MASSA: Paddock favourite quizzed by his F1 rivals



F1 RACING NOVEMBER 2016 NUMBER 249 THE WORLD'S BEST-9

THE WORLD'S BEST-SELLING GRAND PRIX MAGAZINE

JENSON BUTTON: WHY I REALLY QUIT F1







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Swiss movement English heart

Christopher Ward 6



76

48

70 84 34 **COVER STORIES**

FIRST SECTOR: THE REGULARS

- **IGNITION WHAT'S THE PROBLEM, LEWIS?**
- 8 **PARADES THE VERY BEST F1 PHOTOGRAPHY**
- 14 **F1 INSIDER NEWS, OPINION AND ANALYSIS**
- **INSIDE TECH** THE SCIENCE BEHIND WHEELS AND HUBS 28
- PETER WINDSOR HIS TOP FIVE F1 HOMES-ON-THE-ROAD 30
- 33 **DIETER RENCKEN COCA-COLA HAS LESSONS FOR LIBERTY**
- 56 **NOW THAT WAS A CAR THE LIGIER JS17**
- SUBSCRIBE AND GET A McLAREN HONDA RUCKSACK

SECOND SECTOR: THE FEATURES



We sit down with the McLaren ace and 2009 world champion to find out who made the decision about his 2017 hiatus

MEET BUTTON'S REPLACEMENT

Stoffel Vandoorne steps into Button's shoes for 2017. having proved he's more than capable of filling them after that point-scoring debut at this year's Bahrain Grand Prix

THE ORANGE ARMY

Flying the Dutch flag for Red Bull rising star Max Verstappen, is a legion of passionate home supporters. We go behind the frontlines at the campsites of Spa to meet the troops

THE ROAD TO HELL

We speak to the drivers to find out why the Singapore Grand Prix is the toughest challenge they face all season

WHEN HUNT MET MOSS

Maurice Hamilton uncovers a free-wheeling interview between the 1976 world champion and Stirling Moss

THEY ASK THE QUESTIONS

As Felipe Massa comes to the end of his final season in Formula 1, his peers have a few queries they want answered

HERO'S HERO

Toro Rosso team boss, Franz Tost, opens up about the racing driver who inspired his passion for F1, Jochen Rindt

HISTORY OF FORMULA 1: PART 11

In the penultimate part of our series, we follow Formula 1 into a new millennium, when disagreements over the sport's accumulating riches threatened to tear it in two



34 BUTTON On why he'll sit out 2017 to act as a McLaren ambassador



THIRD SECTOR: FINISHING STRAIGHT

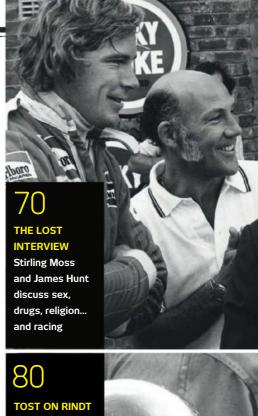
- **SINGAPORE GP DEBRIEF ROSBERG IS UNSTOPPABLE** 96
- MALAYSIAN GP DEBRIEF ENGINE WOES FOR LEWIS
- 104 JAPANESE GP DEBRIEF MERCEDES TAKE THE TITLE
- 108 US GP PREVIEW A LITTLE BIT OF EVERYTHING IN AUSTIN
- 109 MEXICAN GP PREVIEW HIGH ALTITUDE; HIGH SPEED 110 BRAZILIAN GP PREVIEW CARNIVAL FUN IN INTERLAGOS
- 112 INBOX THE CHANGES F1 SHOULDN'T MAKE
- 114 DAMON HILL WHAT WILL F1 BE LIKE WITHOUT BERNIE?



MASSA Answers questions about the pressures of Ferrari and his next move



HISTORY OF F1 Cash creates discord as F1's commercial rights go on sale









Ignition / Anthony Rowlinson / 11.16

Can you get it back on track, Lewis?



Follow Anthony on Twitter: @Rowlinson F1

Oh, Lewis, what can the matter be? You haven't won a race since the German GP in July and now, for the first time in your four F1 seasons as team-mates, Nico Rosberg looks as if he might win the title – and he's driving like a man who believes he can. Your triumphant crowd-surfing at Silverstone, where you blitzed the British GP to close to within a point of Nico at the top of the

drivers' table, already seems a lifetime ago.

To be fair, an apparently certain victory in Malaysia was snatched from you by a 'big end' bearing failure, and comeback drives in Spa and at Suzuka showed you've lost none of your speed, elan, or gift for theatre.

In Singapore, though, you were bested by a Rosberg who joined up probably his most seamless race weekend ever after outqualifying you by 0.7s – a huge margin, given the usually fine slivers of time that separate you on Saturdays. Then, in Japan, you had provisional pole snatched away by Nico; the kind of morale-sapping trick we're used to seeing from you, Lewis. And in both Japan and Monza, start-line woes of some kind compromised your getaways, to leave you playing catch-up.

