastian is an amazing person on whom we can absolutely count at every race" Sergio Marchionne



Sebastian Vettel has immersed himself in Ferrari history: he wants to become part of the legend



In a season that seemed set to be dominated by Mercedes, Seb provided an early shock with his win in Malaysia

but instead to a proper adult. I like the serious way that he approaches problems; it's what Ferrari needed. He's a Ferrari man through and through."

'Easy-going' refers to the fact that Sebastian has come to Ferrari without any particular hang-ups and, as a result, has integrated himself into the team relatively seamlessly. He likes being with the mechanics, and when the opportunity arises he queues up and eats with them in the Maranello canteen, or at the motorhome at races. He loves the world of Ferrari and he loves Italy, which he had already experienced at close quarters when he was with Toro Rosso.

James Allison, Ferrari's technical director, says: "I worked with Michael for five years and I remember that he was often quite timid, and he was also sometimes afraid of appearing to say something stupid. Sebastian is more predisposed to laugh, sometimes at himself. But they're both very proud people and neither is the sort to give

I was only 13 years old when I managed to get into the Ferrari pits at the Nürburgring. I was driving in Formula BMW and I knew nobody at all apart from Michael. It was a massive deal for me to see the red cars, mechanics and drivers up close. Then, when I drove for Toro Rosso, I began to get to know Stefano Domenicali and the Ferrari engineers who looked after our engines.

"From the end of 2008, when I was already confirmed at Red Bull, me and Stefano would talk occasionally about how I might end up at Ferrari in the future. There was another approach in 2010, but nothing in writing. Then, during the winter between 2012 and 2013, I even went down in secret to Maranello to meet Luca di Montezemolo and talk about it a little more. Finally we got to halfway through 2014, after Domenicali had gone, and I met with di Montezemolo again and [then team principal] Marco Mattiacci. Those discussions with Ferrari continued, and I even asked for an opinion from Sabine Khem, Michael's personal assistant. Unfortunately, I couldn't speak to Michael himself. But I'd mentioned it to him a long while earlier, and he said that if I ever went there I would find a fantastic atmosphere and a huge amount of enthusiasm within Ferrari. At the time it seemed like a dream, but now I'm actually living inside that dream."

Sebastian's day-to-day boss is Ferrari's extrovert team principal Maurizio Arrivabene. He's an ebullient character who enjoys making people happy and, having looked after Philip Morris's interests in F1 for many years, he has been privy to the sport's best-kept secrets – those of Ferrari in particular. That includes driver contracts, and although he denies this, the giveaway comes when he says: "I knew Michael before he came to Ferrari. Sebastian has the same Teutonic perfectionist culture, paying attention to every small detail. Schumi was more introverted and private. But both of them were very keen to dot every 'i' and cross every 't' when it came to discussing contractual obligations..."

Above all else, Arrivabene appreciates Seb's commitment. Vettel raises no objection at all to the less-than-thrilling modern F1 task →



FERRARI'S SECOND GOLDEN ERA

THE SCHUMI YEARS

1996	Race starts 15	Poles 4	Wins 3	Position 3rd
1997	Race starts 17	Poles 3	Wins 5	Position 2nd
1998	Race starts 16	Poles 3	Wins 6	Position 2nd
1999	Race starts 9	Poles 3	Wins 2	Position 5th
2000	Race starts 17	Poles 9	Wins 9	Position Champion
2001	Race starts 17	Poles 11	Wins 9	Position Champion
2002	Race starts 17	Poles 7	Wins 11	Position Champion
2003	Race starts 16	Poles 5	Wins 6	Position Champion
2004	Race starts 18	Poles 8	Wins 13	Position Champion
2005	Race starts 19	Poles 1	Wins 1	Position 3rd
2006	Race starts 18	Poles 4	Wins 7	Position 2nd



up when things are going badly. Michael wanted me to work with him and when he won, gave me the idea that I had been an essential part of that success. With Sebastian, I like the way that he interacts with the young engineers, too. He's relaxed, very natural in the way that he relates to people, always available, and he makes sure that everybody knows just how valuable their contribution is. I see the same leadership qualities in Vettel that Schumacher had. That sense of admiration that the team always had for Schumacher is now re-inventing itself with Seb."

But while the young Schumacher never thought that one day he would be a Ferrari driver, it had been a dream of Vettel's for quite a while. He says: "It's a story that's been going on for some time.

"Sebastian is very natural. I see the same leadership qualities in him that Schumacher had" James Allison

“Schumacher knew with certainty that things would get better. Vettel doesn’t have that luxury”

of spending hours in the simulator. He turns up and drives it, for however long it takes. More than most, Vettel knows that a lot of a contemporary driver’s work takes place in the shadows – but that these tedious tasks can be just as instrumental in securing victory on Sunday. And it’s through this work that Seb has strengthened his relationship with the engineers who don’t travel to races, but whose work is vital when it comes to the development of the car.

Through a strange but effective mixture of jokes in Italian (which he speaks at a basic level) and engineering explanations in English, Vettel has fostered a mutual respect within Ferrari that few imagined would become so strong so fast. He has rekindled some of the enthusiasm that was set aside in recent months, opening up new channels of internal communication.

The man on whom Michael relied was Jean Todt. This was a symbiotic collaboration that grew into a fraternal relationship beyond F1. Will Vettel and Arrivabene forge the same kind of relationship? For now, they are still figuring each other out – within the framework of a cordial working partnership. They both count music and road cars among their many shared interests. They are both straight talkers, without recourse to the sort of political language deliberately designed to keep people at a distance.

Alonso was a very different personality. But Ferrari back then was very different, too. Or, at least, the Ferrari that Fernando experienced over the last two years: in which early season promise never quite translated into end-of-season results. Little by little the relationship unravelled, and Alonso began to lose patience. Domenicali was never able to offer him a satisfactory recovery plan. When it was clear from the start of 2014 that Ferrari wasn’t going to be competitive, the divorce gradually became inevitable.

Domenicali found himself isolated. Ferrari had not given him sufficient budget to make a flying start with the new generation of complex hybrid engines. In order not to go against his superiors (such as di Montezemolo and the Fiat Group) he had to make do with people who were perhaps

not always on top of every situation. This was an attitude Alonso considered a surrender. Before long, Domenicali was pressured into resigning.

Vettel came to Ferrari once Marchionne – a man of exceptional intuition – realised the extent of the mistakes that had been made by the previous management, and unlocked more money to try to make up for time lost in the first year of the new power units. Marchionne and Arrivabene are now as Todt and di Montezemolo were: a solid and

transparent alliance, making it easy for Vettel to express his point of view without the risk of misunderstanding or political chicanery.

When Schumacher came to Maranello in 1996, he was faced with a demotivated team who had lost their way as a result of too many



BIG BOOTS AND LONG SHADOWS

FOLLOWING MICHAEL

Germany was lucky. Soon after Michael Schumacher retired in 2006, a new home talent stepped into the very big shoes Michael had just vacated. In 2008, Sebastian Vettel’s talent was visible to everyone. Later, his four titles confirmed it.

The situation reminded me of our neighbouring country. Jochen Rindt brought Austria to F1 prominence in 1970. After Rindt was killed, becoming the only posthumous champion in F1 history, Niki Lauda followed in his footsteps. Austria embraced their new star. However, Germany still hasn’t fallen in love with Vettel. Outside of Germany this causes surprise. Vettel is a more easy-going person than Michael. More emotional. More open to talk about his profession. But less willing to talk about his private life. Hence he is not featured on our TV channel RTL, nor in the country’s biggest tabloid. Vettel has his supporters among hardcore fans, but not within the wider F1-watching community.

Schumacher had the advantage of being first. There has to be two generations in between, then people would accept a ‘new Schumacher’. Schumacher divided the fans into people who loved or hated him, not by what he said, but by what he did. He was either outstandingly good or outstandingly rude on the circuit. Vettel is, in many ways, too clean. He received most respect when he proved he could be as tough as Michael. When he said that team-mate Mark Webber did not deserve to win in the ‘Multi-21’ affair in Malaysia 2013, Vettel got the credit. *“That’s what Schumacher would have done.”* Michael Schmidt, chief Formula 1 correspondent for *Auto Motor und Sport*

rapid changes. But soon the *Gestione Sportiva* was launched into a recovery plan by Ross Brawn, Rory Byrne and others, who had played a key role in Michael’s two drivers’ titles with Benetton. This gave Michael the strength and confidence to plug through five years of waiting, before clinching the first of his five championships with Ferrari in 2000.

Schumacher knew things would get better. Vettel doesn’t have that luxury as Ferrari’s 2015 technical line-up is all-new to him – with no familiar faces from Red Bull. This makes Vettel’s ability to gel with the technical staff even more impressive, creating a working rapport that has been absent for a while at Maranello. →

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Nevertheless, when personalities with strong egos – such as Vettel, Marchionne and Arrivabene – are involved, little is needed to tip a relationship over the edge. The three have no desire to justify defeat for any length of time. And each has taken on the challenge of Ferrari to come out of it a larger person. Vettel wants to become one of the true greats of Formula 1. Arrivabene wants to reinforce his reputation in terms of business and creating key relationships. Marchionne's concern is the Fiat group, knowing that Montezemolo and his allies are watching.

Each is giving everything to reach his own personal goal. There might be disagreements, problems and discussions between them: it's all part of the process. But the stakes are too high this time for any of them to put personal interests above the shared objective. **FI**

*Pino Allievi is Formula 1
correspondent for Italy's
La Gazzetta dello Sport*



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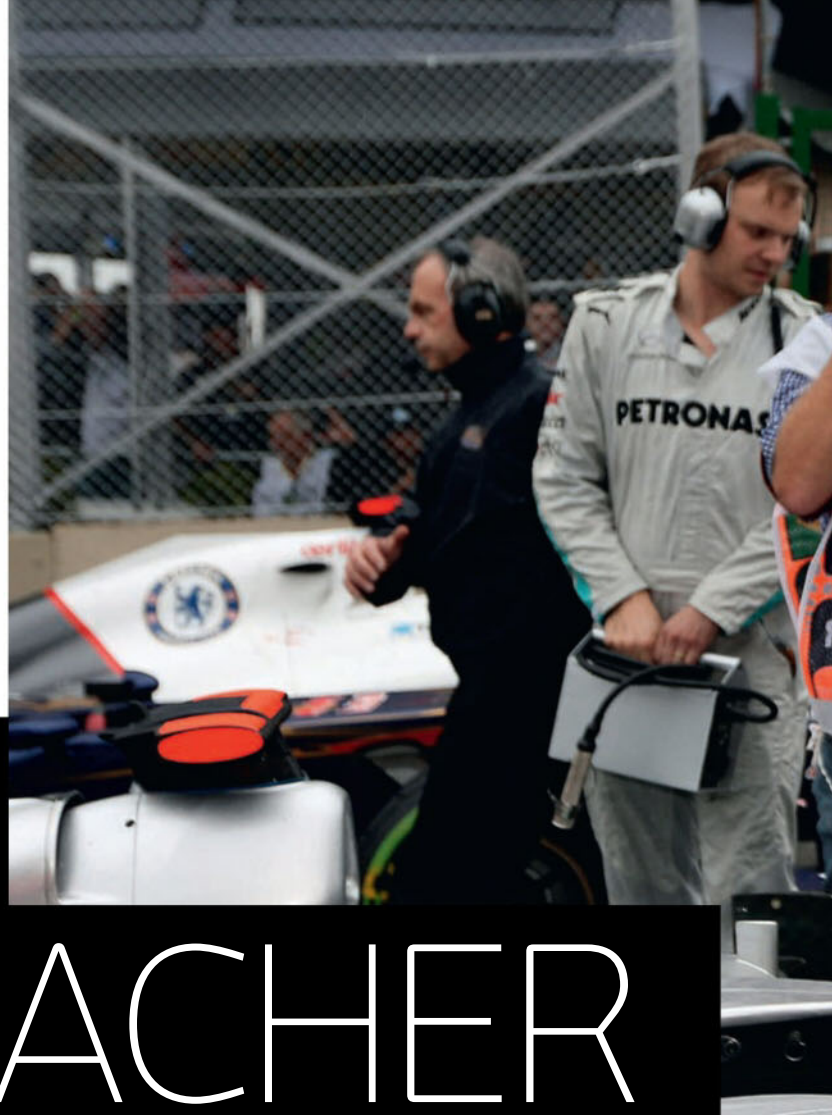
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Since bursting onto the scene in 2007, Sebastian Vettel has been F1's most successful driver, winning at a rate matched only by his hero Michael Schumacher. So how do these two German multi-champs compare?

WORDS JAMES ATTWOOD



VETTEL SCHUMACHER

TALE OF THE TAPE THE STATS

	MICHAEL SCHUMACHER	SEBASTIAN VETTEL
First race	Belgian GP (25 August 1991)	US GP (17 June 2007)
Date of birth	3 January 1969	3 July 1987
Age at debut	22 years, 7 months, 23 days	19 years, 11 months, 15 days
Races started	306	148
Seasons	19	9
Championships	7	4
Championship percentage	36.84%	44.44%
First title in	4th season	4th season
Race wins	91	40
Percentage of races won	29.74%	27.03%
Other podium finishes	64	32
Total podium finishes	155	72
Podium finishing percentage	50.65%	48.65%
Average finishing position	6.8	6.3
Pole positions	68	45
Pole position percentage	22.22%	30.41%
Front row starts	116	69
Front row start percentage	37.91%	46.62%
Average starting position	4.9	5.3
Fastest laps	77	24
Fastest laps percentage	25.16%	16.22%
Races led	142	68
Percentage of races led	46.41%	45.95%
Laps raced	16,825	8,013
Laps led	5,111	2,485
Percentage of laps led	30.38%	31.01%



Passing on the baton: Michael Schumacher at his final race, the 2012 Brazilian Grand Prix, with compatriot and 2012 world champion, Sebastian Vettel

THE COMPARISONS

HOW THEY COMPARE

AT CAREER MILESTONES

Schumacher after 148 races (2001 Spanish GP) Comparison to Vettel's current career stats in brackets

Races	148
Championships	3 (-1)
Wins	47 (+7)
Other podiums	40 (+8)
Total podiums	87 (+15)
Pole positions	35 (-10)
Fastest laps	43 (+19)
Laps raced	7,910 (-103)
Laps led	2,719 (+234)

THE FIRSTS HOW MANY RACES IT TOOK TO REACH EACH MILESTONE



Schumacher at the same age as Vettel (28 years, 2 days)

Comparison to Vettel's age as of 5 July 2015 shown in brackets

Races	84 (-64)
Championships	2 (-2)
Wins	22 (-18)
Winning percentage	26.19%
Other podiums	24 (-8)
Total podiums	46 (-26)
Pole positions	13 (-32)
Fastest laps	25 (+1)
Laps raced	4,378 (-3,635)
Laps led	1,288 (-1,197)



THE STREAKS

Wins	(Europe-Hungary 2004)	7 races Schumacher	9 races Vettel
Podiums	(USA 2001-Japan 2002)	19 races Schumacher	11 races Vettel
Races led	(Australia-Italy 2004)	15 races Schumacher	13 races Vettel
Points finishes	(Hungary 2001-Malaysia 2003)	24 races Schumacher	20 races Vettel

THE PROJECTION

IF VETTEL RACES AS

LONG AS SCHUMACHER

Vettel's projected statistics if he competes in the same number of races as Schumacher, based on current percentages Comparison to Schumacher's stats in brackets

Races	306 (-)
Wins	83 (-8)
Total podiums	149 (-6)
Pole positions	93 (+25)
Fastest laps	50 (-27)

*Streak ongoing as F1 Racing went to press

A

At every European grand prix, just behind the Ferrari garage sits a windowless red trailer. At its rear, steps lead up to a door that can be accessed by only a handful of authorised personnel. This is a top-secret laboratory, occupied by technicians clad in protective glasses and rubber gloves.

Shell are based in here, and it's where they analyse the fuel and oil taken from Sebastian Vettel's and Kimi Räikkönen's Ferrari SF15-Ts to ensure their legality, and also to pick up on any impending reliability issues with the turbocharged Ferrari 1.6-litre V6 powerplants.

As Ferrari technology manager at Shell Global Solutions, Guy Lovett is authorised to access this on-site fuel lab. He's invited *F1 Racing* to join him in its inner sanctum so he can explain the procedure for analysing both fuel and lubricants.

"The FIA is so tight on the regulations that at any point over a grand prix race weekend it can come and take a sample of fuel to check its legality," says Lovett. "We take around 30 or 40 samples of fuel throughout the weekend and test them ourselves to ensure they are legal. Even a small amount of contamination would mean disqualification, so this fuel lab is an important insurance policy."

Two millilitres of Shell fuel (the same fuel that you find in the pumps of high-street petrol stations) is taken out of the Ferrari and inserted into a reduction device in the lab. From that tiny sample, an even tinier fraction is injected into a distillation machine, which heats it up to break down the fuel into its constituent

components. This produces a unique trace for that fuel, rather like a digital fingerprint, which is compared with the original sample submitted to the FIA to ensure it's identical and therefore legal. An unusual spike on the telemetry data would signify the presence of a contaminant fluid or particle. That's when you know there's a problem.

"A couple of years ago one of the Ferrari mechanics was doing some work inside the fuel cell and he had a bit of grease on his glove. That got wiped onto the inside of the fuel cell," says Lovett. "Then the car was refuelled, and when we took a sample of petrol we noticed there was a small amount of grease in the fuel, rendering it illegal. That would have meant disqualification, but because we discovered the contamination in time, we were able to flush out the whole fuel system."

In the case of lubrication, there is no regulatory control, so the analysis of the oil is not to ensure legality but to help identify any potential engine failure. Between 30 and 40 oil samples are taken from both Ferraris over the course of a weekend.

A 1.62mm measurement of oil sits in a reservoir in another machine in the back of the lab, with a graphite rod suspended above it. An electrical charge is sent through the rod, which arcs across an air gap and ignites the oil. As each of the oil's individual components start to burn, they do so at different temperatures, creating different wavelengths. Sophisticated optics detect what exactly is in the oil, which allows Shell to measure the health of the engine.

"As a Formula 1 engine in operation rotates at up to 15,000rpm, it is placed under a lot of stress. Wear in an engine is completely normal, but what we are looking for are very small surfaces inside the engine that come away and end up in the oil," explains Lovett.

"We compare data from every oil sample we take against the massive database we've built up through all our years of working with Ferrari. We have model predictions of how much of the key elements should be in the oil at any given



The health and legality of every Ferrari F1 engine depends on the work carried out in this small, red trailer...

WORDS JAMES ROBERTS
PHOTOS STEVEN TEE/LAT

INSIDE SHELL'S



INSETS: REX FEATURES

A tiny sample of fuel is broken down in the Shell laboratory and compared to the official test sample supplied to the FIA to ensure it has not been contaminated and is therefore legal



distance of an engine's usage. If there's any abnormality between what we measure and what we predict, we can immediately foresee problems."

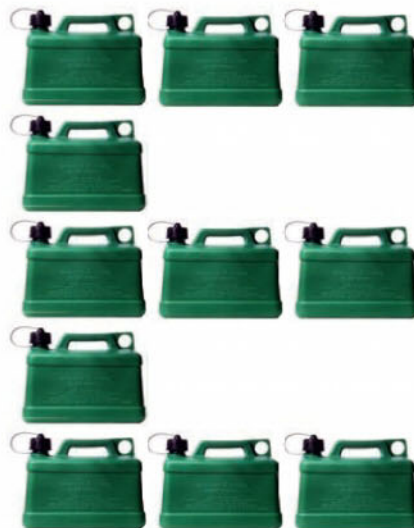
With the technical regulations restricting every team bar McLaren-Honda to the use of just four power units per car over the course of the season, the analysis taking place in this quiet corner of the paddock is crucial to enable Ferrari to improve the reliability of their engine.