In isolation, the odd instance of bad luck or imperfect judgement can be seen as nothing more than statistical outliers. Taken together, particularly when you have a team-mate on the form of his life, they begin to describe the tale of a championship slipping from your grasp.

But more than this, Lewis, there's the suspicion that you may in fact be the author of your own misfortune; that the absolute intensity and focus needed to beat a team-mate as hungry, indomitable and, yes, as talented as Nico Rosberg, has wavered.

It's not a great idea to use Snapchat in the FIA press conference, Lewis. Sorry if you've started to find them dull in your tenth season as an elite sportsman, but you're paid tens of millions of dollars a year in part to put up with these moments of tedium and, believe it or not, we actually *do* want to hear what you have to say. (Not so interested in your sketches of Carlos Sainz as a rabbit, tbh.) A previous FIA regime would, I am certain, have fined or one-race-banned you for such behaviour under the handily all-inclusive article 151(c) of the International Sporting Code. That's the section that takes exception to anyone deemed to have brought the sport into disrepute.

The media reaction to your e-doodling was predictably hysterical in some quarters, prompting you into the retaliatory barb of cutting short your own post-qualifying press conference in the Mercedes motorhome, in a gesture of blatant payback.

The thing is, Lewis, this is all a bit unnecessary and decidedly *infra* the *dig* of a three-time world champion who has the ability to become, perhaps, the greatest driver of all time.

Nico Rosberg, meanwhile – nine-wins-this-seasonand-counting Nico Rosberg – keeps tapping out his title-chasing rhythm "one race at a time".

It's not too late, Lewis. How much do you want it?



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Frank Foster
In F1 for almost as long
as Jenson Button

Our long-serving art editor has toiled through many a season on *F1 Racing*, patiently shooting down bad ideas in features meetings



Jack Woolrich
Karting ace and
king of the layouts

Designer Jack joined us from the world of hi-fi, but much prefers motor racing to the minutiae of gold-plated interconnecting cables



Vanessa Longworth
F1 Racing's grammar
police department

Due to the ongoing Southern Rail fiasco, our chief sub has been reining in our writers' lyrical excesses from a remote location this month



Stewart Williams
Our omniscient
managing editor

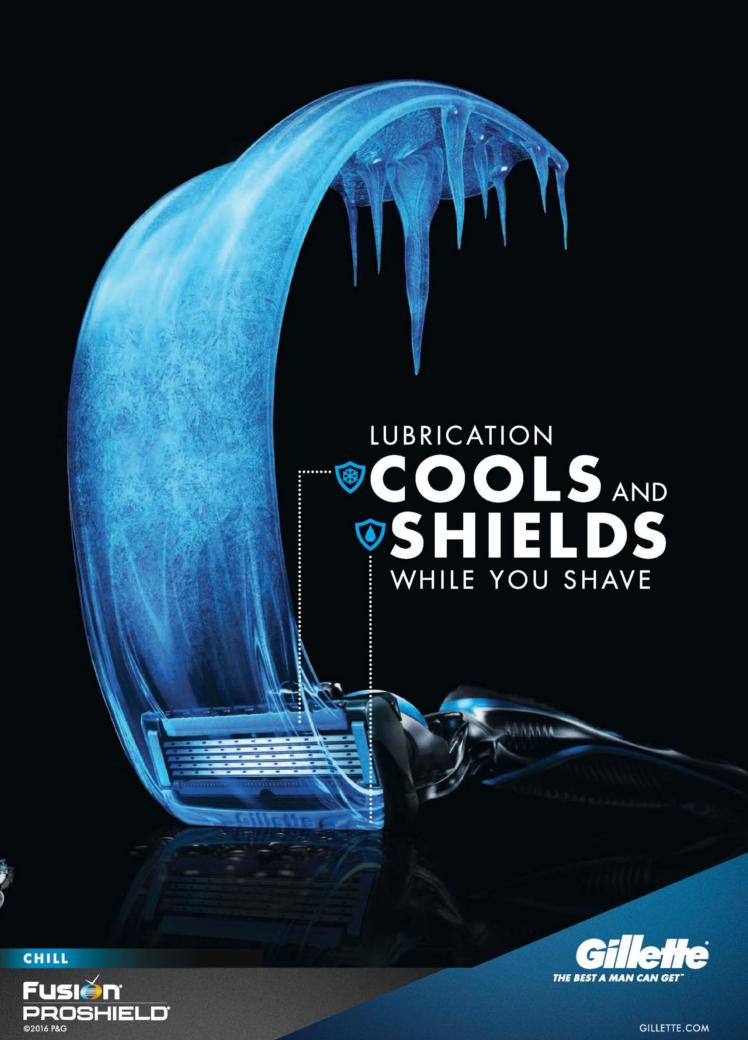
'Wiggy' rules F1 Racing deadlines with a fist of iron. He hit a fence post while cycling in to work last week. The fence post came off worse





Thanks to Deborah Armstrong, Kelly Ashbridge, Matt Bishop, Jack Clarke, Tim Clarke, Rebecca Diver-Clarke, Steve Cooper, Aurelie Donzelot, Silvia Hoffer, Clarisse Hoffmann, Amanda Hunt, Akiko Itoga, Darren Jones, Peter Mills, Chris Murray, Sophie Ogg, Andy Stobart, Lynden Swainston Fabiana Valenti, Bob Wayman









Loaded! This shot of Nico Rosberg utterly on the limit through Loaded! This shot of Nico Rosberg utterly on the limit throug Suzuka's Degner Curve captures the vortex of conflicting forces endured by an F1 car when driven to its full potential. Oh, and did we mention? It's also utterly mega!

Where Suzuka, Japan
When 3.17pm, Friday 7 October 2016

Photographer Peter J Fox
Details Canon EOS-1DX, 600mm lens, 1/250th at F6.3



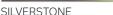














ALO .



CHUMACHER





F1's new owners look to life after Ecclestone

Key sponsorship go-getter Zak Brown is in the frame for top commercial role

The shape of Formula 1's future under its new leadership is becoming clearer, following the emergence of leading commercial figure Zak Brown as a prime candidate to run the financial side of the sport.

Brown, 44, has resigned from his position as group chief executive officer of CSM, a marketing and entertainment leviathan whose executive chairman is Lord Sebastian Coe, and will step down at the end of the year. This will free him up to take on any new role that might emerge in Formula 1 as the sport's new owners, Liberty Media, begin to re-shape the business over the course of the next few months.

It is believed that Brown is keen to take on the role of chief commercial officer, which is as yet unassigned. The new chairman of Formula 1, Chase Carey, has made it clear that he and Liberty are intending to grow the sport in areas in which it has been weak under Ecclestone's rule, particularly in terms of developing more races in the US and the Americas and in exploiting digital media.

In the one major interview that he has given since being appointed chairman of F1, Carey, the former lieutenant of media mogul Rupert Murdoch, has dropped a heavy hint that





Formula 1's new chairman, Chase Carey (left), is keen to introduce a new style of leadership to the sport

Ecclestone's authoritarian *modus operandi* will soon be consigned to history.

"You cannot make everybody happy all the time, but you've got to understand what everybody wants and then find a path," Carey told the official F1 website.

"Sure, that is not a task for a committee, as committees tend to become bureaucratic. But there also can't be a dictatorship, even if probably here they are used to it."

Brown is particularly well regarded in Formula 1 circles for his ability to bring major sponsors to the sport, and has been instrumental in the introduction of some huge brand names such as Johnnie Walker, Martini and UPS. He has had an ambition to run the marketing and commercial side of the sport for many years, and it now appears that he is positioning himself so that he will have no ties that could prevent him taking on such a role were it to be offered to him in the future.

In public comments that he has made since the Liberty takeover, he has been careful not to suggest that Ecclestone should step aside, but he has been highly supportive of the path that has been marked out by Carey.

He has described the establishment of further races in the US as "a priority", adding: "It takes some time, so I don't think we'll see it in 2017 or 2018, but I'd like to think that in 2019 or 2020 we'll see a second American race on the calendar.

"It's the biggest and most mature sports market – therefore it's got to be on F1's radar."

And he has painted a rosy picture of the future of F1 under Liberty, implicitly highlighting a number of weaknesses that have emerged during Ecclestone's custodianship of the sport.

"I think it will look very healthy, I think it will be very engaged with the fans," Brown said. "And from there you'll see more sponsors, sponsors able to talk to the fans, healthier race teams.

"I think Formula 1 has a good product on the track right now, the racing is good. In five years I think it'll be even more dynamic and leading the way in media technology."

He has also been highly complimentary about Carey personally.

"You could describe Chase as arguably one of the most impressive global sports media experts," Brown said. "At the end of the day, F1 is a global sport. It's media-centric – that is how you reach everyone. And he's got a vast amount of experience in all different sports around the world. And his experience isn't just in TV, but on the digital side.

"For the fans, I think that's where they will see the biggest change in a positive way. Fans consume their sports in many different ways, and digital and social is a big element of that – and we all know that's been an area of weakness for F1.