"The samples we take between FP3 and qualifying are the most important of the weekend because that's the last chance the team have to make hardware changes without incurring a penalty," explains Lovett.

With that, we leave the Shell technicians to continue their investigations. We slip back into the paddock, rejoining the throng of passers-by who are oblivious to the work going on inside this anonymous-looking trailer. **F1**



Oil samples are tested by firing a charge into them through a graphite rod. Optical equipment can read the health of the engine from this, comparing it with a vast database to predict failures



LAB



PETER WINDSOR'S

MID-SEASON REVIEW



At the sharp end, the 2015 season is a championship rematch between Mercedes team-mates Lewis Hamilton and Nico Rosberg. But, as ever, the title battle is just one thread of a rich tapestry of interwoven storylines that are unfolding on the world's race tracks. Ignoring the off-track politicking, **Peter Windsor** analyses the on-track state of play at the season's mid-point

THE WORLD CHAMPIONS

Fernando Alonso, Jenson Button, Lewis Hamilton, Kimi Räikkönen, Sebastian Vettel and – even though he's yet to win a title – Nico Rosberg

The Hamilton-Rosberg fight continues at the highest level, Lewis leading Nico five-three in terms of wins post-Hungary. Canada was always going to be a pivotal race, after the drama of Lewis's unnecessary pitstop at Monaco: in 2014 Nico won in Monaco and worked miracles in Canada, springboarding his way into Lewis's psyche.

This year in Montréal we saw a very different Lewis. Relaxed and calm pre-race, he displayed none of the angst for which the media were so thirsty. Nothing was going to interfere with his plan of attempting to set pole on his first Q3 run and then going on to win the race.

It's this focus on Q3 that has accounted for the biggest improvements in Lewis; that and his new ability to think about Sunday, even in FP1. The pattern evolves thus: →

“This year in Montréal we saw a very different Lewis. Relaxed and calm pre-race, he displayed none of the angst for which the media were so thirsty”

lots of different stuff on Friday with maybe a quick lap or two towards the end. A couple of grip-finding offs. More groundwork on Saturday morning while quietly working on late-braking markers with the soft tyre. A banker lap in Q1; a quickish lap in Q2, without giving too much away; and then a very fast banker lap, just under the full limit, early in Q3. This new system has so far won him nine poles out of ten. Last year, at the same stage of the season, Nico was one up – five-four. Hamilton’s response to the dramas in Austria was also typical of 2015-style Lewis: on the grid he kept his cool, didn’t overcomplicate things and managed somehow to nurse the car away from the line.

Meanwhile, Sebastian Vettel’s arrival at Ferrari has proved explosive: in one Jerez day he was quicker on medium tyres than anyone would be on options, and he was fastest in the wet, too. He hasn’t looked back. With front and rear grip that now does what he asks of it, Seb is the driver he was in the golden days of Red Bull: fast in all conditions, a great qualifier and a calculating and aggressive racer. Kimi Räikkönen, by contrast, looks little like a driver who used to win races. He alone has been caught out by Ferrari’s start maps, and he made that beginner’s mistake at Monaco in FP3.

Sadly, there is little to say about Fernando Alonso and Jenson Button, other than that (ironically, in this of all years) Jenson has never driven better. He’s been just as quick, if not quicker, than Fernando and his balance and feel in the difficult McLaren has been beautiful to watch. Fernando’s smile is large – but then it would be, given his financial compensation. Of course he would prefer to be winning in a Mercedes or Ferrari. As that isn’t possible, earning a fortune while waiting for the sun is the next best thing.

Hamilton and Rosberg are battling it out for wins at the top team (right); Vettel has slipped comfortably into Alonso’s shoes at Ferrari (below), providing immediate results; and Button and Alonso are making the best of a bad lot at McLaren-Honda (below left)



Clockwise from right: Mercedes are top of the pile; McLaren-Honda are struggling with power deficiency; win-free Red Bull have slipped backwards; and Vettel is keeping Ferrari in contention



THE MANUFACTURERS

Ferrari, McLaren-Honda, Mercedes, Red Bull-Renault

Year two of the power unit tech regulations was, in theory, going to make the racing closer. Everyone had had a chance to learn and to plan. Over the winter, Ferrari duly produced a better engine with improved drivability and reliability, while the promotion of James Allison gave Sebastian Vettel and Kimi Räikkönen a much better chassis. When Vettel won the second race in the SF15-T, it briefly looked as if we were staring at a genuine fight for the title.

By mid-season, *déjà vu* has set in. The drivers' championship is already exclusively between Lewis Hamilton and Nico Rosberg; the constructors' you can gift-wrap for Mercedes. Ferrari have not done a lot wrong, although Räikkönen's three errors – hitting the Ste Dévote barrier at Monaco in FP3 and spinning/crashing in Canada and Austria – have not helped. The SF15-T has, in the main, been reliable and quick, with Vettel frequently taking it to the limit in difficult conditions.

Mercedes, though, have lifted their game to a hitherto unseen level of performance and technical achievement. Ferrari got Mercedes' attention in Malaysia; Mercedes' response in China was to release a little more power and to introduce new front-wing deflector tunnels. Bang. One-two. For every step made by Ferrari, Mercedes have advanced two.

"By mid-season déjà vu has set in. The drivers' championship is already exclusively between Hamilton and Rosberg; the constructors' you can gift-wrap for Mercedes"

Toto Wolff had the foresight long ago to select logical techno-management people with the ability to delegate. The results are as blatant as those trophies lining the factory's reception.

Red Bull, however, have slipped backwards. The three wins in 2014 should have been converted into four or five this year, but only in Hungary did they show the pace to rival Mercedes or Ferrari. Renault, in looking for improvements, found only unreliability in the winter tests; and those failures have led to less relative power on the road. Still the problems continue, and compounding the issue is the slight superiority of the Toro Rosso chassis over the RB11.

Yet none of this compares with the disappointment that has been the first six months of the McLaren-Honda reunion. Top McLaren management blame Honda, citing a power deficiency of at least 150bhp; engineers on the shop floor privately concede that the chassis lacks downforce and accounts for at least half the problems. What is clear is that the MP4-30 is not the most practical prototype and that McLaren's confusing management system lacks the disciplined autocracy that characterised the Honda eras of John Surtees, Patrick Head and Ross Brawn. The positives are that McLaren benefit hugely from Honda's commercial strength as a team sponsor – and that, technically, Honda *will* get it right in the medium-term. Are McLaren maximising the powerhouse that is Honda, though? Would another team

already have extracted more from one of F1's greatest engine companies? Though rhetorical, these questions remain current. →



THE MID-FIELDERS

Valtteri Bottas, Marcus Ericsson, Romain Grosjean, Nico Hülkenberg, Daniil Kvyat, Pastor Maldonado, Felipe Massa, Sergio Pérez, Daniel Ricciardo

It hasn't been a great half-season for the mid-fielders, with rookies such as Max Verstappen, Carlos Sainz and Felipe Nasr making it all look relatively easy, but several have nonetheless managed to shine.

Marcus Ericsson scored valuable points for Sauber in Melbourne and China. Daniil Kvyat has been fast and consistent since Monaco; Nico Hülkenberg drove beautifully in Austria and at Silverstone; Sergio Pérez was excellent at Monaco; Felipe Massa was fast in Austria and for a while took the British GP by storm; Valtteri Bottas was a star in Canada; and the two Lotus drivers have scored some decent points on a variety of circuits.

Absent from all that, of course, is Daniel Ricciardo, the revelation of 2014. In the 2015 car he looks just as supple and balanced as he did last year: the performance difference is in the grip and balance of the chassis and in the relative drop in engine power. And something else more subtle: at Monaco he followed team orders to let his team-mate past into fourth place. It seemed inconsequential at the time, a typically unselfish Daniel thing to do, but it's no coincidence that Kvyat has since been the more dominant Red Bull driver. The move may not have hurt Ricciardo *per se*, but it gave Kvyat

“Daniel Ricciardo, the revelation of 2014, looks just as supple and balanced as he did last year: the performance difference is in the grip and balance of the chassis and in the relative drop in engine power”

confidence – and that's not always a clever thing to hand to the guy you want to beat, regardless of pre-race agreements.

Felipe Massa has outqualified Valtteri Bottas six-four – which hasn't been such a surprise. Bottas lost some of his feel for gentle weight transfer and 'extending the straights' in winter testing, when the Williams unaccountably seemed more unstable at the rear and more prone to understeer. There was not much to distinguish him from Massa until Bahrain, when Valtteri seemed to regain some of his front-end feel. Massa, mind you, has driven as well in 2015 as he has at

This year at Williams, Massa has driven well and frequently outqualified Bottas, proving that Ferrari should never have dropped him for Kimi Räikkönen



Ericsson (top) has scored valuable points for Sauber; Kvyat (centre) has been fast and consistent at Red Bull; Hülkenberg and Pérez have performed well at Force India; and Ricciardo (far right) looks just as good as he did in 2014 – but is being let down by his machinery



any stage in his career, including 2008. Which is a reminder that in a logical world he should still be at Ferrari. There was no reason to replace him at the end of 2013 – and right now he would be providing better support for Seb Vettel than Kimi Räikkönen is managing.

And so the mid-fielders (and one champion) line up as possible Kimi replacements. Bottas? Would Toto *really* want to release him to Ferrari? Massa? He'd be perfect – but would Ferrari actually admit to the mistake of sacking him in the first place? Ricciardo? Really? After he trounced Vettel at Red Bull in 2014? Hülkenberg? Logical – but logic never seems to have influenced Nico's career to date. Nasr? Kvyat? Jenson, perhaps? All would be good in the other Ferrari – as would Esteban Gutiérrez and, possibly, Jean-Eric Vergne.

One final note on Pastor Maldonado: yes, he makes mistakes here and there, but he remains massively underrated. This year he has manipulated, rather than reflexed, the Lotus around at Grosjean pace; he stays quiet out of the car, despite numerous tech problems about which he could complain; and he raises a massive amount of government sponsorship money. In this F1 economy, he's the sort of driver we should celebrate, not denigrate.



PHOTOS: GLENN DUNBAR/LAT; ALASTAIR STALEY/LAT; STEVEN TEE/LAT



THE INDEPENDENTS

Force India, Lotus, Manor Marussia, Sauber, Toro Rosso, Williams

It's been a positive half-season for the independents, which is a reminder of how Formula 1 is ultimately about good people being given the scope to do what they do well. Technology, in other words – expensive technology – is only as rewarding as the people who manage it.

Each independent team has had their moment of glory: Williams' winter suspension geometry changes left them puzzled at circuits such as Barcelona and at Monaco, but Jason Somerville's aero work nicely redressed the balance for them in Austria and at Silverstone. Williams-Mercedes may not yet be quite the consistently strong force they proved themselves to be in 2014, but they're not far from it. A win is but a Merc-slip away. →

“Vijay Mallya gets a lot of flak, but his commitment to F1, and his resilience to the tortures, to the massive, relentless overheads and to the ever-dwindling TV exposure – has been extraordinary. The revitalised performance of Force India in the second half of 2015 is likely to be the most intriguing story of the year”

Toro Rosso, meanwhile, have been the major success story of the year so far. James Key, with Jason Somerville, pioneered the ultra-short nose that now dominates the F1 pitlane, and his STR10 chassis has, in the main, proved to be a case study in how to face the circuit compromises on a relatively limited budget. Those brilliant rookies – Max Verstappen and Carlos Sainz – have done the rest.

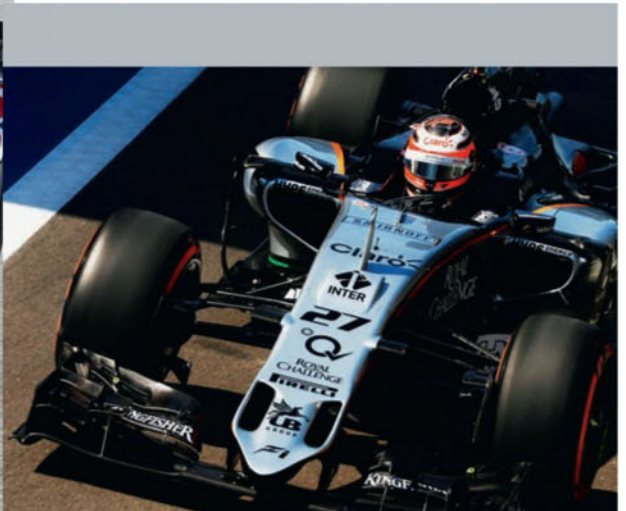
Excellent race management, driving, set-up work and Mercedes power let Force India score plenty of points prior to Silverstone, then the B-car arrived to set new standards both in performance and in design – particularly in the nose area.

Vijay Mallya gets a lot of flak from the mainstream media, but his commitment to F1, and his resilience to the tortures, to the massive, relentless overheads and to the ever-dwindling TV exposure – has been extraordinary. The revitalised performance of Force India in the second half of 2015 is likely to be the most intriguing story of the year.

Sauber's uncomplicated, tidy, revamped 2014 car proved to be very quick in 2015 winter testing and also spoke to the improved drivability – and reliability – of the new Ferrari power unit. The team have had their bad races but there have been several counterpoints – notably in Melbourne, where Felipe Nasr stunned his opposition after a politically fraught qualifying. Compared with where they were last year, 2015 has been a major step forwards for Sauber.

Some sense of the passion at Lotus could be garnered from the first winter test, in Jerez, where the team put a stake in the ground with a 90 per cent-complete Mercedes-powered car. That energy has been sustained through the first half-season, with Romain Grosjean's drives in China, Bahrain and Spain, and Pastor Maldonado's in Canada and Austria giving hints of the potential still to be realised.

John Booth is a tough Yorkshireman, not given to backing down, so it's no surprise to see Manor Marussia beginning to gain traction, race by difficult race. They've postponed their plans to build a new car around the 2015 Ferrari engine; the remainder of 2015 will be about solid, hard work. →



Clockwise from top left: Toro Rosso are the success story of 2015; Force India are setting new standards; Marussia are gaining traction; and Lotus and Sauber show potential

PHOTOS: STEVEN TEE/LAT; ALASTAIR STALEY/LAT; GLENN DUNBAR/LAT



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THE ROOKIES

Roberto Merhi, Felipe Nasr, Carlos Sainz, Will Stevens, Max Verstappen

It's a vintage year for rookies. And Toro Rosso, the team at which two of the classiest acts in town are showing their genius, are at the forefront. Lewis may be racing Nico; Ferrari may forever live in the hope of beating Mercedes, but the *brío* lies this year at STR. They're Italian, they used to be Minardi, and so they have lots of flair. They're concisely run by Franz Tost, they don't have to struggle for money the way Force India or Lotus sometimes struggle, and they've got Max Verstappen and Carlos Sainz. What's not to like?

Verstappen and Sainz are at opposite ends of the style spectrum. Max is all straight lines and supple inputs – very Lewis Hamilton. Carlos is all right foot and oversteer – very Juan Pablo Montoya. Max also has a Michael

Schumacher-like ability to distil the complicated into the essential – to focus on only the things that matter. In his first race, in Melbourne, he started slowly and built up his speed exponentially, staying out of the way of the quicker cars, focusing on the vagaries of the Renault power curve. The car got away from him – but only because he overcompensated for a sudden drop in revs. Call it a rookie mistake.

He improved, and is improving, with every additional dose of experience. There's no doubt that Romain Grosjean braked early at Monaco, but Max stayed quiet, shrugged it off and was back in business in Canada. Something weird happened to the car at Silverstone but Max again made nothing of it, blaming

“Verstappen and Sainz operate at opposite ends of the style spectrum. Max is all straight lines... Carlos is all right foot and oversteer”

Toro Rosso's Sainz and Verstappen (top) are future champions; Sauber's Felipe Nasr (right) is like a cross between Massa and Bottas; Marussia's Stevens and Merhi (below) are fighting at the back with flair



himself and diffusing the moment. All his fundamentals are sound and, very refreshingly, he shows no signs of wanting to be a star. He just loves driving, purely and simply.

Sainz, by contrast, had a rocky winter testing, particularly when his fluid, oversteery inputs failed to generate decent front-tyre temperatures. The breakthrough came in Malaysia, late in Q1, when rain clouds were building. Balancing the STR10 on the finest of knife-edges, he lapped in a devastating 1min 39.814sec, the third-fastest lap of the weekend on one of the calendar's most demanding circuits. That gave him confidence – even when he was obliged to start with new Brembo discs on race morning. The pair are currently tied five-five in qualifying, which gives us a clear idea of the intensity of the match. Both are potential champions.

Felipe Nasr has also looked very good: it's a shame, in some ways, that he's not racing a Williams this year, because in the less competitive Sauber he already looks like a cross between Felipe Massa and Valtteri Bottas.

Will Stevens and Roberto Merhi have battled on for Manor Marussia, showing lots of flair. They're racing within a race, hoping for some reward. But if fortune equals effort, the good times indeed may roll. 🍀





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BALANCING ACT

Lewis Hamilton's incredible speed is built on his ability to expertly balance a car through his superb, other-worldly feel and control. **Peter Windsor** strapped himself into the passenger seat of a Mercedes-Benz C63 AMG Coupé to watch a maestro at work

PICTURES STEVE ETHERINGTON/LAT/PETRONAS



It began, as these days do, with a clear run through the morning traffic. Gaps opened ahead of me; the sun's warmth flowed through the open windows. At Brooklands I smiled as we passed De Havilland Drive, conscious of the hallowed ground upon which I was travelling. I pictured the pioneer engineers and the aviators, the white-overalled mechanics and those fearless 'racing motorists'. Aviation and motorsport have quite a few focal points around the globe; none have layers that run as deep as those of Brooklands.

I was early and so in plenty of time to tease this summer morn. Hot laps with instructors seemed to be much in demand at Mercedes-Benz World. Over there, Sir Stirling and Lady Moss prepared to host a tour of the museum; across here, the media gathered for a press conference; and on various open-plan levels sat all sorts of delectable machinery, from F1 cars to AMG's bewinged finest. I wondered how the bystanders would react when Lewis Carl Hamilton arrived; I wondered, indeed, how Lewis would see the day. →

I first saw Lewis drive in early 2006, at the Valencia road circuit, where the corners are in the main Mickey Mouse, but Turn 1 is fast – almost flat-out in a GP2 car. Lewis was Nigel Mansell through this lovely left-hander, his feel for early weight transfer as clear as the crisp Spanish day.

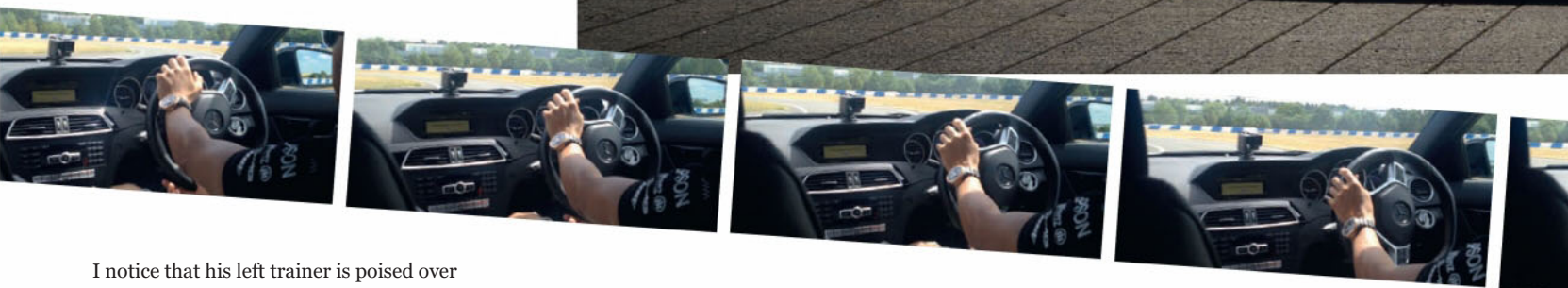
I've appreciated him ever since. He's made his mistakes; he's had his moments – but haven't they all? Lap for lap, corner for corner, Lewis Hamilton is, for me, as good as it gets and I think he would have had no problem at all had he been born into any other era of F1.