NEWS DIGEST

The month's big stories at a glance

09.09.16 Williams recruit Antonio Spagnolo, the former head of Ferrari's tyre performance group, as competitor analysis and performance concept team leader

14.09.16 Daniil Kvyat admits the stress of his turbulent season took him "a bit over the edge"



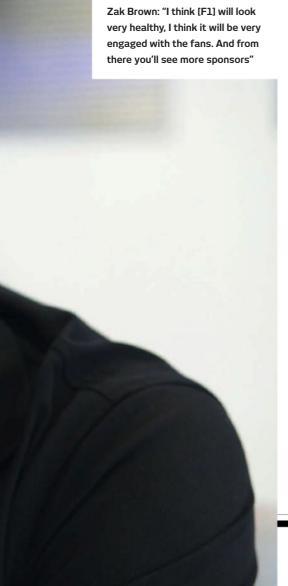
15.09.16 Renault delay decision on 2017 driver line-up 16.09.16 Pirelli drop plans to introduce new soft-compound tyre construction in 2016, citing inconsistent testing data 23.09.16 Honda confirm expansion of UK technical base 28.09.16 FIA releases draft 2017 calendar and closes engine-penalty loophole 01.10.16 Sergio Pérez commits to Force India for 2017 02.10.16 Williams confirm change of seatbelt supplier from US GP onwards, following Bottas incident at Singapore Grand Prix

"Getting digital social engagement platforms right will be high up on Chase's list. And I can't think of a better person to lead that charge."

Carey has already said that he intends to expand Formula 1 – an unspoken result of which will be to raise its profits – while keeping its core appeal intact.

"The historic pillars are important and we will continue to grow those and make the events bigger from the promotion side of it, and with broadcast probably widen the core television experience to today's needs," he said.

"A good digital product makes the television product more rewarding. Marketing the sport, in telling the story of the stars and heroes and the incredible machines. Then strengthen it geographically. So there is not 'the cash cow', but there is growth possibility in every area."





NEWS

Silverstone: we can't afford the British GP

The owners of the circuit claim they will be unable to afford the British Grand Prix from 2019 onwards, due to escalating race fee

Formula 1's buyers, Liberty Media, are facing their first crisis even before completing the deal in which they will take a controlling interest in the sport. Silverstone have said that the future of the British GP is under threat because the contract has become too expensive.

Derek Warwick, chairman of Silverstone's owners, the British Racing Drivers' Club, said

the circuit's bosses were considering whether to activate a clause by which they can end the contract after the 2019 race, rather than allow it to run its full term through to 2026.

Warwick blamed a so-called 'escalator clause' that adds five per cent to the race fee each year, saying it "has become too expensive for us".

Such clauses are common in all F1 race contracts.

The Silverstone Wing (left), opened in 2011, was part of the upgrade aimed at retaining the GP

Silverstone's initial deal, signed in 2009 and starting with the 2010 race, was for £12m. That means the race will cost £18.6m in 2019 and £26.2m if the contract continues to 2026.

Silverstone's operators are forced to pay these increases despite inflation in the UK currently running at less than 0.5 per cent according to the consumer prices index, and at just over one per cent according to the retail prices index, which is calculated differently.

Warwick told *Autosport*: "We're looking at where we are going to be in 2019, whether or not we still want the grand prix, and whether we can push Silverstone forward without the grand prix. At the end of the day, if you can't afford it, you can't afford it." He added that Silverstone will have to activate the break clause by the time of next year's race if they want to drop the grand prix from 2019.

Silverstone's owners have been struggling to make ends meet, despite trying out new ways of raising more money – such as by increasing attendance at the race and introducing a sliding scale of ticket prices similar to those employed by budget airlines. The situation is being complicated by the fact that Silverstone are looking for new investment, and four parties have expressed interest in buying the circuit.

These are: Jaguar Land Rover, Lawrence Tomlinson (the owner of the Ginetta sports car brand), Jonathan Palmer's Motor Sport Vision company, which owns several other British tracks, and a fourth unnamed party.





AU REVOIR, JENSON!

Q1 Jenson won the title in '09 but where did he finish in the standings in 2008: 12th, 15th or 18th?
Q2 What is the name of the pub named after Jenson in his home town of Frome in Somerset?
Q3 Which four different engine manufacturers have powered Jenson during his F1 career?
Q4 Jenson's best result in 2015 was P6. Where did he manage it?
Q5 How many circuits has Jenson raced on in F1: 30, 31 or 32?

Q6 Which team-mate said Jenson had the racing gravitas of a boyband member?

Q7 What was notable about the 2014 Hungarian GP for Jenson? Q8 What is the only race that Jenson has won three times? Q9 How many times has Jenson finished fourth at the British GP

- his best result there?

Q10 In what year did Jenson win the McLaren/Autosport BRDC Young Driver award?

Q11 Jenson's triathlon team name, Ichiban, means 'number one' in Japanese. True or false?

Q12 When Jenson scored his first world championship point in Brazil in 2000, who was disqualified from second to move him into the points?

Q13 Which driver was Jenson's first British team-mate, albeit only for a single race in 2004? Q14 How many races has Jenson won in his F1 career?

Q15 What nationality was Erling Jensen, John Button's rallycross friend, after whom Jenson was named: Swedish, Danish or Icelandic?