So towards us he strides, apologising for being just a little late. The conversation quickly turns to racing – and the details of his driving. "You see, there's this vibration you feel under heavy braking, almost through the driveshafts," he says, talking about the W06. "It's what happened back in Austria. People think I braked too late when I spun in Q3, or too hard. I didn't. There's something connected with the electronics going on. We've got to work on that..."

"In general, though," I reply, "qualifying's going well, eh? Nice job with the early laps in Q3. That's been a feature of the year."

"Yes, I've been working on that but there's still more to come. The goal is always to take pole with the first run and go quicker again with the second. Not easy..."

We strap ourselves in to the Mercedes-Benz C63 AMG Coupé. Lewis has his seat set relatively low. His arms are comfortably bent and, even as we head out towards the test track, bounded by the paving of the original Brooklands infield,



I notice that his left trainer is poised over the brake pedal.

"Do you brake with the left foot when you're cruising on the road?" I ask.

"Ah. Let me think. No. No – not when I'm driving slowly. I brake with the right foot. I only use the left when I'm going quickly."

Lewis knows this narrow proving course; it's been a victim of hundreds of Hamilton laps. I can't imagine that this is how he wants to spend his Monday. Mercedes and Petronas have invited us – and Lewis has obliged. It's part of being an F1 driver. So what will he do? How will he drive?

"There's only one way to have some fun here," he says, eyes sparking, "and that's to do some drifting. I love drifting..."

Of course, Lewis Hamilton's concept of 'drifting' – massively sideways with wheelspin – is very different from mine: Juan Manuel Fangio fingertipping it through the sweepers at Rouen in a 250F.

The twain meet, however – for you cannot do one without the other. Put another way, any great F1 driver should in my view be able to win a reverse-parking Autotest, master Pikes Peak, do justice to a NASCAR stock car and stand stationary on a bicycle, with both feet on the pedals, for at least ten minutes.

And throw a Merc around. Lewis floors the throttle through the Tiptronic upshifts then brakes very hard – judderingly hard – for the

first right-hander. The back end slews out of line and Lewis twirls the wheel in svelte response. His fingers and palms sit lightly on the rim. There's not an inkling of over- or undercorrection. Simultaneously you feel his right foot, already back on the power, easing about half an inch.

Now we're approaching the inevitable esses. "This is what I love about drifting," says Lewis, as calm as if he's buttering a piece of toast. He has the Mercedes running at about 90° to the apex of the first corner, then feeds the load around the other way, via steering and throttle. It's as if he's winding in a heavy tuna at the end of a long line. →



From the race track to the road

How F1 fuel and lubricant technology is directly benefitting road cars

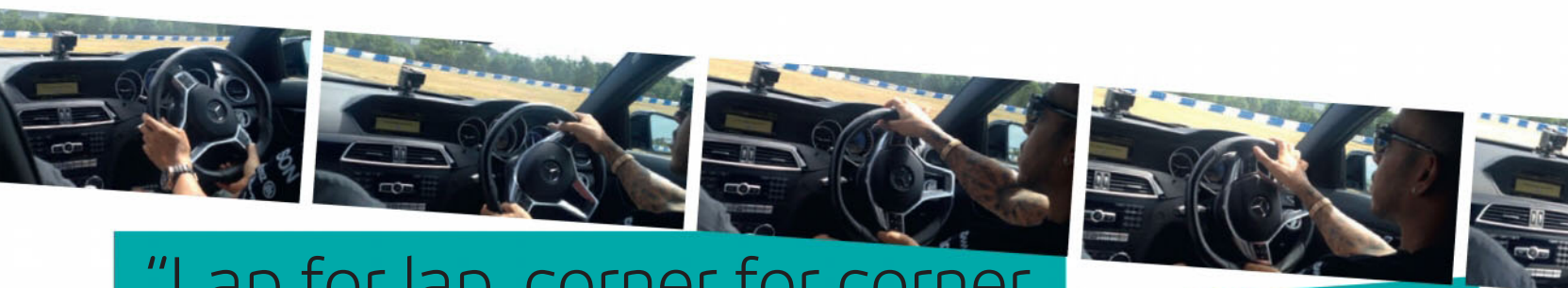
Both the fuel and the oil in the C63 AMG Coupé that Lewis Hamilton is piloting around the circuit at Mercedes-Benz World are virtually identical to the products found in his F1 W06 Hybrid. Gone are the days of exotic 'rocket fuel' as Formula 1 regulations state that high-street pump petrol must now be used to fuel today's cars.

The knock-on effect is that the efficiencies found in F1 can be fed directly back into creating more efficient fuel for your everyday commute.

"The amount of fuel we use in F1 has dramatically reduced over the past few years. We're down to 100kg of fuel, whereas 15 years ago an F1 car would use 300kg, and we're continuing to work on further improving efficiency," says Adrian Bell, senior support engineer for Petronas. "In addition, the oil we produce for the W06 provides a very effective cooling function. We are able to cool the pistons with the lubricants we develop and that is directly applicable to today's modern, high-performance road-car engines."

The extra cooling ability of the oil allows for smaller radiators, which reduces weight and again improves fuel consumption. "The technology in both the fuel and lubricants we use in the Mercedes-Benz W06 Hybrid is directly transferable to what we sell on the high street," adds Bell.

James Roberts



"Lap for lap, corner for corner, Lewis Hamilton is, for me, as good as it gets

and I think he would have had no problem at all had he been born into any other era of F1"



Not too fast, not too slow... "I love this moment when the car changes from left to right – timing it... like... that..." His movements are rhythmic and supple. There's nothing jerky about any of it. One flowing motion follows another.

At the end of the straight he is again braking hard into the tight right-hander. You don't feel a jolt, but you do feel yourself stretched forward within the belts. The car sits square on the road – a Lewis trademark – before he peels the car deep into the corner, trading brakes against steering. Now his left foot is massaging the big pedal and I realise he's using the brakes more to provoke the car than to slow it. He's drifting it into the most extraordinary angles – way past the points where you're convinced you're going to spin – but already he's looking two drifts – two corners – ahead. The Merc is zigzagging around a bunch of apex points. In fact, make that *dancing*.

It's difficult to take it all in. The lap is short and the extreme angles are in some ways disconcerting, so rabid is the tyre smoke, so pungent the smell of heat. This is a mind-boggling display of car control, the likes of which you'd never associate with F1's Lewis Hamilton in a million years. We see him doing what he does so regularly on the TV screen – squeezing the maximum from the W06 in a wide variety of conditions – that we never imagine he can also be this guy – this sort of Fernando-Alonso-meets-Gilles-Villeneuve-meets-Jody-Scheckter type driver, with dazzling reflexes and balance. Lewis in F1 rises a step higher than that. In a grand prix car he is about straight lines, not sweeps or curves. He is about creating little pieces of straight road even when the track geography dictates otherwise. As we see today, though, he can also slide a car around; no question about that. He can be Jochen Rindt or Ronnie Peterson at the flick of a switch.

Balance. As time speeds on, I begin to realise that what we are really seeing here – touching, feeling here – is balance. The whole performance

is a symphony of balance – balanced braking, steering and throttle. Even balanced driving position. As casual as Lewis is finding the day, he's still centered in his seat, arms flexed, shoulders square. His feel for the road, for telling the Merc what's coming next, is flowing, I think, through his thighs, the small of his back, his

shoulders, his fingers and his palms. He oozes touch. You feel it with the slight, implied movements, with the way his palms settle and then re-settle on the wheel rim. This isn't about beads of sweat or white knuckles – and nor is there any shadow-boxing with the wheel. Everything is delicately precise. It's about... balance. It's about everything being right. No false notes. Balance. Harmony. No wonder Lewis uses an anti-lint roller on his T-shirt even when it's new.

And so some of it clicks into place. Lewis brakes harder and later than most drivers not because he is abnormally brave, but because he has this supreme sense of balance. It's about feeling the precise moment for taking the brake-pedal pressure from the initial to the hard; it's about correctly – physically correctly – balancing retardation against G-load; it's about perfectly creating the moment of least downside for rotating the car. It starts with Lewis's natural balance and touch; it evolves with his management of all the dynamic forces.

It's no wonder that Lewis is able to harvest a relatively large amount of energy under braking. It's not because he brakes later and thus harder than his peers: they all brake 'late' at F1 level. Lewis does this because he has the balance to feel the cadence that allows him correctly to use the calipers, discs and tyres – to extract more from the brakes, in other words – and thus to use them so relatively late. Lewis doesn't feel that he's braking late: he feels that he's braking correctly. It's a bit like the difference between a person who likes 'shopping' and someone who only shops for something. Braking later than another F1 late-braker, in other words, only makes sense if you are using the brakes somewhere near perfection – and that perfection is all about feeling the right piece of road on which to stop, initial brake pedal pressure, full brake pedal pressure and then decreasing brake pedal pressure. The one leads to the other – and the surplus energy Lewis generates into

Other drivers may look at his telemetry and conclude that it's all about making the corners more of a 'vee'. That is true at its most basic level – and for most of the top seven or eight drivers in F1, such an approach can probably be reproduced over one lap on a decent set of tyres. The art lies in sustaining the shorter, more linear corner over a full race distance, over different track conditions, tyre cycles and fuel loads. Lewis does this entirely by feel (born of balance). Most others – with the exception, I think, of Fernando Alonso, Max Verstappen and possibly Daniel Ricciardo and Sebastian Vettel – do it by engineering the numbers. Skew the race parameters and the car magically develops understeer, oversteer or poor traction. Lewis faces those symptoms too – but he adapts quickly to them. He turns the car around. The lesser drivers don't. They attempt to change them with setup (brake balance, etc). Alternatively, they just slow the car down.


The shame is that today's W06, and cars like it, are so sophisticated that we can't see all of Lewis Hamilton. If we had foot-clutch-operated gearboxes I think his advantage in F1 would be even greater. Likewise under braking, if we threw

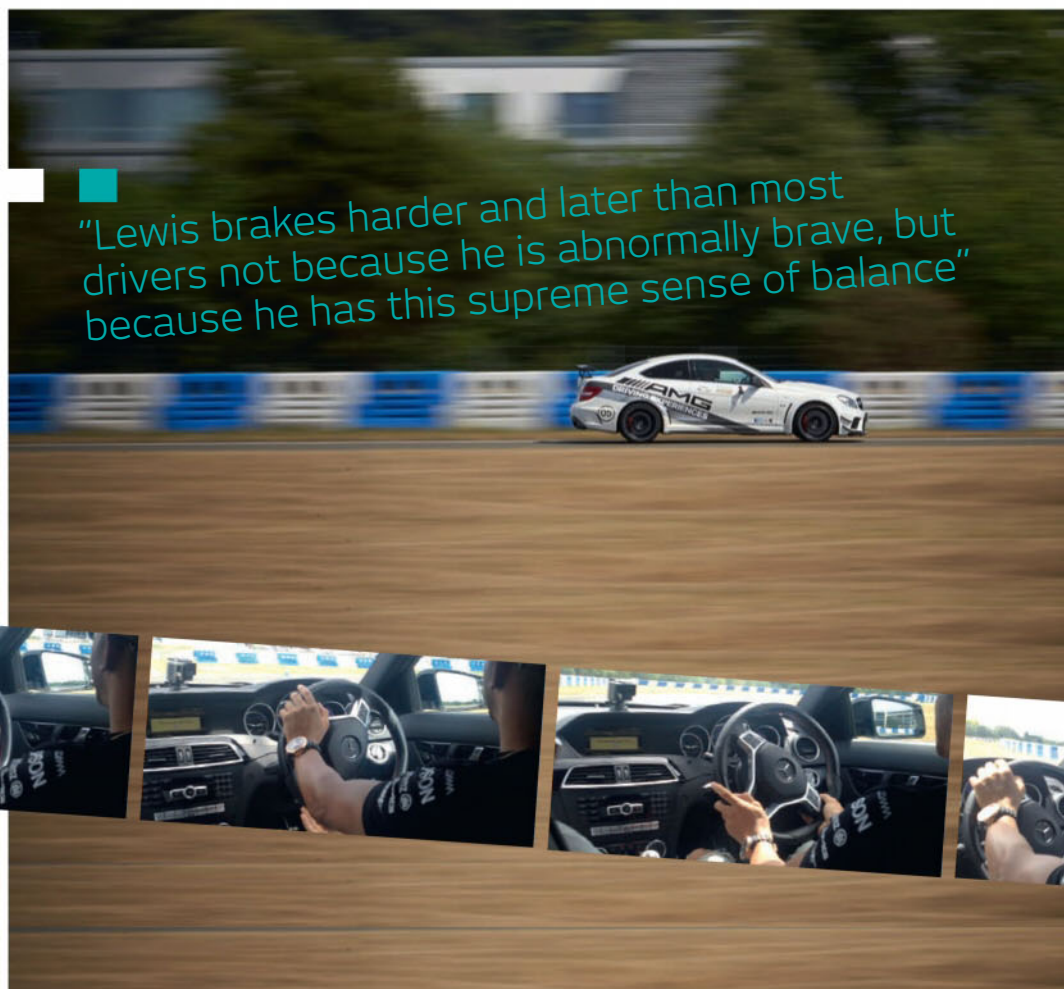
away the electronics. The start, too, minus the 'maps'. On the plus side, we see Lewis being able to harvest more energy and to save more fuel (for a given lap time) than his peers.

Lewis is cooling down the car now, worried he might have eaten through a set of tyres. "So I take it you like oversteer?" I ask with a smile.

"You know I do!" comes the reply. "No, seriously, it's not so much oversteer as a car that lets me do what I need it to do. So long as I've got a front end that'll take it, I don't mind what else is going on. What I hate is sitting there, waiting for the front to bite." A bunch of words that cover a million dynamics. The beauty is in how they sit in Lewis's mind. Distilled. Uncomplicated.

Balanced.

I know it was only Mercedes-Benz World and I know it was only a road car – albeit a hot C63 – but what I take away from it is this: you can hit Lewis's F1 car with a crosswind in the middle of a blind-brow, 175mph corner and the flick oversteer will for him be but a fly to be brushed aside. And that's just a tiny part of what makes him a great racing driver. The rest of it we see out there on the F1 circuits of the world. 



corners is then parlayed into more power – or the consumption of less fuel for the same speed, depending upon how the race is playing out. Cruise-and-coast means much more when you're doing it with margin.



In conversation with

Felipe Massa

Now in his second year at Williams, the seasoned racer mulls over his options and offers sage advice to Ferrari drivers current and future

WORDS JAMES ROBERTS PORTRAIT GLENN DUNBAR/LAT

Will we see you at Williams next year?

Maybe. I don't see the reason why I should not stay here. I really like to work with this team and I feel respected. I feel relaxed and we've had some good results as well. We have an option for next year and I don't see why we shouldn't carry on.

What do you make of Kimi Räikkönen's situation at Ferrari? What's it like to deal with the pressure there?

It's not nice to be in that position. It's not easy and everyone says 'Iceman', but he's not really like that and he can also suffer with the pressure and it shows in some results. He just needs to relax and to try to do his best because he's definitely a big talent and can do a lot better than he's doing now. Everybody knows that, but it can be possible that the team are looking for another driver. I don't think I will go there, I'm happy with where I am – so it's not my problem.

Your team-mate Valtteri Bottas has been linked to Ferrari. Do you have any words of advice for him?

Well, it's one of the most important names out there, but we can't forget that he has an option to stay here at Williams. He's shown that he's a good driver and he has the talent to drive in a top team. He's shown he can do well in whatever he's racing – that's why other teams are interested to have him. But I don't know if he's going or not.

Williams are closer to Mercedes this year. Would you say that's over one lap or a race distance?

It's difficult to say. Every race we try to do the best we can and we need to keep trying. Mercedes are very strong. Not just in qualifying but in the race, too. Every time there is another car in front of Mercedes it's because something has happened in the race – a problem or a reliability issue.

There is a lot of talk of how F1 should change in the future. You've driven V8s and V10s and in the era of refuelling: what do you think should change?

It's a good idea to make the cars quicker. But if they're five seconds quicker and you see less overtaking, people will complain. The change needs to be intelligent, it's not just about speed. We need to improve the show.

I was watching the NBA basketball finals and there was so much on Instagram about the game for the fans. We need that here as well, so people

FACTFILE

Age 34

Place of birth São Paulo, Brazil

Team Williams

Role Driver

2014 Joins Williams

2013 Scores a single podium in his last year for Ferrari

2009 Suffers a head injury in Hungary and is out for the rest of the season

2008 Misses out on the title at the final GP of the year by one point

2006 Races for Ferrari and takes two wins in Turkey and Brazil

2003 Ferrari test driver

2002 Makes F1 debut with Sauber

understand more on the technical side. So it needs to be intelligent, not just putting more downforce on the car. People want to see competition, overtaking, fighting on the track – that needs to be the change.

What about the quotes from Niki Lauda saying that the sport should be more dangerous?

I disagree. Twenty years after Ayrton Senna's crash, Brazilian TV showed races from then. At those races it was worse than it is now. The difference in qualifying would be as much as 1.5 seconds to third place. And they were lapping up to third in races, so the difference in competitiveness was greater than it is now.

Speak to anyone and they'll say 'the past was amazing', but go back and watch it and then compare it to now. Back then the tracks were a lot worse, it was a lot more bumpy, so when you see the cars driving it looks more difficult. I don't believe the FIA will change the tracks now to make them more dangerous.

Should the cars be harder to drive?

Well, that implies these cars are easy. You should try it. They're not. Maybe it looks that way on the television. When I was racing in 2008 with refuelling, we were quicker in the race and you felt that physically. Now we are five seconds slower because the cars are heavier with fuel, but they are not easier.


People say that drivers take more risks because the sport is too safe now...

I don't agree. In my first year in F1 when I was 20 years old, I made a lot of mistakes. Watch GP2, watch the other categories, watch Formula 3 this year – they crash a lot. When you get more experienced it happens less.

Do drivers get too much help from their engineers?

Well, we drive such complicated cars now and we need all the information we can get. There are so many things to change – often the changes we have to make on the steering wheel are so complex that we don't even know what they are! That's why we need so much dialogue with the engineer.

Would you ever consider racing at Le Mans?

Yes. The prototype sportscars are the best cars after F1 – they're like F1 cars but with closed cockpits. After F1 I'll still need to have fun and drive the best cars with great technology. So maybe I'll think about going there. 



CREATING A

MODERN CLASSIC



On 1 November, Formula 1 will race at the Autodromo Hermanos Rodríguez for the first time in 23 years. But new regulations mean the circuit must be extensively reworked. **Justin Hynes** investigates what's changing and why

PICTURES MAURICIO RAMOS

E

arly June in Mexico City, and with 150 days to go until F1 cars edge out into the pitlane here for the first time in 23 years, it's hard to imagine that there's enough time to get this finished.

From the upper tiers of the grandstands opposite the pitlane at the Autódromo Hermanos Rodríguez, there's a clear view of the skeletal pit buildings, the empty spaces within lit up by showers of sparks, accompanied by the howl of angle grinders. The pitlane is a river of red-brown earth, bounded only by the emerging bones of the pitwall. Halfway down the main straight another concrete chasm, a half-constructed tunnel to the infield, breaks like a pale grey wave across the beam of the track.

But there is order amid the chaos. The circuit is a hive of activity with some 500-800 workmen on site at any time, and the shape of things to come is becoming clear. The limits of the circuit are visible, fencing is being erected, and earthworks are giving way to aggregate and the initial stages of asphaltting. It is, according to Christian Epp of go-to F1 circuit architects Tilke GmbH, all going according to plan.