I 18th Z The Frome Flyer 3 BMW, Renault, Honda and Mercedes 4 US CP 5 31 6 Jacques Villeneuve 7 It was the last time he led a race 8 Australian GP 9 Three 10 1998 11 True 12 David Coulthard 13 Anthony Davidson 14 15 15 Danish FIND

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SHOULDERS CAN CARRY ANYTHING

BUT DANDRUFF









Pirelli express doubts over 2017 tyre remit

Formula 1's tyre supplier claim test cars being used to evaluate 2017 rubber lack sufficient downforce to mimic real conditions

Pirelli have expressed concerns about the speed of the cars being used for 2017 tyre testing as doubts linger as to whether they will be able to fulfil their obligations next season.

Pirelli will be required to produce tyres on which drivers can push flat-out for the majority of a race, and which do not suffer irretrievable thermal degradation if pushed hard. These requirements were set out in a target letter requested by Pirelli from the FIA as part of discussions between bosses, drivers and tyre supplier last winter, following discontent about the tyres supplied to F1.

Pirelli racing manager Mario Isola has said he believes the 'hack cars' provided by Mercedes, Ferrari and Red Bull for tyre testing to simulate the performance levels of next year's faster cars are "around 20 per cent" down on the amount of downforce expected next year.

"The problem of not having the downforce at the right level is you don't stress the compound

at the level that is required and expected for next year," Isola said. "You evaluate the degradation, which is probably not the right one because when the performance and downforce is increasing, you have higher degradation. That's why we are working with the teams to have a car that is able to generate more downforce."

Mario Isola: "We are working with teams so we can provide a tyre in line with expectation"



Isola added: "We're working with them to have cars that are really representative of next year's conditions so we can provide a tyre that is in line with the expectation and data collected in this year's testing."

Some team insiders have questioned whether Isola's remarks are intended to lay the ground for excuses if the tyres do not manage to meet requirements in 2017.

The main aim of the new rules is to produce cars that are up to five seconds per lap faster than their 2016 counterparts. But so far this isn't going to plan, since it has emerged that the fastest lap time set by Ferrari at their tyre test in Barcelona in early September would have qualified them on the back row of the grid for this year's Spanish Grand Prix.

Insiders have cautioned against reading too much into lap times at these tests because of the restrictions that have been placed on the cars being used. For a start, they are heavier than the cars that will be used in 2017. Additionally, the engines being used are last year's and have been detuned to ensure they do the required mileage. And finally, the front wings do not work as they are expected to work in 2017.

One senior engineer from a high-profile team remarked that Pirelli should be given time to produce the tyre demanded of them "because these are their first efforts and they don't know how to do it yet".



Apple are yet to take a bite out of McLaren

Rumours of a buyout were wide of the mark, but insiders confirm McLaren *did* hold talks with Apple about a car project



McLaren and Apple held confidential talks about working together on the tech giant's long-mooted car project earlier this year. This was confirmed by sources close to the negotiations in the wake of a report in the *Financial Times* last month that Apple were discussing a potential takeover of the McLaren Group.

However, F1 Racing understands the talks are now over and that there is no deal in the offing. It is not clear whether they could be revived in the future.

Apple are well known to have been investigating their own car project, as rivals such as Google work towards producing a driverless car. But the company have recently laid off dozens of staff who were working on the project, leading to speculation that it may have been put on ice.

It seems that the leak to the FT came from some of these former employees – the

McLaren have the kind of technical expertise Apple would need for their own car project

newspaper cited its sources as "three people briefed on the negotiations, who said talks started several months ago". But the active nature of the deal – or otherwise – has been overstated in many media outlets.

McLaren's appeal to Apple is clear. The McLaren Group are involved in a number of areas that could have been of use in the Apple car project – they have their own range of high-tech supercars, and their Applied Technologies group sell their expertise in electronics to a number of other businesses and organisations.

They develop advanced materials, such as advanced carbon composites and lightweight metal alloys, used in the automotive business, and are an acknowledged world leader in simulation technologies.

F1 BANTER

PASSNOTES

Your essential F1 briefing #32 Fire



Name Fire
Age 470 million years,
according to Wikipedia
Appearance Red, or
yellow, or white, or blue
- or even green

Green-coloured fire? You've been watching too much Game of Thrones.

Quite the opposite. As any good physics textbook would tell you, barium nitrate burns green.

Any good physics textbook? That's quite a claim. Is it in *Understanding Physics* by Isaac Asimov?

Unknown. Is that a good physics textbook? Does it have a sticker on the cover saying "From the author of Nightfall and The Caves Of Steel?"

Also unknown. As, no doubt, is Isaac Asimov's reaction to the engine fire that brought Lewis Hamilton to a smoking halt while leading the Malaysian Grand Prix.

Since he died in 1992, that is beyond doubt.

Still – what would the eminent biochemist, intellectual and sci-fi novelist have made of this fiery imbroglio, and the numerous conspiracy theories that now swirl around it?

I imagine he would have composed a rather dry and earnest tale, possibly hinging around the three laws of robotics, in which he systematically debunked the notion that Mercedes would deliberately scupper their own chances of sewing up the constructors' title at their title sponsor's home grand prix.