"Ninety per cent of the work on the track will be done by 1 August, which is 92 days

from the first race," he says confidently. But getting to that date is an involved process, stretching beyond the huge civil project that is mere bricks-and-mortar construction.

Before a wheel can be turned at the Autódromo Hermanos Rodríguez, indeed before an engine can be fired up in anger at *any* racing circuit, the FIA must be satisfied the track is fit for purpose. The final arbiter of whether a circuit has reached that state is F1 race director Charlie Whiting.

"The homologation process normally starts when the designer engaged by the promoter presents us with a master plan, an overall scheme of what is intended," says Whiting. "The FIA then has a set of internal guidelines that we provide – an extensive and very detailed document developed over the past 40 years. Basically, it describes everything a circuit designer might need to know about walls, tracks, kerbs, fences, how

For Epp, the FIA guidelines amount to a complex code, a set of rules that makes the process of circuit design more quantifiable. "They describe everything that falls within the realm of safety," he says. "For example, the details of what constitutes an FIA fence, how the resistance is measured, and when a car is driving above 155mph and there are spectators behind the fence, how much resistance that fence needs to have."

Once the master plan is received by the FIA, simulations are run to model the suitability and changes deemed necessary are fed back to the architects.

For Whiting, there is no substitute for a first-hand look at the circuit, and during its construction he will visit at least four times. This is based on 2010 and the 11th-hour approval of the Korean GP circuit.

"We learned big lessons from Korea," says Whiting. "When I went there in July



to design corners, how much run-off area you need – everything we have learned over the past four decades.

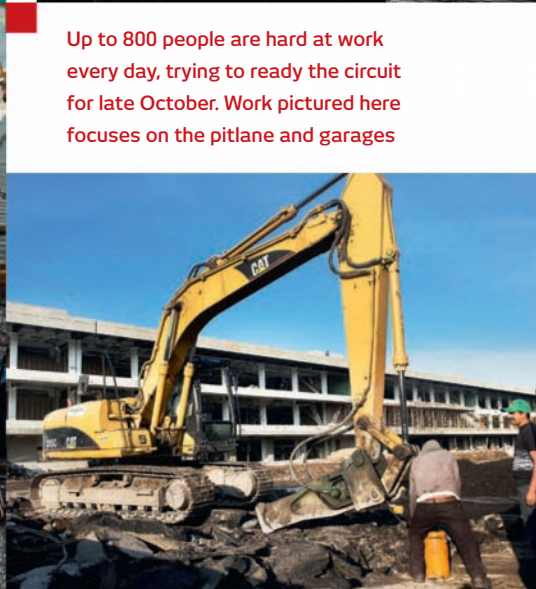
"What was considered safe even 20 years ago would be considered old-fashioned these days. For example, guard rails are much better than they were; the spacing of the posts has been adjusted massively to stop the guard rails spreading. Debris fences are much improved.

"Kerbs have developed enormously. They used be nearly 25cm high, which would be totally unacceptable these days. In Mexico, when I first went there, the old kerbs were maybe a foot high; you just would not do that nowadays. It goes all the way back to a second line of protection, so it includes track, kerbs, run-off areas, barriers – and then the second line, debris fences."

2010, it was a disaster. The main buildings were complete but the track was a mess. The section from Turn 13 to the last corner wasn't there. It was little hills and woods. You couldn't have driven it in a four-wheel drive. The lack of progress was alarming."

Following negotiations with the region's governor, the arrival of a new construction company and a last-minute, two-day inspection, the circuit was approved just two weeks before the inaugural grand prix, with the race taking place on a finished track but with much of the surrounding infrastructure far from completion.

"I've not let that happen again and I now visit nine months before the first event and then four or five times before the race. There's no point in going earlier because there isn't much to see. Nine months in,



Up to 800 people are hard at work every day, trying to ready the circuit for late October. Work pictured here focuses on the pitlane and garages

you get a good impression of how things are shaping up. That's how we did India, Austin and Russia, and it's worked well."

Because of the level of detail in the initial planning phases, Whiting's site inspections rarely result in major architectural changes, but he insists site inspections are crucial to understanding how a circuit will be raced.

"There are never major discrepancies in terms of the architecture; what is more likely is that you will request changes based on elements you see in the flesh," he explains. "We visit at key stages when we can see developments on the ground and say, 'That kerb isn't how I imagined it from the drawing; take it off and do it this way,' because that's the stuff that really matters."

When it comes to initial track design, a process at the discretion of developer and

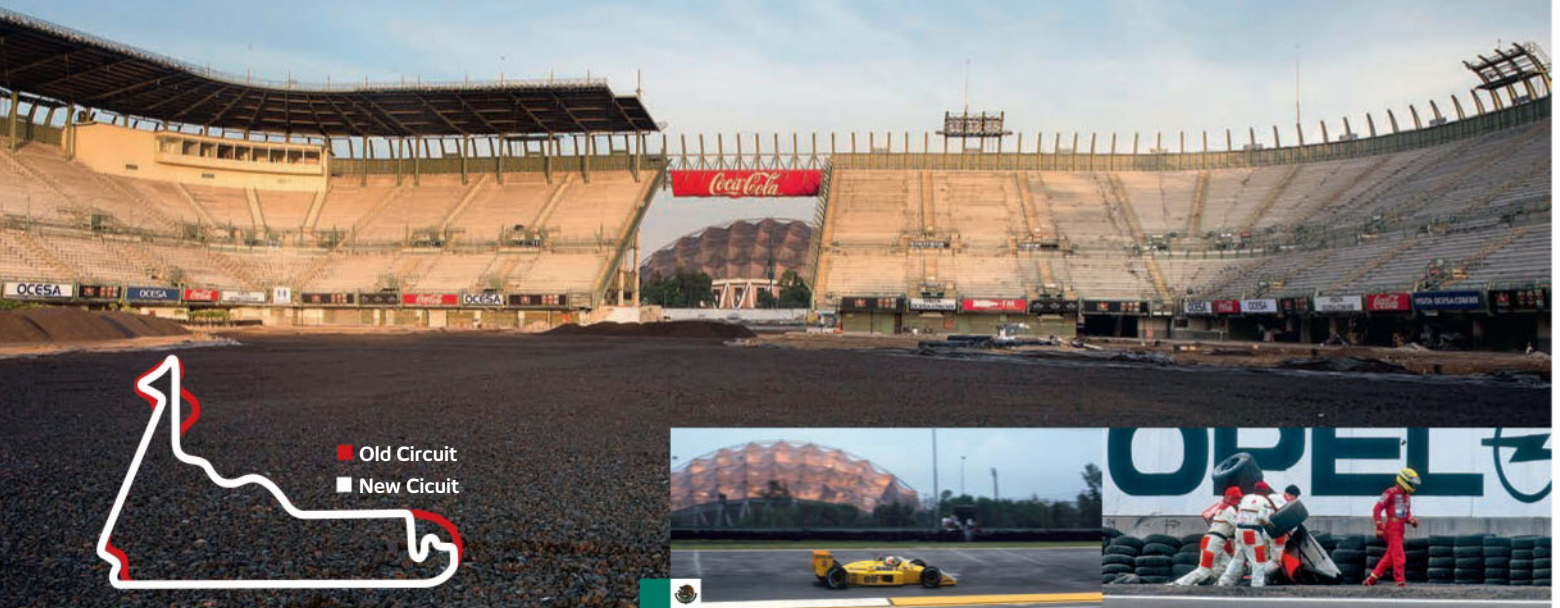
"What was considered safe as recently as 20 years ago would be considered old-fashioned these days"

Charlie Whiting, FIA race director

architect, Whiting admits he would like more attention paid to pit entry and exits.

"Pit entry and exits appear to be the most difficult things to do on a circuit," he says. "If you've got a long straight, a slow corner before and a slow corner at the end, it's relatively straightforward. But if a designer wants to put the pits on the outside of the circuit for example, as in Korea, getting off the track and on again is a problem. It's not easy to do – not nicely and not safely."

"The original design for Yas Marina had the cars coming out right onto the racing line, where they were braking for the first corner. But dear old Philippe Gurdjian [the late circuit boss of Yas Marina] said: 'No, let's build a tunnel!' and unbelievably he convinced the people paying for it to do that. It's not perfect, because the →



cars come out into a very fast corner – it'll always be a problem when the pits are on the outside of the circuit."

While architectural changes are rare, Whiting's site inspections can result in alterations that at first glance might appear counterintuitive to the FIA's safety-first brief. "We look at things like the size and gradient of run-off areas," he says. "Often when a circuit looks okay, the run-off areas appear big enough but when you visit you'll say 'You know what? You don't need that much run-off area there'. It may be theoretically correct, but you have to look at it yourself to understand what sort of accident might happen in that corner."

"I always like to get spectators as close as we can to the circuit. You can start off with great big run-off areas but they're seldom used. Certainly circuits that were designed 12 to 15 years ago probably have got some run-off areas that are a little too big and they wouldn't be as big these days because we have a lot more knowledge of how cars go off at certain corners and we have much better impact attenuating devices."

In Mexico City, the confines of the parkland circuit proved difficult in terms of carving out enough space for F1 standard run-off areas. "It's an old track and it had a lot of the issues that come with old circuits," he says. "A lot of the corners didn't have run-off areas, so that's why some realignment had to take place. It was unavoidable, but afterwards you can play around with the details to compensate. For example, Turn 11, which leads onto the

The formidable Peraltada was considered unsafe for modern F1. Its second half remains, but a revised layout now weaves through a stadium that seats 36,000

back straight, was very fast and would have needed a large run-off area, so we slowed down Turn 10, so 11 could be taken under acceleration, meaning you need less run-off. It's a balancing act. You have to adapt."

There was never a question of achieving a balance with the fearsome Peraltada. When details of the new layout were revealed, fans decried the loss of the circuit's signature section. Whiting, though, is unmoved.

"It's the question everybody asks, but the Peraltada has been off the agenda for years," he says. "When Champ Car raced there from 2002-07, they didn't use it, and the baseball stadium has been built on the inside of that corner. Champ Car took the track through a very simple right-left-right [through the stadium]. We've maintained that section because there are 36,000 people sitting there, so it would be a crime not to use those seats. It's a different take on what they used to do with Champ Car. I think it's better, as a slow corner leading onto a long straight is always better than a fast corner leading onto a long straight for overtaking purposes. The Peraltada didn't have any run-off area, so it was never going to fly – not these days."

Epp adds that it wasn't simply a lack of space that caused modernisation issues. "The biggest difficulty is that this was an extremely outdated F1 track. So basically,

every advance made over the past 23 years was missing. It's a little bit like your mobile phone: look at the iPhone you have today and the phone you used 23 years ago. There has been almost as much an evolution as that in terms of design, in every aspect.

"The run-off areas weren't right. The track surface was worn down, the drainage system was not working, the kerbs were outdated and the fencing was unsuitable. The entire pit infrastructure was wrong. The pitwall didn't exist in the way we now need it. The medical centre was not in a good location, it didn't have the right footprint and all its equipment was wrong. The list goes on, but with the FIA we have addressed all those issues and now we are on time."

The circuit should be signed off by Whiting in late August. But even then the work will not be complete. "I'll go again two weeks before the race, just before the US GP, to make my final check. I will have done a couple of trips before then to iron out any complications, so on that final visit I would be expecting to see everything in place and as it's supposed to be."

Whiting is expecting to see the return of a racing great, a track that despite huge changes will still carry the imprint of the classic of past eras. "It was a difficult packaging exercise but those sweeping corners, that great characteristic, will still be maintained," he says. "What can people expect? I think they can expect a world-class facility, a massive, very enthusiastic crowd and a truly great circuit, where I am sure the racing will be just as special." **F1**

Formula One ● Le Mans 24hr ● MotoGP ● Superbikes ● Historic

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Brazil Abu Dhabi

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F1 Belgian GP
F1 Italian GP
Last few places
remaining

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Carlos Sainz

Toro Rosso's talented Spanish rookie on his friendship with Fernando Alonso – and why he had to step out from his father's shadow

WORDS JAMES ROBERTS PORTRAITS ANDREW FERRARO/LAT

The sun is shining this Thursday lunchtime before the British GP at Silverstone, so we head upstairs to the roof terrace of the shared Red Bull/Toro Rosso motorhome. Up here there's a great view of the heliport on the inside of the track and, in the distance, a sea of cars and trucks.

Ready for your questions is Carlos Sainz Jr, 20, one of two Toro Rosso rookies (along with Max Verstappen), who have taken to F1 with aplomb in 2015. Prior to the British GP, Sainz had scored four points finishes, and at this year's Malaysian GP, he and Verstappen even outshone the senior Red Bull team.

Our question cards don't say 'Carlos Sainz Jr' – the son of the double world rally champion has dropped the 'Jr' suffix since arriving in F1. He notes that we haven't used it, and thanks us for our accuracy. It's something he wants to clarify and, handily, that's our first question...

Why did you decide to drop the 'Jr' from 'Carlos Sainz Junior'?

Michael Gutierrez, USA

All my career I've been Carlos Sainz Jr, or the son of Carlos Sainz, or Carlitos. I got to a point

where in Spain people just think you are in Formula 1 because you are 'the son of'. But there has never been a Carlos Sainz in F1, so I don't need the Jr. I want to demonstrate that I can create my own name in Formula 1. I love my surname and my father and what he's achieved, but I need to take off the 'son of' tag.

Do you think that the good relationship you have with Fernando Alonso has helped you feel more comfortable in your first season of Formula 1?

Joanna Lewis, UK

Yes, definitely it has helped me because when you have such a big personality in the paddock who welcomes you, it always makes you feel more at home and you might have seen that we are always together. He doesn't always answer my questions though – for example, what is the best line for Turn 1? So we don't speak about racing so much; we mostly talk about training and are also gossiping about the personalities in the paddock. We have some laughs, but we mainly talk about sports – we have a lot of things in common in that sense.

Who was your racing hero when you were growing up?

Paula Carson, Canada

My racing hero has always been Fernando Alonso, and I first started watching Formula 1 when he started winning. I was karting back then and F1 was never my target until I started watching Alonso. I first met him at the Spanish Grand Prix in 2005 and then I decided that I wanted to be like him. He was my hero, my idol. Aside from him, my role models were Senna and Schumacher, but Alonso was always my hero. There's a saying in Spain – 'make your heroes your rivals' – and this year, it has been a massive personal achievement for me to race against him.

How does driving a Formula 1 car compare to driving in Formula Renault 3.5 last year?

Rachel Hilman, UK

The biggest differences with the Formula 1 car are the tyres and the engine. The cornering speeds with the Renault 3.5 are similar to what I have in the Toro Rosso. The biggest changes are that I have 300bhp more, a lot more →



Red Bull

Red Bull

NOVA
Chemicals

F1
RACING
Carlos Sainz

CEPSA

SAPINDA

RENOLTA



buttons on the steering wheel, and a tyre that behaves differently.

The Pirelli tyre is very good longitudinally, so you can brake very late and still have good traction, while laterally it's not so good. The Michelin would give you a lot of support in the high-speed corners. With the Michelin in World Series you can really push minimum speeds.

Can you describe Toro Rosso team boss Franz Tost in three words?

Zacharie Duval, France

Comprehensive. Tough. Passionate.

Red or brown sauce on a bacon sandwich?

Matthew Webster, UK

This is about ketchup or HP sauce, right? I'm a big fan of Heinz ketchup, but I once tried the HP sauce and I was surprised at how nice it was. I alternate sometimes, but I prefer ketchup.

Do you ever think about driving a World Rally car?

Jakub Kurowski, Poland

Who *doesn't* want to drive a World Rally car? When I turned 18 I got my driving licence and at the same time my Dad bought a Group N rally car and we've been playing around with it near the country house we have in Spain – I must say, I love it. Right now I'm in my first year in Formula 1 and I have to concentrate on that, but one day, when I've got a bit more time to decide what to do, I will probably do a bit of rallying as a hobby.

What's your favourite track and why?

Olga Bialczak, Poland

It's a very close call between Spa and Silverstone. I've always had great results at both – perhaps a qualifying lap at Spa is that bit more exciting, particularly in the wet, that's something special. In Spa you run with less wing and the driver can make more of a difference. What's special at Silverstone though is Copse, Maggotts, Becketts, Stowe; that section. And the new Turn 1. With the downforce we have, we expect to do it flat-out in qualifying. It's becoming a real challenge.

What would you do to make F1 more enjoyable and appealing for the fans?

Adam Midgley, UK

Good question. Can I say a couple of things? First of all, the fan who goes to the race track always wants to see the fastest cars in the world and say 'Oh my god, these guys are heroes.' So we need to make the cars properly quick, like they were in 2005.

The other thing I would do is let the drivers speak out. If they are pissed off when they get out

of the car, they should be allowed to express that. The fans would love it. I would like to see more outspoken rivalry between two drivers, like we had with Hamilton and Massa a couple of years ago. We need more of that sort of competition.

What do you think about Max Verstappen joining Toro Rosso aged 17 and, out of ten, how would you rate him?

Samuel Scruby, UK

I think he's a very big talent, as we all know. He's doing something special because of his age and I think he deserves to be in F1. Obviously last

year I thought that I deserved it more than him because I was winning. But when I got to F1 I realised that it was good for me to have a teammate like Max who has so much talent, so that we can be competitive with each other.

We have a great relationship, and actually I've never had such a good relationship in the past with a team-mate before and I think it's been very beneficial for both of us. And to rate him out of ten, I'd put him at a nine as he still needs that bit more experience.

FIR: You would be a ten of course!

CS: No, no. I would be a nine as well... It takes years of experience to be a ten like Hamilton or Alonso, a champion.

When did your father first take you for a ride in one of his rally cars?

Sorin Botoaca, Canada

I think it was when I was about six or seven years old. I went to see him in a test in Portugal when he was driving a Ford Focus WRC. He took me for a ride and I remember it was very special. It shocked me. I suddenly had huge respect for rallying. I remember going from Tarmac to gravel, back to Tarmac and the driving style was so different. I was very impressed.

FIR: Your dad was on crutches recently, what had he done?

CS: He did his Achilles tendon, playing football with me and my friends. He went into a sprint and left his Achilles tendon behind...

How many Toyota Celica GT-Fours does your family own?

Carlos Lopes, UK

My uncle has one and my dad has another one. We have the Carlos Sainz special edition, which they made when they signed my dad. My dad also has the one he won the World Rally Championship in.

What was the first thing Bernie Ecclestone said when he met you?

Heath Richards, New Zealand

First thing he said was when I was ten, back in 2005 at the Spanish GP. He asked whether he would see me in this paddock in the future and I said I hoped so. I was very shy at that time.

What's your favourite road car?

Dimitris Ziamos, Greece

At the age that I am now, if I had all the money in the world to buy what I wanted, it would be... [turns to PR aide Tabatha Valls Halling] ...Do I need to say a Renault? Okay, no, I really like the Golf GTI I have. That's perfect for me now, but if I had a lot of money I would buy a Ferrari. Not a classic, a modern one. Fernando [Alonso] had



"When I was about six or seven I went to see my dad in a rally test in Portugal. He took me for a ride and I remember it was very special"



How does it feel for you and Max Verstappen to regularly outperform the senior Red Bull Team?

Thomas Guilfoyle, USA

Regularly? We do it sometimes. It feels very weird as Red Bull should always be in front of Toro Rosso and it's strange when it happens. People say I'm lucky that the Toro Rosso is such a good car, but it's not great when I'm asked to beat someone called Daniel Ricciardo or Daniil Kvyat in a team that has four times the resources of mine. Yes, it's good, but in another way it shouldn't really be happening and I don't want it to become a trend.



Toro Rosso's Carlos Sainz leads Red Bull's Daniil Kvyat at the 2015 Spanish Grand Prix

a La Ferrari and I wouldn't mind one of those. But in the future when I had a family I'd buy a Porsche Panamera.