No chance of a laser-gun battle, then?

Certainly not. Armed with logic alone, this yarn's protagonist might point out the rank improbability of choosing an engine fire as the method of terminating the lad's race, what with said title sponsor being of the 'fuel and lubes' variety.

Ah! But that's what THEY want you to think.
This whole scenario gets fishier by the minute!

On the contrary, it sounds like a storyline that's wandered in from the sort of programme minor satellite channels screen on Sunday afternoons.

Right after the Malaysian Grand Prix, then? This really is too much of a coincidence...

I think I preferred it when you spent our dialogues harping on about old pop hits.

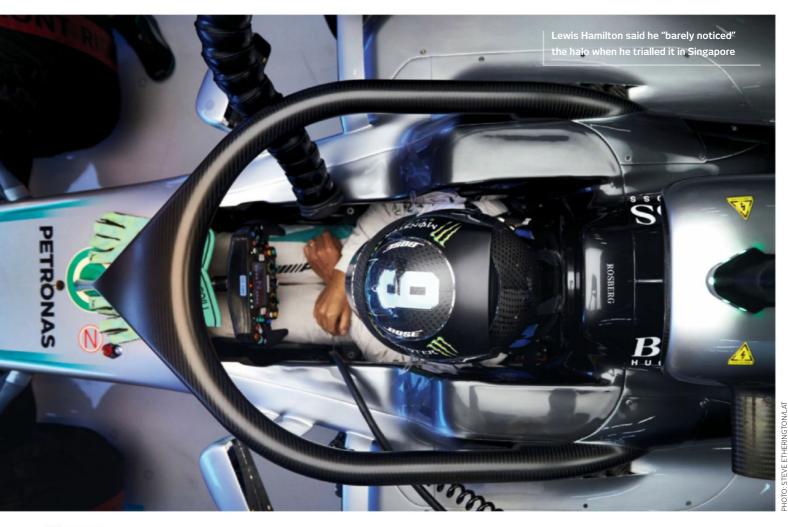
Do say We didn't start the fire **Don't say** I'm the firestarter



Official fuel consumption figures in mpg (I/100km) for Ford Fiesta ST-Line range: urban 50.4-65.7 (5.6-4.3), extra urban 72.4-88.3 (3.9-3.2), combined 62.8-78.5 (4.5-3.6). Official CO2 emissions 104-94g/km.

The mpg figures quoted are sourced from official EU-regulated test results (EU Directive and Regulation 692/2008), are provided for comparability purposes and may not reflect your actual driving experience.





NEWS

Halo looks set to be adopted for 2018

Despite concerns about driver access and the view through mirrors, driver feedback in practice sessions is mostly positive

Formula 1 is pressing ahead with plans to introduce the halo head-protection system for 2018, after tests in practice sessions at grands prix indicated that there were no major problems. The halo had been slated for 2017, but the F1 Strategy Group decided to delay its introduction for a year so further research could be conducted into its potential consequences.

Part of their concerns related to the effect the halo would have on driver visibility, but this has since been proved not to be an issue, following a series of runs by various teams and drivers in practice sessions in recent races.

Lewis Hamilton said he "barely noticed" the halo when he tried it in Singapore, saying it

blocked his view of the timing screens when sitting in the pits and out of his rear view mirrors, but there was no problem out on track. Hamilton, who was outspokenly opposed to the halo when he first saw it, but became one of its more vocal proponents once he understood its safety aspects, went as far as to say he felt he could have run with it for the remainder of the weekend without any problems.

Daniel Ricciardo also told the FIA that the halo blocked his view through his mirrors. Fernando Alonso said he felt driver access needed to be improved.

Insiders say the view in the mirrors is a nonissue because it is simply a function of how the halo has to be mounted on 2016 cars; its rear mounting points will be in a different place when it is formally adopted. As for driver access, the FIA believes that slightly increased difficulty in getting in and out of a car is a small price to pay for the improved safety the device provides. However, the fire suffered by Kevin Magnussen's Renault in practice in Malaysia, although a rare occurrence, will doubtless lead to a rethink on this latter point.

The halo has been proven in FIA tests to provide close to 100 per cent protection in all incidents in which a large object – such as a wheel or a wall – threatens to intrude on the cockpit space. In addition, there is a 17 per cent reduction in risk from small objects, such as the suspension part that fractured Felipe Massa's skull at the 2009 Hungarian Grand Prix.

The likelihood of the halo being the safety device that is ultimately adopted is only increased by the fact that there are no other alternatives in the pipeline. The intention is for all drivers to try it before the end of the season, and they have each been given a questionnaire to fill in to record their observations.





Winter [*cept evo2

Optimised asymmetric pattern design for driving in all winter conditions

Optimised pattern design helps bite into snow effectively and improve traction performance of the tyres.