F1R: Do you have your Golf at home in London?

CS: No, I have it in Madrid. I get the Tube and bus when I'm in London. I live on the Fulham Road next to the hospital, it sounds posh but I pay less rent than I did in Milton Keynes. I'm so much happier with that move.

F1R: Do you ever go to watch Chelsea?

CS: I live right next to the stadium, but I haven't gone yet. I will try to find some time to go, 100 per cent. But I'm a Real Madrid fan.

Why did you choose car number 55?

Kmail Golab, Poland

Simple story. Racing drivers get bored. And when I was bored I had a crazy idea. I was alone in my hotel and realised that as a Formula 1 driver I had to choose a number. My favourite number is 19, but Felipe Massa already has it. My second favourite was 5, but Sebastian Vettel already has that one. So I went for 55 and I saw that my name with the two 'S's in Carlos and Sainz looked perfect with the logo 55. So it's a good match.

Did you apologise to your grid girl after knocking her with your wing in Austria?

Adam Barnard, UK

I was just focusing on putting my car into the correct grid position and I knocked her with my front wing and my mechanics started laughing at me. Obviously I went to say sorry; if you're a gentleman you have to say sorry. She didn't fall over, it was just a tap – a little kiss.

Are you a candidate to take Kimi Räikkönen's seat at Ferrari next year?

Kent Rose, USA

I wish, but I don't think so. There are many more people in front of me. I would need a very good second half of the season or for something special to happen to have a chance.


If you could race at any past or present Spanish GP venue, which would you choose and why?

Brian Kenney, USA

I love Barcelona, but I would like Madrid to have a circuit. I think the capital of Spain should have a circuit. Okay, we have Jarama, but it is very old. We need a proper, new racetrack.

Is there any story behind your nickname 'Chilli'?

Victoria Palmer, UK

This comes down to the effects of alcohol on my friends. At a party in the past they called me Carlos, then Charlie and I don't know how but it became Chilli... It's nothing to do with me being spicy; it's because of the amount of alcohol my friends had drunk... 

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“You’ve got to have the will to win. My dad said: ‘I’ll give you one year of budget. If you make it, then you’re on your own. And if you don’t, get a proper job.’ Luckily for me, I cracked it and was picked up by Van Diemen”

Hard graft and determination helped **Mark Blundell** fight his way into F1 and success at Le Mans. Now he’s teaching those traits to the next generation

PORTRAITS GLENN DUNBAR/LAT

For young drivers in need of guidance, it’s hard to beat talking to someone who’s been there and done that. And I don’t mean won world championships, dated supermodels and appeared on talk shows. Quite the reverse, in fact.

What you need is a graduate from the school of hard knocks. One who has suffered rejection, survived a massive shunt, been paid a pittance at times and yet come out on the other side with an impressive CV that embraces F1, victories as diverse as Le Mans and the daunting speedways of IndyCar, along with a reputation as a good all-round bloke you wouldn’t want to mess with. That’s the guy you need looking over your shoulder; the sort of mentor prospective employers respect; a London boy with nous.

Mark Blundell fits the bill perfectly, his company MB Partners looking after the interests of, among many, Roberto Merhi, Mike Conway, Gary Paffett and Tom Blomqvist. He remains down to earth and practical, arriving for lunch at the Rupert Brooke in Granchester at the wheel of a Mini (John Cooper Works tuned, of course) and gets stuck into nicely presented fish and chips. You could say it’s an upmarket version of



how Blundell lived when he started in single-seaters 32 years ago at the age of 17...

Maurice Hamilton: In Formula Ford you raced at any opportunity, in every championship that was going. You did something like 70 races in a season. How on earth did that work?

Mark Blundell: That was because I’d come from motocross, an environment where I did three or four races in one day. So, with Formula Ford, I’d go to somewhere like Brands Hatch or Snetterton and there would be rounds of the Champion of Brands, Star of Tomorrow, Dunlop and Esso. And yet you’d have drivers entered for just one of those races. It didn’t make sense. You’re talking

about a tank of fuel, if that, an entry fee, maybe some tyres and wear and tear. You’re already there, so why don’t you enter all the races? Okay, you might have some damage, as we often did, but my learning curve was vertical. Then others caught on and the grids became quite healthy because it was so cost-efficient.

MH: How much importance do you attach to a young guy being hungry, like you were when you started racing whenever you could?

MB: A huge amount. And that translates across all sports. You meet young guys who haven’t really got the hunger to get out of bed in the morning and go and fight for it. I’ll get out of bed in the morning for somebody who’s got the hunger and the level of passion that I had when I was racing. I’ll go all the way with you, but if you don’t feel the same, why should I bother?

With youngsters today, they all want managers. So you ask: “What do you want a manager for?” The stock answer seems to be: “Well, you’re going to get me a deal; you’re going to get me sponsors.” Well, I’ve got news for you: it doesn’t work like that. I’m only as good as you and you’re only as good as me. We need to reach the understanding that if you want this to →



work, you've got to put a lot of work in yourself. There's no magic. And I don't have a wand.

MH: Apart from winning races, you earned a reputation in Formula Ford for being a driver not to be messed with. Was that deliberate?

MB: In many ways, yes. It's because of where I came from. Just to give you a bit of background: I'm the kid who lived on the caravan park. My first bed was the bottom drawer of a chest of drawers and I've got no qualms about telling you that. I'm quite happy about where I've come from and what I stand for. I was always taught that you've got to stick up for yourself; no one else is going to do it for you. But that doesn't mean to say you've got to make your way through life by being an arsehole. Quite the contrary. Saying 'please' and 'thank you' means a lot to me. It costs nothing and yet you don't come across it a lot these days. When people treat you with respect, you return that respect. So, I guess I'm a kind of old-fashioned-values guy and I've tried to instil that in my kids while telling them that, to earn a pound, they'd better understand how to get it. It's not going to fall into their lap.

When it came to racing, I was quite prepared to go into a corner with somebody and not come out the other side because, psychologically, I knew that if they backed out, I'd won. If they didn't back out, I was going in with them – but I knew at the next race, they'd back out. That's how I functioned. Most of the boys in Formula Ford back then were doing it. It was fantastic racing with probably the biggest generation of

guys who actually made it all the way to the top. Johnny Herbert, Damon Hill, Eddie Irvine. A good crop. But yes, it would probably be fair to say I was one of the more aggressive guys off the track as well as on it.

MH: Did you get into verbal punch-ups?

MB: Only if I felt that I'd been taken advantage of; not for any other reason. I remember one weekend at Castle Combe I had a massive bust-up with Bertrand Gachot. He tried to stick me into a concrete post in the wet. When we got back to the paddock, I was fuming. I wanted to punch his lights out, but he wouldn't take his helmet off. Then he made the mistake of lifting up his visor and I managed to get my fingers in. Then the local constabulary waded in and were going to arrest me for breach of the peace! We went to the stewards and it was the same old Bertrand; claimed he couldn't speak a word of English but, as soon as we got out of the stewards' room, it was: "Fuck you!" Perfect English. But, overall, they were great days.

MH: Would you say that your parents have been a big influence on your life?

MB: Yes, they were. My dad left school at 13. My mum taught him how to read and write. He's a survivor; a grafter. He was a motivating force, along with my grandfather. That's why, on my racing helmet, there's always been a little motto: 'The Will to Win'. It's from my grandfather; nothing to do with the sport or anything like that. He worked on the railways and instilled in me that you've got to fight for it; you've got

to have the will to win. My dad was a massive supporter. Without him, I would never have had the funding to do the first year of racing. He said: "I'll tell you what I'm going to do. I'm going to give you one year of budget. If you make it, then you're on your own. And if you don't, get a proper job." Luckily for me, I cracked it and was picked up by Van Diemen the year after in 1984.

During that little process, I fell out with my father in a huge way, because we are so alike. We didn't set eyes on each other for seven months. It was one of those points where I'd gone from being a boy to becoming a man. A number of people around the family network helped put us back in place. One of them was Dave Robertson. We introduced Dave and his son Steve to motor racing [the Robertsons went on to manage drivers including Kimi Räikkönen]. We've never had a cross word since then. And now it goes full circle because, unfortunately, Dad's got a stage four brain tumour. I've now managed to buy back my first-ever racing car, which, of course, he bought me originally – and I'm having it refurbished. I'm looking forward to presenting him with that car and seeing the look in his eyes.

MH: I remember you telling me a nice story about how your father helped you, and then when times were tough for him, you were able to step in and help him out. Most kids can't do that.

MB: He had reached a very interesting stage in his life. He had a property business, a jet, the yacht – all of this after starting from scratch. When the recession came, the banks pulled the rug out from under him. It went full circle because I was earning and managed to give him some funding to help him build himself back up.

MH: You say you were earning, which would have been F1 and beyond. Before that, you jumped straight from Formula Ford to Formula 3000. That must have been a big leap.

MB: It was a case of not having an understanding of what to do or how to do it. When I was doing Formula Ford, we ran our own team. We didn't know what an operating team was. "We'll run it ourselves, no problem." We won a lot of races and had a lot of success. Then I got picked up by Van Diemen as a factory driver. But, along the way, things didn't come together for an F3 drive. So, once again, probably through lack of knowledge but also thinking outside the box, we thought: who says we've got to do F3? Where's

"In Formula Ford it was fantastic racing with the biggest generation of guys who made it all the way to the top"



Damon Hill leads Blundell, approaching Becketts, in British Formula Ford at Silverstone in 1985



A young Blundell with the Lola T88/50, with which he contested the 1988 Formula 3000 championship

the rulebook that says you've got to do it? We'll do F3000. We bought a year-old Lola and made a name for ourselves by doing a few things in that car that we shouldn't really have been able to. Unorthodox, but it worked.

MH: Where was the sponsorship coming from?

MB: We had some sponsors but I had to borrow money from a group of individuals, and also from my father again. It was a good eight or nine years before I could pay them all back – but I did. Coming off the back of the year with the works Lola and with a lot of help from John McDonald, I stepped into the Williams test seat and a world sportscar seat, as well as F3000. I did all three disciplines in the same season. That sort of thing doesn't happen any more.

MH: It must have been a revelation going to Williams, working with Patrick Head and being taken seriously.

MB: John had convinced Frank to put me in the car and see how I got on. I actually did get paid to be a test driver; not a lot, but I was paid. I've always felt that's important. I never sat an exam in my life and I was useless at school, but my self-worth came from being paid as a professional guy for what I did. It just made sense in my head. Rightly or wrongly, I felt that's how it should be. I've got a great deal of respect for Patrick; super-hard but also super-fair. A passionate, table-thumping racer! It was a vibrant time in the history of the team.

MH: Which meant you had this situation where you'd signed to race for Brabham in 1991 and, during the week, you'd test a Williams – the car that had lapped you a couple of times on Sunday.

MB: That's when it dawned on me that no matter how good you were as a driver, you were never ever going to make the difference if the car was

as bad as the Brabham. It's like horse racing; you could be the best jockey in the world but if you're on an old nag you cannot make the difference. If you're on a great horse, you'll complement it and you might win by an extra couple of lengths but the other way round is nigh on impossible. You're only as good as what you drive. I remember there was a test immediately after the grand prix at Imola. I was in the Williams and went round Imola on worn race tyres 2.2 seconds quicker than I had managed on qualifying tyres in the Brabham. Suddenly it clicked. I was actually as quick as Riccardo Patrese, Thierry Boutsen... any of them.

MH: Okay, here's a question based on wasting your time with a back-of-the-grid team: what do you say to Roberto Merhi? He drives for Manor Marussia and you manage and advise him.

MB: It's a good question. The landscape is different in that if we were taking a big pot of gold to the team, you'd have to assess whether it's a valid thing to be doing. But we're not taking a bag of gold; we're being supported by the team, which is fantastic. So we have to treat it as a shop window and Roberto has to get on top of it – which he is beginning to do. It's starting to come good. The problem now is where does it lead? If it doesn't lead to progression within F1, what it may do is help us find an opportunity elsewhere – sportscars, IndyCar – because there's a reference thanks to being in F1. We've got to be realistic. The aim is for my guys to do what they love and get paid to do it. If they can do F1, even better. But you have to be realistic and recognise that window is very small.

MH: And to be fair to Manor Marussia, their effort is sensible and well managed compared to what you had at Brabham, even though, if I recall, they had some very good people there.

MB: Correct. But there was no money. We were running with old brake discs that had been skimmed five times. They couldn't afford to test. They couldn't afford to pay me; my cheque bounced two or three times. Brabham was a big mistake, which was why I went back to test driving, this time with McLaren.

MH: That was a good move. And P1 with Peugeot at Le Mans. That must have been nice, too?

MB: Very nice. I'd already had a little bit of exposure at Le Mans because I'd put the Nissan on pole in 1990. But, again, you come to understand what you need to do to get the job done and I could see the shortcomings with the Nissan operation. I realised I needed →

something on a higher level to make it count. The Peugeot opportunity came about because McLaren were in the early stages of talks with Peugeot about an F1 engine supply. I got to drive with Derek Warwick and I'd always looked up to Derek. The minute you got yourself engaged in that operation you knew you had a chance of winning. The car was fantastic and reliable, the team were great and there were no budget issues.

MH: And you got to work with Jean Todt. Do you agree with just about everyone who has driven for Jean that he was a good guy to work for?

MH: Was this to check on how you were doing and the quality of your feedback?

MB: Almost certainly. It was typical of his attention to detail. As we went through that season, I got to know him better. There were a lot of things I picked up on; things such as the psychology side, which I'd never really thought about. With Senna more than anyone, you began to understand what you needed to do outside the race car as much as when you were in the cockpit. That's an area I work on a lot with the young drivers. Ayrton thought about absolutely

would consider doing that sort of thing with a journalist a waste of time and energy. For a driver with a Latin temperament, it's best to let them get it off their chest.

MH: Talking about allowing someone to get something off their chest, you probably experienced Ken Tyrrell and his so-called 'froth job' when he'd let you know what he thought. But before Tyrrell, you were with Ligier and scored a couple of podiums. Was it an interesting couple of seasons with those two teams?

MB: Definitely. It was because I'd been seen as a test driver for Williams and McLaren and then I got the call from Ligier as a result. I was the first English driver ever to be signed by a French team. And then they go and sign another [Martin Brundle]! I knew we had a half-decent package because there was a Williams rear end on that car. In many ways, we did okay. We had a couple of podiums as you say; some great drives. Although I never won a grand prix, I shared podiums with world champions: Senna, Alain Prost, Michael Schumacher, Damon Hill. You look back and think, yes, it could have been better – but it could have been worse. All in all, Ligier was a fantastic year.

My weakness was that I didn't speak French. In my naivety, I thought that if I spoke in English, they'd have to listen. I couldn't control the political side of it, whereas my good old team-mate spoke French – and Martin is a great politician. And lo and behold, when it came to the end of the season, I was gone and he stayed.

MH: I know you are great mates, but did driving for the same team test that relationship?

MB: I don't think Martin is any different to anyone else on the grid. But I do think there are certain relationships that are stronger than others – and that applied to us. Okay, it was tested to the extreme on several occasions. Neither of us had any qualms about putting the other in the gravel or brake-testing or anything like that. It's dog-eat-dog, and we lived by that. I think the best example was when one of us ended up on the grass at more than 160mph somewhere. We shared a plane home and never even looked at each other, never mind spoke. We each had a newspaper and stayed buried in those. When we got off the plane, it was: "Speak to you next week." "Yeah, speak to you next week." And we walked away. Of course, when we met again, it was as if nothing had happened. Had it been anyone other than Martin, I would probably have torn his head off his shoulders...



With Brabham in 1991: "They couldn't afford to test. They couldn't afford to pay me. It was a big mistake"

MB: Absolutely. He looked after you in a way that showed he understood how to get more out of you. He was very open and would hear what you had to say. That's not to say that everything would get actioned – but he was prepared to listen. There was a firmness about the way he operated. He wasn't over the top, but there was respect both ways. "This is how we're going to get to where we need to be. We've got to do it like this." And because he delivered it with a little bit of charisma, you bought into it. I know a lot of people out there have different views on how he is today, but I have a lot of respect for him. You can only take people as you find them, and that's the only reference I've got for Jean in my book.

MH: Talking about taking people as you find them, how did you get on with Ayrton Senna, who was at McLaren when you were test driver?

MB: McLaren worked for me because, when I did the test role in '92, I was, as you say, testing for Senna and Gerhard Berger. I got to understand a lot about Senna and how he worked. I can never forget the first time I tested for McLaren. Senna turned up mid-morning. He never got in the car, didn't say much, just stood in the garage with headphones on, listening to the feedback. He was there for half an hour and then he was gone.

everything. I sat on the plane with him one day and he had a big book of press cuttings from previous grands prix. All the references to him – from all around the world – had been highlighted for him by someone else and he was reading everything. There was one colour for positive comments and another for negative. He was explaining this to me and he said: "This guy here has made negative comments about me so, when I see him next, I will address it."

MH: And he would. I had the finger jabbing and the questions at Paul Ricard in 1986. I couldn't believe it. This was during practice for the French Grand Prix, yet he was allowing himself to get stoked up – quite irate, actually – over something I had written. Quite extraordinary.

MB: Interesting you say that because I think it was down to cultural differences. The Brits

Winning with Peugeot at Le Mans 1992, alongside team-mate Derek Warwick and boss Jean Todt





Blundell makes it onto the podium in third place with Tyrrell at the 1994 Spanish GP, alongside race winner Damon Hill and Michael Schumacher in second place

MH: Interestingly, Martin also drove for Tyrrell before you. How did your deal come about?

MB: I got picked on merit. I didn't bring any funding. Ken was a great guy and I consider myself lucky to have worked with him. His attitude was: "We can only pay you a bit of money but we want you in the car. Let's see if we can get some results." Regrettably it was an era when money was tight at Tyrrell and we couldn't do all the things we needed to do. The plus was that Yamaha were there. I'd scored Yamaha's first championship point at Brabham and it was great getting back together. There were several things that should never have happened, like brakes exploding because they were so old. That was very costly for us in terms of results.

My other big problem that year was that my team-mate Ukyo Katayama was like a jockey.

Even though I was a slim, fit guy back then, my frame was such that I was one of the heavier drivers. The weight issue penalised me heavily. It was one of those things that used to grind at me because there was nothing I could do about it.

MH: Then you returned to McLaren as a test driver – which became a race seat because Nigel Mansell didn't fit the MP4/10. Did you accept the test drive because there was nothing else?

MB: In effect, yes. Tyrrell were falling off the cliff. There were no drives as a paying proposition, so I said, okay, I'll go to a proper team and test again. My problem was that Ron Dennis knew the position I was in and took full advantage. When Nigel left and the race seat became available, because I had signed my deal as a test driver on test driver money, that's the way it stayed even though I was a race driver.

This was a third of the way through the season and Ron put me on a race-by-race contract as he felt I would function better if I was under that amount of pressure. I said: "If you're going to keep me in the car, pay me properly and respect me as a race driver." He wouldn't do it. We had a huge disagreement. I said he would get more out of me if I felt like an integral part of the team. I outqualified Mika Häkkinen at Estoril in '95. There was a race later on when I was told to move over – actually I got told to move over twice. These things give me knowledge now and add to what I can contribute to young drivers.

MH: It's hardly the image of the romance of being a F1 driver, is it?

MB: No, but it's great grounding. It wasn't easy. I wasn't a young single playboy doing his bit. I was coming home from a race to a shitty nappy. →

"At Ligier, I couldn't control the political side of it. Martin is a great politician... at the end of the season, I was gone and he stayed"



INSETS: LAT ARCHIVE

Race career



Mark Blundell

Born: 8 April 1966

- 1996** Switches to CART World Series with PacWest; scores three wins across five seasons
- 1995** After a year at Tyrrell, returns to McLaren as a test driver and is later promoted to the race team
- 1993** Takes a first F1 podium in South Africa on his debut with Ligier team
- 1992** Wins Le Mans 24 Hours with Peugeot while working as McLaren F1 tester
- 1991** Makes his F1 debut with Brabham, which dovetails with his role as test driver for Williams
- 1987** After winning the European FF2000 titles, moves up to International Formula 3000, scoring a best championship finish of sixth in 1988
- 1984** Starts racing in Formula Ford, taking second place in the British championship in his debut season



INSET: LAT ARCHIVE

“Here – your turn. I’ve been doing this all weekend. You can take over now.” I’m still with my wife, Deborah, 30 years later and she’s rock solid. Without that environment, it would probably have never driven me on.

MH: It took you and the family to North America and CART in 1996. I remember going to see you at Milwaukee and thinking the cars looked fantastic and the racing was just as good.

MB: I was going to stay in F1 and had signed a tentative agreement with Sauber. At the last moment, Red Bull came in as a shareholder and Dietrich Mateschitz and said he wanted a grand prix winner. Johnny Herbert got the seat.

Mercedes were strong supporters and said: “Look, you’ve done a great job for us. We’ll give you an engine deal you can take to the States.” I didn’t get to use it until the year after because I went to PacWest and cut a deal with those guys. They had a Cosworth contract, but the following year they went to Mercedes-Benz. Serious cars: 930bhp, no traction control – I loved it.

MH: You took to the 200mph ovals, didn’t you?

MB: My only regret is that I never got to race at Indianapolis because of the split between the CART and IRL organisations. I did Le Mans, raced at Monaco and I wanted to do the Indy 500. I had five top-six finishes in 500-mile races. One of them I won; in another, I came second.

Test driver Blundell replaced Nigel Mansell in the McLaren MP4/10 at the 1995 Monaco Grand Prix


MH: And the downside was a massive shunt at Rio. You were extremely lucky to survive that.

MB: Yep, very lucky. The disc bell exploded, giving me brake failure at 198mph. The impact was 122G, into concrete. It was coming up to a left-hander and there was nothing but a concrete wall ahead. I knew that if I hit that, I was dead. I took the car down onto the apron and tried to scrub off some speed by hitting Mauricio Gugelmin, my team-mate. It wasn’t the ideal thing to do, but in any case I missed him by inches and bent the steering wheel completely. I took the car down onto the apron and tried to scrub off some speed by hitting Mauricio Gugelmin, my team-mate. It wasn’t the ideal thing to do, but in any case I missed him by inches and bent the steering wheel completely. There was so much momentum, I couldn’t get the car into a spin. It was a colossal impact. Cartilage and muscle stripped off the sternum; lungs and ribs collided; I had a brain clot; my right foot had four fractures where the throttle pedal chopped it across the top. There was a lot of internal stuff.

MH: Any repercussions today?

MB: With a cold tile floor in the morning, my right foot sometimes gives up on me. But given what happened, I’m not complaining.

MH: You’re not complaining about much, Mark, despite it being one hell of a ride at times.

MB: I wouldn’t change a thing. Not a thing. 

WIN

A framed 40 x 30" Lewis Hamilton oil painting on stretched canvas worth £2,000



Greg Tillett is a passionate motorsport fan and professional artist, who has combined his two loves to produce a series of stunning artworks. He was first commissioned to produce a painting of Valentino Rossi in 2001, and further works featuring drivers such as Lewis Hamilton and Fernando Alonso are available as A3 prints or as incredible original oil paintings on 40 x 30 inch stretched canvas.

The Prize:

The competition winner will receive a 40 x 30 inch Lewis Hamilton original oil painting on stretched canvas, worth around £2,000

More information
www.gregtillett.com

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Q In which 2008 grand prix did Lewis Hamilton claim his first Formula 1 win?

- A Canadian Grand Prix**
- B US Grand Prix**
- C Spanish Grand Prix**

Terms and conditions: **1** To enter, visit www.f1racing.co.uk **2** Competition closes at 11.59pm on Sunday 6 September 2015 **3** This competition is open only to UK residents aged 18 or over **4** There is no cash alternative **5** Prizes are non-transferable **6** Only one entry per person **7** The winner will be selected at random **8** The first prize is to win a framed 40 x 30" Lewis Hamilton original oil on stretched canvas worth £2,000 **9** For full terms and conditions, visit f1racing.co.uk/competition
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Why Formula 1 needs



At the heart of Italian motorsport, the Autodromo Nazionale Monza is the altar at which the *tifosi* worship. Yet this evocative circuit, steeped in passion and motorsport history, is at risk because of a very modern problem: a simple lack of money

WORDS RICHARD WILLIAMS

PICTURES MAX PEEF & LAT



the Albergo Sant'Eustorgio in Arcore, just outside the north-eastern edge of the Parco di Monza, photographs of great racing drivers – Mario, Ronnie, Jody, Gilles – line the restaurant walls.

Once upon a time, the Scuderia Ferrari block-booked rooms at the Sant'Eustorgio for the Italian Grand Prix or the 1,000km sportscar race. The Old Man, Enzo himself, was sighted here, too, on his brief visits during the practice days, welcomed with open arms by the hotel's owner, whose son now proudly guards the pictorial display even though the caravan has moved elsewhere.

Wait, though. There's a familiar figure alighting from a taxi in the hotel's tree-shaded garden, walking up to the reception desk. Fifty years after he won the 1964 world championship in

a Ferrari, John Surtees – *il grande John* – is checking in for the grand prix weekend. Here, old habits die hard.

History makes its voice heard at the Autodromo Nazionale Monza, even when it hides behind a layer of modernity. Like atheists entering a great medieval church, those with little or no knowledge of motor racing can find themselves awed by the sense that here the deeds of the present are simply adding another panel to a fresco that was begun long ago.

Monza is one of the few surviving grand prix circuits identifiable from almost any photograph, regardless of age, not just from its specific features – the 180° Parabolica, the Futurist main grandstand, the bridge over the Seraglio Curve – but from its proportions. Yes, there are modern safety features, but this is no supersized Scalextric track, →



Main: The long-disused 2.6-mile Pista di Alta Velocità oval



Above: A view you won't see on TV – Monza's main straight framed by distant mountains. Left: Giuseppe Farina leads Ferrari team-mate Alberto Ascari at Monza in 1953. Right: 1961 Italian GP Roberto Bussinello on the old oval banking



PICTURES LAT ARCHIVE

devoid of personality or challenge, marked out with painted lines like some supermarket car park. As with the swoop and climb of Spa's Eau Rouge and the thrilling anachronism of Monaco's Casino Square, the sight of cars racing at top speed past the beautiful cantilevered grandstand reminds us of that precious and endangered quality of character dictated by topography and architecture, the antithesis of artificial tracks laid out on patches of dead land with no other meaning or value.

"The past is never dead – it's not even past," the novelist William Faulkner said. On a hot September afternoon, everyone seated in the main grandstand can still look back down the track and see the cars emerging from the haze of the Parabolica like little black insects as

they build towards top speed. That sight is much the same in these days of grid penalties and engine-development tokens as it was in the era of carburettors and string-backed gloves.

Few making a first visit to Monza remain unmoved by a first sight of the *Pista di Alta Velocità*, a concrete oval measuring 2.6 miles, where the bankings rear up at an angle steep enough to defeat many who try to clamber up to its rim. Since cars used the speed bowl for the last time more than 40 years ago, the surrounding woodland has matured and the crumbling track now resembles an Inca temple abandoned and overgrown in the jungles of Peru.

If you walk off the old south curve of the banked track, where it flattens out and blends into the road circuit at the exit of the Parabolica,

there's another surprise that isn't revealed by any television lens: a view down the main straight, with the grandstands on the left and the pits on the right, and there, in the far, far distance, the outline of snowcapped mountains. Do the drivers ever notice it as they rocket out of the final turn, preparing to activate the DRS while listening to instructions from their race engineers?

Many things have changed at Monza, but the newer additions can sometimes enhance the spectacle. Fans at the end of the main straight last year witnessed the moment Nico Rosberg handed victory to his Mercedes team-mate Lewis Hamilton by missing his braking point for the first chicane and shooting straight on down the escape road. Soon afterwards Fernando Alonso rolled to a standstill at the same point,



Above: Alberto Ascari on the Monza podium in 1949, celebrating Ferrari's first post-war win



Above: The much-loved Autodromo Nazionale Monza, the home of Italian motorsport

the failure of his Ferrari's engine casting a pall of gloom over the home fans. On the other side of the circuit, at the exit of the Ascari chicane, an observer could enjoy the way the reduced downforce of the 2014 cars was making it harder for the drivers to apply the power smoothly. As they tried to straighten up before heading off down the back straight, the back ends of their machines snaked out of shape in a variety of ways that would not have been on show during the era of blown exhausts, when the cars were cornering as if on rails.

The inaugural Italian Grand Prix took place in September 1921 at Montechiari, outside Brescia. But the following September a permanent track was opened in Monza's royal park, a 20-minute train ride from the centre of Milan. Twice as big

as New York's Central Park, the woodland was easily able to absorb the autodrome.

Speed was an Italian fetish at the beginning of the 20th century, captured in such Futurist paintings as Umberto Boccioni's *Dynamism of a Cyclist* and Giacomo Balla's *Abstract Speed*. At Monza it became the whole point. Where other circuits had corners, architect Alberto Rosselli created a 3.6-mile road course based on high-speed curves – plus the banked oval, which could be incorporated to extend the lap to 6.2 miles. The first foundation stones were laid by Vincenzo Lancia, the founder of the company bearing his name, and Felice Nazzaro, Italy's first grand prix ace. It was built in three months by 3,500 men using 200 wagons, 30 lorries and a specially laid narrow-gauge railway, at a cost of six million lire.

In front of the crowds packing a row of handsome wooden grandstands, the first of Monza's grands prix produced a home win for Pietro Bordoni in a Fiat. The pre-war years featured a succession of distinguished victors, including Antonio Ascari, Robert Benoist, Louis Chiron, Tazio Nuvolari, Luigi Fagioli and Rudi Caracciola, climaxing with three Auto Union wins for Hans Stuck, Bernd Rosemeyer and Nuvolari between 1935 and 1938. The track also became a home for the two-wheeled Grand Prix of Nations, whose winners included Achille Varzi on a 500cc Sunbeam, with Nuvolari scooping a 350cc class hat-trick on his Bianchi.

A pre-war remodelling of the circuit included the building of the new 2,000-seater main grandstand, completed just as racing came to →



Above: Turn 11, the formidable Parabolica, claimed the life of Jochen Rindt during qualifying at Monza in 1970. He became the sport's only posthumous champion

a temporary halt. With the arrival of Allied troops in 1945, the park was commandeered for use as a transport hub. When the Milan Automobile Club regained possession in 1948, little of the track remained undamaged, but restoration work was completed in time for a race that October, won by Jean-Pierre Wimille in an Alfa 158.

Over the next few years, extra grandstands and new pits were added. In 1949, Alberto Ascari won Monza's first post-war Italian GP in a Ferrari, taking further victories on the way to his world titles in 1952 and 1953. Fangio's Mercedes streamliner swept to victory in 1954 and 1955. Moss won three times: in 1956 in a Maserati, in a Vanwall a year later, when the British team trounced the might of Italy on their home ground, and in a Cooper-Climax in 1959, proving the little rear-engined machine to be as effective

on a high-speed track as around street circuits. In 1958, Moss had survived one of the track's most lurid accidents, when the steering broke on his Maserati special at 160mph in the second of the two bizarre 500-mile races in which Indianapolis cars and drivers competed on the oval against outgunned European opposition.

Chicanes began to appear in 1972, putting an end to slipstreaming epics such as the one won by Peter Gethin's BRM the previous year, when the first five finishers were covered by 0.6 seconds. Since the 1,000kms – once a happy hunting ground for Porsche 917s, Ferrari 312Ps and Jaguar XJRs – came to an end in 2008, top-level sports cars no longer race there. But the grand prix remains the focal point of the Italian motorsport year, always stirring hopes that Ferrari will pick up again where Michael

Schumacher, with five victories between 1996 and 2006, left off.

On motorbikes, British riders on Italian 500cc machinery – Geoff Duke on a Gilera, Surtees and Mike Hailwood on MV-Agustas – proved virtually invincible in the late 1950s and early 1960s. But after a pile-up at the Curva Grande cost the lives of Renzo Pasolini and Jarno Saarinen during the 250cc Nations Grand Prix in 1973, motorbikes made only occasional returns.

It would be foolish to claim that Monza's death toll has not helped shape the legend of the place. John Frankenheimer knew exactly what emotions he was engaging when he staged Jean-Pierre Sarti's fatal accident there as the climax to his film *Grand Prix* in 1967. Deaths in the autodrome began with Fritz Kuhn, an Austro-Daimler driver, at the very first race,



Above: The location of Jean-Pierre Sarti's fatal crash at the end of 1969 film *Grand Prix*



Left and above left: Nico Rosberg overshoots the first chicane in 2014, heading down an escape road and handing the win to team-mate Hamilton. Above: Fernando Alonso's Ferrari engine fails on the same lap – his first mechanical failure since 2010 – breaking the hearts of the tifosi

PICTURES LAT ARCHIVE

and included those of Ugo Sivocci, Count Louis Zborowski, Luigi Arcangeli, Giuseppe Campari, Baconin Borzacchini and Count Stanislaus Czaykowski. In 1955 Alberto Ascari, Antonio Ascari's son and already a double world champion, died in a friend's Ferrari sportscar during a private test session; the crash took place at the Vialone curve, since modified and now known as the Ascari chicane. Jochen Rindt was killed at the Parabolica during qualifying in

1970, followed by Ronnie Peterson just after the start in 1978. The most recent fatality involved a fire marshal, Paolo Gislimberti, hit by a wheel that flew off Heinz-Harald Frentzen's Jordan during a multi-car crash at the Roggia chicane on the opening lap of the 2000 Grand Prix. Most dreadfully, the accidents that killed Emilio Materassi in 1928 and Wolfgang von Trips in 1961 also took the lives of spectators: 27 in the first instance, 14 in the second.

If drivers, marshals and spectators were still killed on a regular basis, you could understand why it might be time to move on. But the threat to the oldest circuit still on the F1 calendar is purely a question of money. Now it needs help.

Wimbledon, Kitzbühel, the MCG, the Maracanà, St Andrews: each of their respective sports could survive without them, but they would not be the same. Can it really be that Monza's history and unique ambiance count for so little? If Bernie Ecclestone is so happy to make an exception for Monaco, waiving his usual fee for that particular grand prix due to the Principality's rich heritage, surely Monza – the symbol of Italy's immense contribution to a century of motorsport, and a circuit with an emotional vibrancy to which all others aspire – deserves similar generosity in its time of need. **F1**



LONGINES

M. Andretti



olivetti



Mario Andretti's passion for racing was honed at Monza, and the circuit was the scene of some of his most treasured memories. Then, in 1982, a phone call from Enzo Ferrari allowed Andretti to return to the hallowed ground for one more incredible high...

MONZA'S MOST MAGICAL MOMENT

WORDS PINO ALLIEVI PICTURES LAT ARCHIVE

Monza. A circuit that traced the contours of his heart. A track synonymous with his idol Alberto Ascari. The place where he tried a Formula 1 car for the first time. And the place – ten years later – where he won the world title. And this temple of speed remains the scene of one of the most devoted displays of affection ever seen in Italy: the 1982 Italian Grand Prix, the penultimate F1 race of Mario Andretti's astonishing career.

Mario can't hold back the emotion when he talks about Monza, because the Autodromo Nazionale represents not just part of his career, but part of his life. How could he forget, for example, that terrible Sunday in 1978 when Ronnie Peterson lost his life and Mario won the title? It was joy ruined by despair; Mario and Ronnie were close friends as well as team-mates.

For Mario, this was a shocking blow; a party that was never celebrated. And one he had wanted to celebrate for a long time. Only people who have been exiled from their homeland can truly understand the emotions behind a triumphant return. The Andretti family came from the Istrian peninsula, which after World War II was ceded to Yugoslavia, provoking →

Marshal Tito to encourage his citizens to invade the homes of Italians living there. The Andrettis were well-to-do. Mario's father Gigi managed a collection of farms; Mario's maternal grandmother had a hotel-restaurant. When war broke out, two of Mario's cousins were hanged from a post, while one of his uncles was hurled alive into a *foibe*, one of the natural sinkholes that are a feature of the local landscape.

In 1948 the Andrettis fled their Montona home for the Italian border. They ended up in a refugee camp, first in Udine and then in Lucca. While there, Mario and his brother Aldo got out to see Fangio win the 1954 Italian GP at Monza, while their idol, Ascari, was forced into retirement.

The family had no money, certainty or future, prompting a move to America in June 1955. "When we saw the Statue of Liberty for the first time from our ship, we hugged each other from sheer joy because we knew the nightmare was

over," recounts Mario. "The United States gave me back the life that had been taken away from me, even though the blood running through my veins will always be Italian."

That's why Monza always sends such a shiver down Mario's spine. And the biggest one was probably the moment when, on 30 August 1982, he received a phone call from Maranello, and Enzo Ferrari asked if he would drive the turbocharged Ferrari 126 C2 at the Italian Grand Prix on 12 September.

"I would be delighted if it could be you driving the second 126 C2 alongside Patrick Tambay, replacing Didier Pironi after his accident in Hockenheim," murmured Ferrari.

"Of course I'm available," said Mario, instantly. "I'm taking the first plane from New York and I'll be right with you. Thank you..."

Mario had endured a tough 1981 F1 season with Alfa Romeo, followed by a luckless one-off

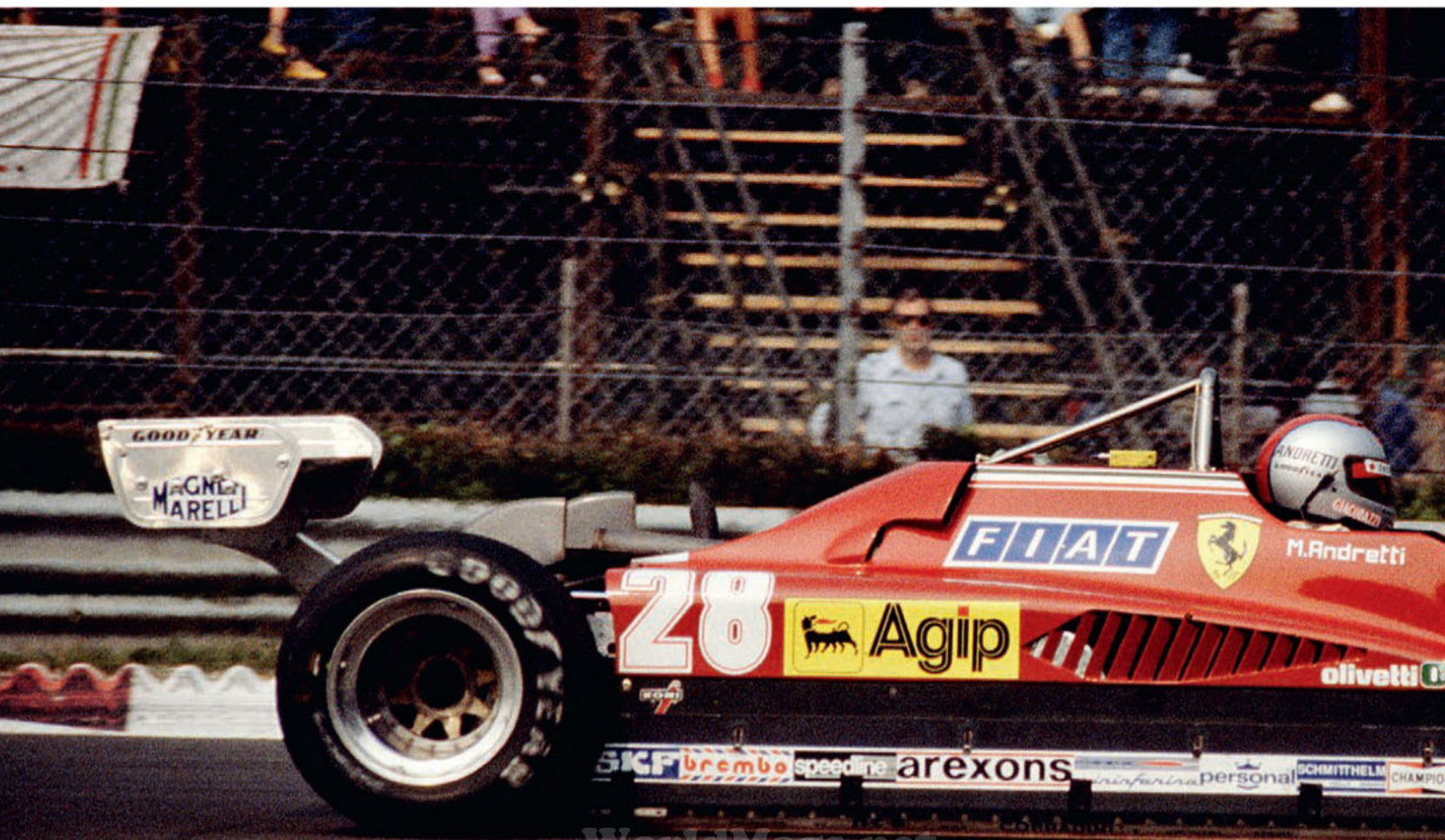
race with Williams at Long Beach in early 1982. He had a contract to drive the Wildcat in IndyCar but had retired at Riverside while leading, ending his chances of winning the title.