Renault eye Hülkenberg as driver market shrinks

Sergio Pérez has spurned them in favour of Force India, but Renault are still keen on recruiting fresh blood for 2017

The F1 careers of Kevin Magnussen and Jolyon Palmer hang by a thread as Renault deliberate their 2017 line-up. They are keen to change both drivers, having not been convinced by either of them over the course of 2016.

But the lack of available options elsewhere could hand either driver a lifeline. Renault had been talking to Sergio Pérez, but Pérez said after the Malaysian GP that he would remain at Force India – as had been widely expected.

Nico Hülkenberg, Valtteri Bottas and Carlos Sainz are also of interest to Renault but all are under contract to their existing teams. This may not be a great impediment, since sources within Force India have indicated that they will not stand in Hülkenberg's way if he is determined to move to a works team who can offer him a well-paid long-term deal.

Williams are believed to have taken up their option on Bottas, which came up in September, and are planning to pair him with the well-funded Canadian driver, Lance Stroll, who won the Formula 3 Euroseries over the weekend of the Malaysian Grand Prix.

Stroll is said to be paying at least £20m to Williams this year for a programme aimed at readying him for F1, which includes running a two-year-old car in a series of tests around the

world. He is expected to bring a similar-sized budget to race in 2017.

Red Bull took up their option on Sainz ahead of the European GP in June. They intend to keep him at Toro Rosso alongside either Daniil Kvyat or GP2 frontrunner Pierre Gasly.

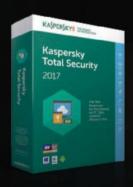
Renault are of interest to all three drivers as a works team that can offer a lucrative package and the promise of moving up the grid.

The other seat has long been expected to be filled by Renault reserve Esteban Ocon, a Frenchman of great promise who is contracted to Mercedes, but could be loaned out. However, Renault are believed to have cooled towards Ocon since he joined Manor because he has been struggling to match team-mate Pascal Wehrlein, another Mercedes protégé. It remains to be seen whether Ocon outqualifying Wehrlein for the first time in Malaysia has reassured them.

The uncertainty over a lead driver means there is still potentially a seat for one of the current drivers, in which case Magnussen would be the favourite, having outqualified and outscored Palmer so far this year.

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NEWS

Schumacher family quashes 'walking' rumour

Nearly three years on from Michael Schumacher's serious skiing accident, details of his condition remain a closely guarded secret

Light has been shed on Michael Schumacher's medical situation in a court case in Germany. Felix Damm, representing the Schumacher family in a lawsuit against Germany's Bunte magazine, confirmed the seven-time champion cannot even stand following the head injury he suffered while skiing in December 2013.

Bunte had reported last year that Schumacher was able to take small steps with assistance. But Damm stated in court that this was incorrect. He then said to CNN: "I told the court that the alleged claim that Michael Schumacher can walk again is false and simply not true. Michael

It has been confirmed that Schumacher remains unable to walk following the injuries he sustained in 2013



cannot even stand with the help of his special therapists. I cannot make any other comments about Michael's health situation."

It is the first update to emerge from the Schumacher camp for some time. Michael's manager Sabine Kehm said in a statement in response to the Bunte report that it was "not true" that he could move again.

Schumacher, now 47, suffered a severe head injury while skiing on holiday in the French Alps. He was placed in a medically induced coma in hospital in Grenoble for six months before being transferred to his home in Switzerland to

continue treatment.

It was announced in June 2014 that he had come out of his coma, but there has been no confirmation from the family as to whether he has any level of responsiveness to external stimuli, awareness of his environment, or is able to make voluntary movements.

The only information Kehm has given on his condition is that it is "severe", that "we must always keep the seriousness of his injuries in mind" and that recovery "will take a very long time".

NEWS IN BRIEF



BAHRAIN TEST MOOTED

Senior figures in F1 have been lobbying for one of next year's pre-season tests to be held in Bahrain. Mercedes and Ferrari are believed to be behind the suggestion, but the smaller teams are not so keen. "From a budgetary point of view, if there is a choice, then being allowed to make that choice is probably the better solution," said Force India's deputy team principal Bob Fernley. "For us, at the moment, it would be Barcelona because the cost is significantly higher going to Bahrain."

CALENDAR ANNOUNCED FOR 2017

The FIA has released a 21-round provisional 2017 calendar, with three events listed as "to be confirmed". The dates will be ratified by the World Motor Sport Council in December.

- 26 March Australia
- **9 April** China
- **16 April** Bahrain
- **30 April** Russia
- **14 May** Spain
- **28 May** Monaco
- ► 11 June Canada (TBC)
- **18 June** Europe (Azerbaijan)
- **2 July** Austria
- **3 July** Britain
- **23 July** Hungary
- **30 July** Germany (Hockenheim, TBC)
- **11 27 August** Belgium
- **II** 3 September Italy
- **17 September** Malaysia
- **1 October** Singapore
- 8 October Japan
- **22 October** United States
- 5 November Mexico
- 12 November Brazil (TBC)
- **26 November** Abu Dhabi

NO F1 DRIVE AT HAAS FOR LECLERC

Ferrari protégé Charles Leclerc will not get a race seat at Haas in 2017, the team have confirmed. Leclerc has been driving for the team in Friday practice sessions this season, but team principal Guenther Steiner said: "In the position we are in, he's too inexperienced."