On 3 September, Alitalia flight AZ601 touched down at Milan Malpensa. Crowds of journalists, TV crews and fans were waiting there to greet Mario. The airport's director said at the time: "I've seen heads of state, rock stars and Nobel Prize winners land here; they never got such a warm reception..."

Andretti was surprised, but delighted. "I'm 42 and thought I was going to start having a quiet life, but that phone call from Ferrari got all the juices flowing again," he said to the crowds at the airport. Then his speech became more reflective: "This is actually one of the biggest satisfactions of my whole career. What Enzo Ferrari said touched my heart and it's something I'll always remember. I can't wait to see him in person."



"THAT PHONE CALL FROM FERRARI GOT ALL THE JUICES FLOWING AGAIN. THIS IS ACTUALLY ONE OF THE BIGGEST SATISFACTIONS OF MY WHOLE CAREER" **MARIO ANDRETTI IN 1982**



The last time Andretti had driven a Ferrari was in 1971 at the South African Grand Prix. He won. Eleven years later, two hours after touching down at Malpensa, Andretti was already at Maranello, with renowned engineer Mauro Forghieri explaining to him every detail of the 126 C2 Turbo. Then there was lunch with Enzo Ferrari, Ferrari's son Piero, motorsport director Marco Piccinini and press officer Franco Gozzi. They had tortellini, tagliatelle al ragù, roast beef, vegetables, and a glass of Lambrusco. But best of all was the friendly and cordial atmosphere. It was as if Andretti and Ferrari had been together for years. "So Mario," said the *Commendatore*, after his obligatory coffee, "would you like to do some laps of Fiorano tomorrow?"

"No," replied Andretti. "I'd like to drive some today." In the end they didn't get going until 7pm, with Andretti completing 13 laps to get used to the seating position, engine, and gearbox

before it became completely dark. The following day he did 60, culminating in a lap of 1min 07.10secs, just 0.2secs off Didier Pironi's record. Andretti had never even seen Fiorano before. And he had zero knowledge of the 126 C2.


"I was in the pits," recalls Piero Ferrari. "And I couldn't believe what I was seeing. Even Forghieri was amazed. But Mario was just his usual calm and humorous self."

Six days later, the first day of practice for the Italian Grand Prix was a learning session to find the right setup. But Mario said something significant: "This car makes me feel something special." Niki Lauda's prediction at the time was: "Andretti's on top form, and it's going to be a struggle for anybody to stay in front of him."

The following day, like a fairy tale, Andretti took pole and was feted like no other Ferrari driver. The 80,000 or so spectators were almost delirious with joy, waving banners, shouting his

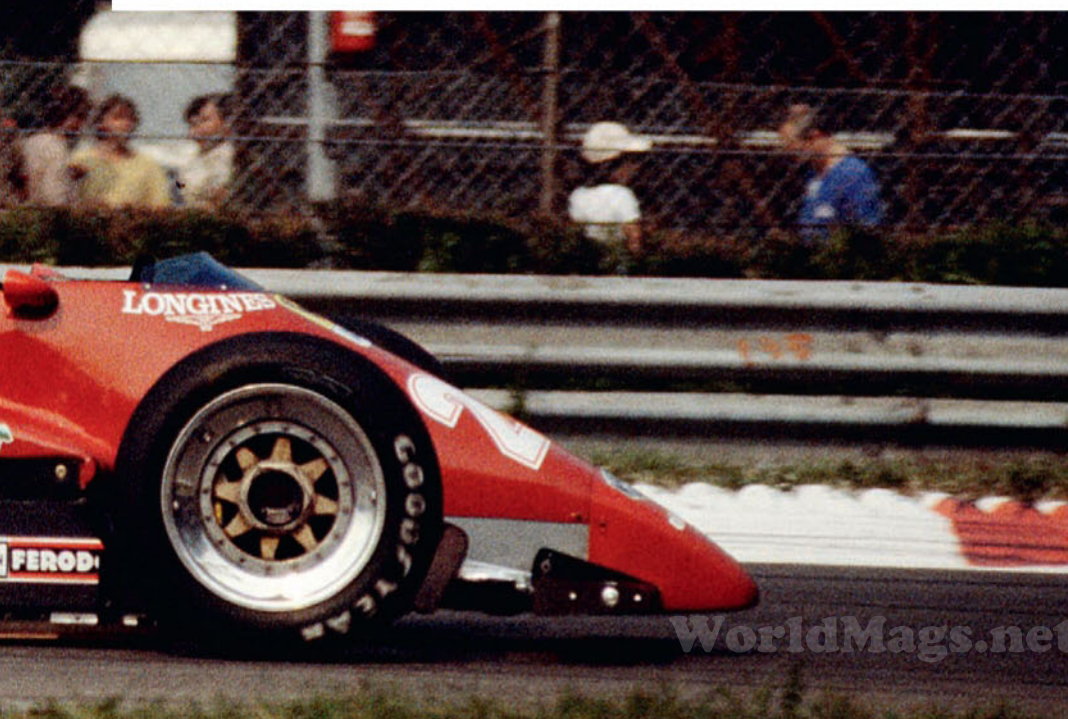
name. This had never been seen in qualifying at Monza before; it was as if Andretti had won the championship rather than setting pole.

In Italy, Andretti's pole was headline news. Enzo Ferrari was straight on the phone from Maranello to congratulate him. It was a magical moment: perhaps the single most magical moment in Monza's long history. Andretti finally felt the heart of his home nation beat for him – a beautiful and unforgettable reconciliation.

There was much more to that pole than being fastest, as Mario and Enzo both knew. Italy's betrayal of the Andretti family is something that can never be forgotten, but from that moment on it became tolerable. And the fact that a throttle problem the following day prevented Mario from winning the race, limiting him to third behind team-mate Patrick Tambay and the Renault of René Arnoux, almost didn't matter. Pole, and the feelings that came with it, was worth more. 



Andretti put his Ferrari 126 C2 on pole (below) to a rapturous response from the crowd, but a throttle problem in the race meant he finished third (above right) behind René Arnoux and Patrick Tambay



When Monza failed to welcome Andretti

Mario Andretti wasn't always as revered at Monza as he was in 1982. Fourteen years earlier, the USAC Champ Car racer was set to make his grand prix debut there – until Italian officials intervened.

Andretti entered the 1968 Italian GP on 8 September in a third works Lotus 49B, but had a clashing commitment to take part in a USAC race on the Indiana State Fairground dirt oval on the Saturday. Along with Bobby Unser (in a BRM), Andretti completed a private test at Monza mid-week and ran in the first part of Friday qualifying before flying to Indiana. His best time of 1min 27.2secs would have put him tenth on the grid.

Andretti left Friday qualifying early to catch his flight to Indiana, going on to finish second in Saturday's USAC race. At the time, rules barred drivers from taking part in a GP within 24 hours of contesting another race. It was rarely enforced, but Italian organisers at Monza applied it to Andretti and Unser.

Having flown overnight and landed back in Monza early on Sunday, Andretti tried to convince officials to let him race, a doctor verifying he was fit to do so. It didn't work. Andretti vowed never to race in Italy again.

James Attwood

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** 17.1% of drink drive accidents are between hours of 5am and 1pm (Source: Dept. for Transport, Road Accidents and Safety Annual Report 2010)

* 4 Pints of Abbot Reserve contain 14.8 units of alcohol (Source: Greene King) and each unit takes 1 hour to leave the body (Source: NHS). Therefore 14.8 hours after 9pm the alcohol will have passed from the body.

FINISHING STRAIGHT

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Seb's second Scuderia success

Ferrari get the better of Mercedes, thanks to a brilliantly controlled performance from Sebastian Vettel, although a hard-charging Ricciardo stole the spotlight

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RACE DEBRIEF

by Anthony Rowlinson

Hungarian Grand Prix

26.07.2015 / Hungaroring



If anyone can, Dan can

Inspired by the spirit of Jules Bianchi, Ricciardo gives it his all to unsettle the usual order in Budapest

To a man they rose in the Hungaroring's grandstands to cheer the warrior they'd seen wield a broadsword in defiance of his rivals and in furious, although ultimately vain, pursuit of victory.

They'd watched Daniel Ricciardo driving at his muscular, athletic best, using his RB11 as a weapon, no less, daring his peers to impede his progress, unafraid of a little 'carbon kissing' along the way.

He and Valtteri Bottas were the first to get intimate, on lap 1 – coming together through T2 in a nudge rough enough to briefly pitch the Red Bull into the air, though with no lasting damage. Then, much later, post-Safety Car and with Ricciardo on softs and Lewis, Nico and Seb ahead on mediums, there was more bish-bash-bosh.

Hamilton got it first, understeering into Ricciardo as Perth's finest grafted around

the outside at T1, on lap 49, to take third. There was damage to the Red Bull's side and floor, but the pass electrified the masses and prompted grandstand rejoicing – a spontaneous, appreciative outburst for a man driving with his heart on the sleeve of his racesuit. Driving, as he'd later confide, in memory of Jules Bianchi, whose passing lent a poignant tone to the 30th edition of the Hungarian GP.

Watching Ricciardo scream out of Turn 5 in chase of Rosberg as the laps ticked from 50s to 60s, was to witness primal driving. The menace of his pursuit was so fierce it made Rosberg's capitulation inevitable, given Mercedes' baffling second-stop choice of harder Pirelli mediums. On grippier softs, Rosberg and Merc would themselves have been hunters, chasing down Vettel who was scampering away into the lead. Instead, they became prey.

How, though, would Ricciardo make his move? His RB11 might have been the fastest thing on the 'ring in the closing quarter, but it was always 6mph slower down the straight than a W06 with a stonking PU106B Hybrid under the hood.

Ricciardo was in no mood to be detained by such footling details, however. He'd won here against the odds a year ago with a Mercedes-humbling virtuoso display and he fancied more of the same. So he did the only thing he could: he used the wonderfully pliable chassis balance achieved this day to wax Rosberg's tail through Turn 14 on lap 63, gain a better exit and be *just* within range at the end of the straight to take a dive into T1.

"I was close, although not close enough," he said, "but I'd decided that I was going to do something that lap, no matter what. It was late, for sure, but it was clean."

It was a hugely ambitious move and just about clean, but Rosberg's no patsy and refused simply to let Ricciardo past. Somewhat inevitably, then, contact number three for Dan came between his right-front-wing endplate and the left-rear Pirelli of Rosberg. The resulting damage to the RB11 necessitated a pitstop for a new nose, while Rosberg, who'd been eyeing a net points gain over Hamilton, was dumped briefly out of the points with an enforced tyre change. Eighth would be his scant reward, two places behind Hamilton, whose afternoon was undone by a marauding Ricciardo and a fumbled early pass on his team-mate.

Dan's final clash spelled the end for his victory hopes; he'd finish third, head down, game on, setting fastest lap with just one tour remaining. It was the drive of a man on a mission. "That was definitely for Jules," he said. "I left everything out on track. I drove inspired and with a heavy heart, but a strong heart. I could have settled for third and accepted that but I knew I had a chance to win, so I went for it."

Perhaps Ricciardo deserved more than third place and, later, he was privately dejected that a victory he could taste had slipped away. But for Red Bull, the two-three they took home, thanks also to Daniil Kvyat's rather calmer run to second, was welcome succour in a season so far soured by acrimony between the team and engine partner, Renault. Both will surely build on this.

As, most likely, will Ferrari, and Vettel. This win, Seb's second in scarlet and a Senna-equalling 41st, was top-drawer, classy and controlled. Its foundation was an audacious, reflexive launch-attack-pass sequence from the grid. Anyone who still doubts that Vettel is the realest of deals should watch and re-watch the laser precision of his move on Hamilton from the second row to P1. Stunning.

Emotional post-race, as many were throughout a race weekend that followed Bianchi's funeral in Nice, Vettel nonetheless managed to bring some welcome levity to proceedings. Reflecting on his first grand prix win at this modestly brilliant circuit, he declared, tongue firmly in cheek, his disappointment at the change in podium trophy hardware from the traditional Hungarian porcelain: "So, I'm 99.8 per cent happy today. I was looking forward to that – not that I have a crush on porcelain or a weakness for it, but I think it belongs to this grand prix."

How Mercedes would have welcomed a trophy of any kind from this race. On form, Lewis and Nico were expected to replicate their grid one-two into a facsimile finish, but some smart, aggressive and opportunistic rivals tore up that script and wrote something altogether more riotous, to send F1 – praise be – into the summer break with a smile on its face. **F1**

The story of the race

V Ferrari duo Sebastian Vettel and Kimi Räikkönen jump both Mercedes at the start



HUNGARORING



> Lewis Hamilton runs wide at the chicane on lap 1, dropping to tenth



> A front wing failure on lap 43 puts Nico Hülkenberg out of the race, later bringing out the Safety Car



> Racing resumes on lap 49, with Rosberg passing Räikkönen for second place. Räikkönen later retires



< On the same lap, Hamilton and Ricciardo clash fighting for fourth



< Ricciardo makes contact trying to pass Rosberg on lap 64. Both pit and Kvyat takes second place



V Hamilton passes Grosjean on lap 69 to move into sixth, two spots ahead of title rival Rosberg

> After 69 frantic laps, Vettel secures his second victory of 2015



MAIN PHOTO: SAM BLOXHAM/LAT. ILLUSTRATION: ALAN ELDRIDGE. INSETS: STEVE ETHERINGTON/LAT; SAM BLOXHAM/LAT; CHARLES COATES/LAT; STEVEN TEE/LAT

Hungarian Grand Prix stats

The lowdown on everything you need to know from the weekend at the Hungaroring...

THE GRID



1. HAMILTON

MERCEDES
1min 22.020secs Q3



3. VETTEL

FERRARI
1min 22.739secs Q3



5. RÄIKKÖNEN

FERRARI
1min 23.020secs Q3



7. KVYAT

RED BULL
1min 23.332secs Q3



9. VERSTAPPEN

TORO ROSSO
1min 23.679secs Q3



11. HÜLKENBERG

FORCE INDIA
1min 23.826secs Q2



13. PÉREZ

FORCE INDIA
1min 24.461secs Q2



15. ALONSO

MCLAREN
NO TIME IN Q2



17. ERICSSON

SAUBER
1min 24.843secs Q1



19. MERHI

MANOR
1min 27.416secs Q1



2. ROSBERG

MERCEDES
1min 22.595secs Q3



4. RICCIARDO

RED BULL
1min 22.774secs Q3



6. BOTTAS

WILLIAMS
1min 23.222secs Q3



8. MASSA

WILLIAMS
1min 23.537secs Q3



10. GROSJEAN

LOTUS
1min 24.181secs Q3



12. SAINZ

TORO ROSSO
1min 23.869secs Q2



14. MALDONADO

LOTUS
1min 24.609secs Q2



16. BUTTON

MCLAREN
1min 24.739secs Q1



18. NASR

SAUBER
1min 24.997secs Q1



20. STEVENS

MANOR
1min 27.949secs Q1

THE RACE



THE RESULTS (69 LAPS)

1st	Sebastian Vettel	Ferrari	1h 46m 09.985s
2nd	Daniil Kvyat	Red Bull	+15.748s*
3rd	Daniel Ricciardo	Red Bull	+25.084s
4th	Max Verstappen	Toro Rosso	+44.251s
5th	Fernando Alonso	McLaren	+49.079s
6th	Lewis Hamilton	Mercedes	+52.025s
7th	Romain Grosjean	Lotus	+58.578s
8th	Nico Rosberg	Mercedes	+58.876s
9th	Jenson Button	McLaren	+67.028s
10th	Marcus Ericsson	Sauber	+69.130s
11th	Felipe Nasr	Sauber	+73.458s
12th	Felipe Massa	Williams	+74.278s
13th	Valtteri Bottas	Williams	+80.228s
14th	Pastor Maldonado	Lotus	+85.142s**
15th	Roberto Merhi	Manor	+2 laps
16th	Will Stevens	Manor	+4 laps - vibration

*Includes ten-second penalty for leaving the track and gaining an advantage
Includes ten-second penalty for overtaking before the SC1 line at the end of Safety Car period *Includes five-second penalty for speeding in the pitlane

Retirements

Carlos Sainz	Toro Rosso	60 laps - broken hose
Kimi Räikkönen	Ferrari	55 laps - MGU-K unit***
Sergio Pérez	Force India	53 laps - brakes
Nico Hülkenberg	Force India	41 laps - accident

THROUGH SPEED TRAP (QUALIFYING)



Fastest: Felipe Massa, 199.58mph

Slowest: Roberto Merhi, 186.29mph

TYRE COMPOUNDS USED



Soft Medium Intermediate Wet

CLIMATE

Sunny 22°C

TRACK TEMP

41°C

FASTEST LAP



Daniel Ricciardo, lap 68, 1min 24.821secs

FASTEST PITSTOP



Felipe Massa, 21.502secs (entry to exit)

DRIVERS' STANDINGS

1st	Lewis Hamilton	Mercedes	202pts
2nd	Nico Rosberg	Mercedes	181pts
3rd	Sebastian Vettel	Ferrari	160pts
4th	Valtteri Bottas	Williams	77pts
5th	Kimi Räikkönen	Ferrari	76pts
6th	Felipe Massa	Williams	74pts
7th	Daniel Ricciardo	Red Bull	51pts
8th	Daniil Kvyat	Red Bull	45pts
9th	Nico Hülkenberg	Force India	24pts
10th	Romain Grosjean	Lotus	23pts
11th	Max Verstappen	Toro Rosso	22pts
12th	Felipe Nasr	Sauber	16pts
13th	Sergio Pérez	Force India	15pts
14th	Pastor Maldonado	Lotus	12pts
15th	Fernando Alonso	McLaren	11pts
16th	Carlos Sainz	Toro Rosso	9pts
17th	Jenson Button	McLaren	6pts
18th	Marcus Ericsson	Sauber	6pts
19th	Roberto Merhi	Manor	0pts
20th	Will Stevens	Manor	0pts
21st	Kevin Magnussen	McLaren	0pts

CONSTRUCTORS' STANDINGS

1st	Mercedes	383pts	9th	McLaren	17pts
2nd	Ferrari	236pts	10th	Manor	0pts
3rd	Williams	151pts			
4th	Red Bull	96pts			
5th	Force India	39pts			
6th	Lotus	35pts			
7th	Toro Rosso	31pts			
8th	Sauber	22pts			



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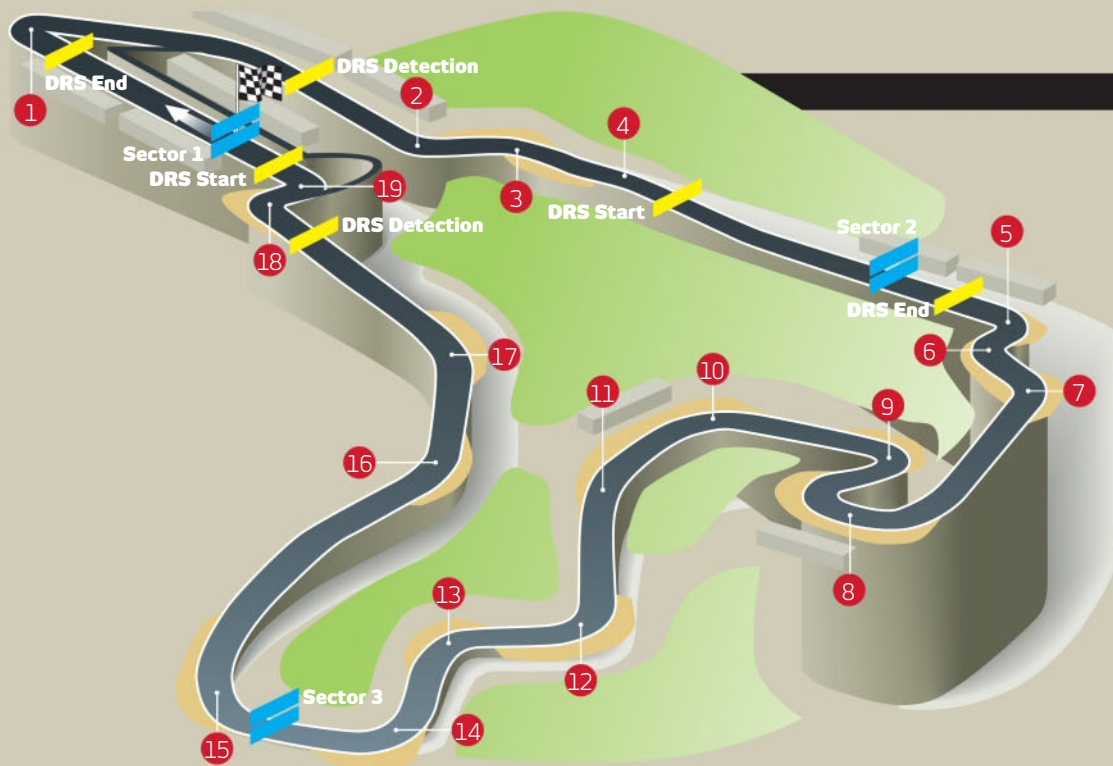
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The Belgian GP preview

Round 11 / 21-23 August 2015 / Spa-Francorchamps, Belgium



BELGIAN GP RACE DATA

Circuit Name Circuit de Spa-Francorchamps
First GP 1950
F1 races held 47
Circuit length 4.352 miles
Race distance 191.414 miles (44 laps)
Direction Clockwise
Winners from pole 15

TV TIMETABLE (UK TIME)

Friday 21 August

Practice 1 09:00-10:30

Practice 2 13:00-14:30

Saturday 22 August

Practice 3 10:00-11:00

Qualifying 13:00-14:00

Sunday 23 August

Race 13:00

Live coverage BBC and Sky Sports F1

RACE NOTES: A LENGTHY AND OLD-SCHOOL CLASSIC TRACK

The high-speed circuit, with a string of testing corners, makes for an exhilarating grand prix, with weather playing havoc with strategy

Just four circuits from the inaugural F1 world championship season in 1950 remain on the calendar, and while Spa-Francorchamps has been extensively reworked over the past 65 years, it retains more of an 'old-school' feel than any other. It's a challenging track that rewards the brave and committed.

Spa is packed with classic corners, and the fact that it's the longest circuit on the calendar only adds to the challenge. Mixed weather can make strategy difficult, and the long lap can lead to time loss if a driver is caught out on worn rubber or the wrong tyre for the conditions.

Kimi Räikkönen loves this track and has won here four times – more than any other active driver. His last was in 2009, when he scored Ferrari's sole win of the year. Could victory this year help his future job prospects?



Kimi Räikkönen, a four-time Belgian GP winner, last won here in 2009 for Ferrari

PACE NOTES: THE KEYS TO SUCCESS

Learn to compromise

The first and final sectors are all long straights and high-speed bends, but the middle section is more technical so teams must balance the setup between the two.

Aaah, the fickle Ardennes...

Rain showers are common in the Ardennes region, and on a circuit as long as Spa that frequently leads to mixed conditions that make tyre choice and strategy very difficult.

Work those tyres

Spa is especially tough on tyres. The vertical loads on a tyre through Eau Rouge and Radillon can often exceed 1,000kg.

Key corner

Pouhoun, the double left-hander tackled at around 150mph, requires a well set-up car to get it right.

WHAT HAPPENED IN LAST YEAR'S RACE...?

Winner Daniel Ricciardo
Margin of victory 3.383 secs
Fastest lap 1m 50.511s, N Rosberg
Safety Cars 0
Race leaders 4
Pitstops 46
Overtakes 37



Escalating tension between Mercedes team-mates Lewis Hamilton and Nico Rosberg finally boiled over with contact on lap two as Rosberg tried to pass Hamilton into Les Combes. The incident put Hamilton out, and delayed Rosberg. The beneficiary was Daniel Ricciardo, who resisted a recovering Rosberg's late charge to take an unexpected victory.

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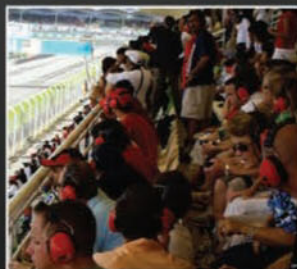


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The Italian GP preview

Round 12 / 4-6 September 2015 / Monza, Italy



ITALIAN GP RACE DATA

Circuit Name Autodromo Nazionale Monza
First GP 1950
F1 races held 64
Circuit length 3.599 miles
Race distance 190.586 miles (53 laps)
Direction Clockwise
Winners from pole 22

TV TIMETABLE (UK TIME)

Friday 4 September
Practice 1 09.00-10.30
Practice 2 13.00-14.30
Saturday 5 September
Practice 3 10.00-11.00
Qualifying 13.00-14.00
Sunday 6 September
Race 13.00
Live coverage Sky Sports F1
Highlights BBC

RACE NOTES: AN ATMOSPHERIC END TO THE EUROPEAN STAGE

Fans and teams are treated to another classic venue, before Formula 1 embarks upon its next round of fly-away races

The European portion of the Formula 1 season ends at the most atmospheric circuit of them all: the Autodromo Nazionale Monza. And all eyes will be on new Ferrari team leader Sebastian Vettel.

Vettel has already enjoyed three victories here, including his memorable maiden career win for Toro Rosso in 2008 – although success in his first Italian GP for Ferrari would likely top the emotion even of that.

That said, Monza's long straights and tight corners put a real emphasis on engine power, which is much more likely to favour the works Mercedes pairing of Lewis Hamilton and Nico Rosberg. Hamilton's victory here in 2014, during which he pressured Rosberg into two spins, really marked the start of his charge to the world championship.



Vettel took his maiden F1 victory at Monza for Toro Rosso back in 2008

PACE NOTES: THE KEYS TO SUCCESS

Small wings, big brakes

Long straights dictate that cars will run with low downforce, putting emphasis on engine power. The slow, tight chicanes at the end of the straights strain the brakes, so managing them is key.

Tough on tyres

High speeds combined with low downforce means cars slide around here. So Pirelli will bring easier-to-nurse soft and medium compounds this year.

One stop or two?

Teams usually stop just once, but the softer tyres this year could reward a more aggressive strategy.

Key corner

The first chicane isn't exactly a classic, but since it comes at the end of the main straight, it is the best place to make an overtaking move. It is particularly treacherous at the start of the race.

WHAT HAPPENED IN LAST YEAR'S RACE...?

Winner Lewis Hamilton
Margin of victory 3.175 secs
Fastest lap 1m 28.004s, L Hamilton
Safety Cars 0
Race leaders 2
Pitstops 23
Overtakes 35



Lewis Hamilton started from pole, but a software glitch meant he was fourth off the line. He battled back, and a pair of mistakes by team-mate Nico Rosberg at the first chicane gave Hamilton the edge. There was disaster for Fernando Alonso in Ferrari's home race, when he suffered his first retirement due to a mechanical problem since 2010.

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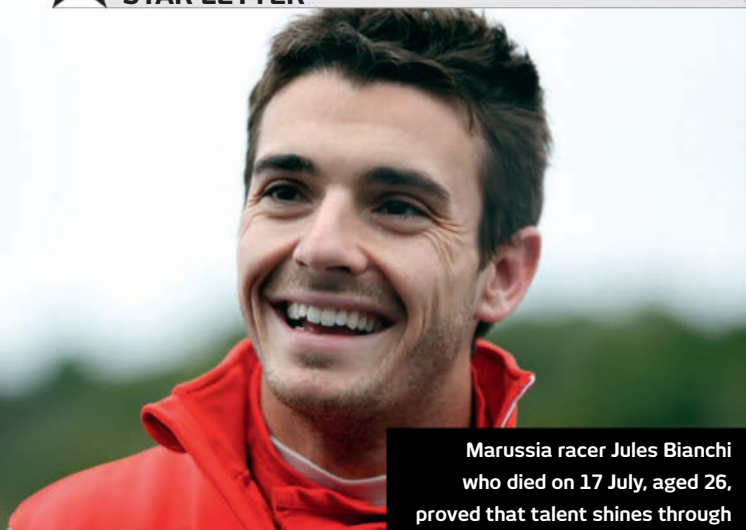
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★ STAR LETTER



Marussia racer Jules Bianchi who died on 17 July, aged 26, proved that talent shines through

Jules Bianchi: an inspiration to a future generation

Like the rest of the F1 community, I should like to pass on my condolences to the family of Jules Bianchi for the loss of their son, whose life tragically ended nine months after the crash at the Japanese Grand Prix.

While attention is focused on the front of the grid during race weekends, it is easy to overlook the contribution made by those at the back. The underdogs we cheer. The future drivers we hope to see at the front of the grid driving for the big teams. Jules Bianchi was such a driver. His manner on and off track was impeccable. His image was that of a hard-working, unassuming and friendly young man who never sought to hog the limelight.

His points in Monaco in 2014 made him driver of the season for me and gave true F1 fans a glimmer of hope that, in a season of one-team, two-driver dominance, the underdogs can have their moment.

A future Ferrari driver. A potential champion. An inspiration to a future generation. His contribution to F1 will be long remembered. RIP Jules.

Adrian Townsend
Retford, UK



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Who's really in charge?

I read the results of your F1 Global Fan Survey (*F1 Racing*, August) with great interest. Many points I agreed with; some not so much. What did surprise me, however, was that there were no questions regarding the team radio contact.

While this is supposed to be limited these days, there is still too much information provided to the drivers. If we want to make F1 true racing and improve the competition and spectacle, this should be the first area to be changed. Radios are great for warning drivers of dangers, informing them of penalties, and congratulating them. That is all. Leave it to the drivers to decide when to change tyres, how to preserve fuel and brakes etc, otherwise, we may as well move to driverless cars.

Forget bringing back refuelling, stick with a single tyre supplier and tyre restrictions, but hand responsibility for managing the cars back to the drivers. Maybe I'm a purist but it seems a pretty simple solution to me.

Gill Chesney

By email

F1R: From the Belgian Grand Prix onwards, the FIA will limit pit-to-car radio communication. For more on this story turn to p24.

Less noise, more families

I'll admit I was crestfallen at Silverstone last year when I heard the new car noise for the first time. I spent the next eleven and a half months dithering about whether or not to book my 2015 tickets.

Due to Silverstone's widely publicised ticket-price reduction offer, not only was I there, but I also took my wife and our young son. We had a spectacular weekend. I felt such pride and excitement

knowing that we were creating a little bit of family history for ourselves.

Would I have taken my little boy along knowing he was in for an onslaught of ear splitting noise from dawn to dusk? I'm not so sure. Of course we made sure he wore ear defenders, but even so I don't think my wife (who has a reasonable interest in the sport) would have enjoyed it so much and would have been happy to spend so much time around the circuit soaking it all in and enjoying the festival atmosphere of the campsites.

As Eric Boullier noted in response to your Global Fan Survey: "More families are coming because it's less noisy." Well, I can certainly vouch for that.

I still have huge reservations about the noise, but now have a dilemma I never thought I'd face about the plans to re-introduce the spine-tingling grunt that is missing. Perhaps, as ever, it will be that my wife who has the final say...

Hedd Piper

Aberystwyth, UK

F1's new recruit

I recently attended the British GP weekend and took with me a friend who had barely watched a race on television, let alone knew the ins and outs of Formula 1.

During our journey to the circuit on Friday morning I explained the rules and regulations to him and gave a brief overview of the history of the sport (he'd only ever heard of Michael Schumacher and Lewis Hamilton). I also mentioned that F1 has been getting a lot of negative press lately due to the dominance of Mercedes and the cars and rules being too complicated.

By the time we left the circuit on Sunday evening, my friend could not believe what he'd seen. A classic race, mixed weather, fast cars, skilled drivers, a home win, but, most importantly, an incredible number of people in attendance. He was overwhelmed. As we headed back, he said he could not believe the thousands of people who stayed

behind after the race just to catch a glimpse of Lewis. "You don't get that at football," he said. I felt proud to have introduced someone to F1 who then ended up enjoying it more than I expected!

The best part was when he said, "I don't know why it's been getting all of these bad headlines – you can't please everyone I guess. It's amazing! When's the next race?"

Craig Curtis
Swansea, UK

New solutions needed

The results of your recent fan survey didn't necessarily surprise me, but I don't think introducing some of the things the fans want would make F1 any better.

Your results show that 64.5% have been watching F1 for more than 15 years and clearly want a return to what they perceive to be the golden age of the sport. But would that really be any better than the current F1?

Things like refuelling have been taken out for a reason, be it cost, safety or something else. I don't think customer cars are a great idea either. If I were Mercedes and another team wanted a chassis, I wouldn't be selling them the newest and best version. It would be an old one that wasn't nearly as good, which means all we'd have is a mid-grid full of out-of-date cars, which would, as pointed out by various people, make F1 a two-tier sport.

For a better sport, don't we want to cherry pick the best parts from the past and encourage designers

to think outside of the box to bring out the next generation of Adrian Neweys and Ross Brawns?

Sophie Carby
Ayrshire, Scotland

Less doom and gloom, please

How do you expect fans to remain engaged with F1 when the media seems only to be interested in its failings? It has become unfashionable to be enthusiastic and passionate about the sport. Of course there are problems, such as the uneven distribution of revenue, but is all this doom-mongering really necessary?

It seems that every article I read is despairing at some crisis or another, spelling out to fans exactly why the sport they love is unappealing, failing and nowhere near as exciting as in the good old days. While journalists dedicate column inch after column inch to engine noise, fuel saving and team domination, the very real problem of pay-to-view F1 is largely dismissed – 46million of the 50m people who stopped watching in 2013 were from China and France when fees were introduced.

The last few years have included some incredible racing, and there has been a brilliant cast of drivers including some exciting new talent.

Although I'm a massive fan of this magazine, I can't help but feel you should spend more time telling us why we should be watching F1 rather than why we shouldn't.

Anna Duxbury
By email



Anna Duxbury asks: with incredible racing, a brilliant cast of drivers and obvious support, why do we keep focusing on F1's negative aspects?

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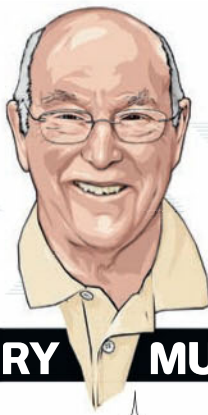
Mercedes' German ace on bouncing back from his 2014 defeat and why he can be a world champion

- > Special analysis: who is Britain's greatest world champion?
- > A day in the life of McLaren's Jenson Button
- > David Brabham reflects on his career with Maurice Hamilton

ISSUE ON SALE 10 SEPTEMBER*

*CONTENT'S SUBJECT TO CHANGE

MURRAY WALKER



UNLESS I'M VERY MUCH MISTAKEN...

"My association with the daunting Belgian Grand Prix circuit at Spa-Francorchamps goes back a fair bit.."

I first went there as a child in the 1920s when my father, Graham Walker, was a works rider for the Norton, Sunbeam and Rudge-Whitworth motorcycle race teams. In those days, it was the fabled 8.75-mile circuit, first used in 1925 and since reduced to 4.35 miles, with, as I once embarrassingly remarked: "Lots of gradient – not just up, but down as well!" In either form it was, and is, a major challenge and, for my money, it is still by far the best GP circuit of them all.


I recall Freddie Dixon, the wild pre-war car and motorcycle ace, shooting out the Spa street

lights with the FN pistol he'd been awarded for his Belgian GP victory and then preventing a police-car chase by stuffing a potato up their exhaust pipe. I'd like to say that I've enjoyed every visit, but that would be an exaggeration. In the bitter winter of 1944, I was involved in the Battle of the Bulge in my Sherman tank, as Hitler's Wehrmacht made a last effort to reverse the flow of World War II in the West by trying to lunge through the Ardennes to the French coast. I certainly wasn't thinking too much about the glories of the nearby Spa circuit then!

Years later, I went back time after time, to do BBC and ITV commentaries for the F1 Belgian GPs from 1978 to 2001, races that were almost invariably enlivened by the Ardennes weather. In glorious conditions, under clear blue skies and blazing sunshine, the track could be bone dry – only for black clouds to gather, resulting in a sudden deluge of torrential rain onto parts of it, calling for numerous frenzied strategy changes.

So many memories. Like 1987: round three. Nigel Mansell, leading the championship in his Williams, started from pole with Ayrton Senna third in his Lotus. Nigel lost the lead but tried to pass the Lotus on the outside, exiting the terrifyingly fast Pouhon left-hander. Contact, and they both spun off! Senna was out but Mansell continued for 17 laps before retiring. Racing incident? Nigel didn't think so when he appeared in the Lotus garage. "I knew he hadn't come to apologise when he got me by the throat," recalled Senna. It took three mechanics to separate them.

There was a similar adrenaline-fuelled dust-up 11 years later in 1998. It was one of the most dramatic Belgian Grands Prix of them all, run in appalling conditions that led to just eight of the 22 starters finishing the race. On lap 26, following a massive 12-car pile-up at the start, Michael Schumacher's Ferrari slammed into the back of David Coulthard's McLaren, ripping off the Ferrari's right front wheel. Back in the pits a grim-faced Schumacher stormed into the McLaren garage. "Are you trying to kill me?" he shouted as he was dragged away from an impassive Coulthard. All part of F1's rich pattern. That was the race, incidentally, where Damon Hill underlined his class by taking the Jordan team's first victory after a thrilling end-of-race battle with his team-mate Ralf Schumacher.

Needless to say, I made the most of this rich drama, but my biggest Belgian challenge was in 1989 when my co-commentator, James Hunt, failed to turn up. To compensate for his absence we got drivers who retired – there were plenty of them, with the race held in awful conditions – to join me in the box and tell us how it was. One of them was Martin Brundle, making a first behind-the-mike appearance, and he was so good that BBC producer Mark Wilkin made a mental note. With Martin now one of the world's top sports pundits, the rest, as they say, is history. 



"At Spa 1998, Michael Schumacher's Ferrari slammed into David Coulthard's McLaren, ripping off the Ferrari's right front wheel"





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