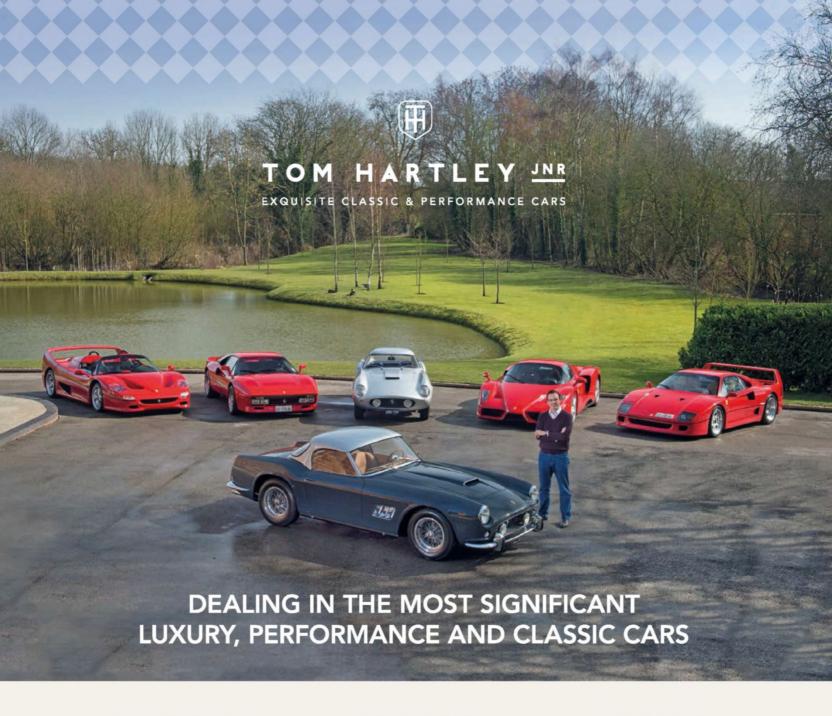
SEPARATED AT BIRTH...



Academy Award-nominated actor, Ming the Merciless and Game of Thrones star



engineering supremo



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Pat Symonds explains THE SCIENCE BEHIND... Wheels and hubs



Can we start by clearing up the terminology used when talking about wheels and hubs?

The wheel itself is obvious and this is attached to a small axle also known as a hub. The hub has the brake disc attached to it and rotates within bearings contained in the upright, which is connected top and bottom to the suspension arms – or wishbones, as they are commonly known. The brake callipers are bolted to the upright, and the push-rod or pull-rod, which operates the suspension spring, is normally attached to the upright. Finally, at the front, a steering arm is attached to the upright at one end and the steering rack at the other, while at the rear a track control arm will anchor the upright.

Apart from its obviously greater width, how does an F1 wheel differ from a road-car wheel?

The biggest difference is the material used. Even high-performance road cars usually have wheels made from aluminium because it is so robust. The wheels on an F1 car are made from magnesium. They are also very thin to save weight and reduce rotational inertia, and yet at the same time are designed to be very stiff so that they control the tyre contact patch well.

In addition, with aerodynamics being so important in F1, the wheels are designed with airflow in mind and while a road-car wheel will be a major styling feature on a car, in F1 we do not concern ourselves with appearance.

With tyre temperatures being of such concern, does the wheel play any role in their control?

The wheel is an important part of the total thermal management of both the brakes and the tyres. The inner rim of an F1 wheel has a knurled appearance with a pattern applied to the surface. These features increase the surface area of the wheel that is exposed to the flow through the brake ducts. Depending on the circuit and the tyre compounds available, we may wish to either increase or decrease the tyre temperature. We can do this by using different types of brake duct,

which may either divert hot air from the brakes to heat the wheel or use cool air that has been taken in by the ducts to cool the wheel rim – and hence the tyre. If we are doing the latter, then the duct will also channel hot air from the brakes away from the wheel rim.

Presumably you use a lot of sensors – what sort of thing do they measure?

Within the wheel rim is a tyre-pressure sensor. It differs from those found on road cars in that it has a built-in, infra-red sensor that measures the temperature of the tyre's inner liner. Because this sensor rotates with the wheel it would be tricky to have wires carrying the signal, so the sensors are battery-powered and transmit readings over a radio system to a receiver on the car.

On the hub itself, there are many other sensors that measure such things as brake wear and temperature, and even the vibration that the hub is experiencing. This not only helps us to understand the ride and grip of the car, but it can also alert us if a flat-spotted tyre is producing vibrations that could destroy the suspension.

How do you actually take the measurements from around the wheel and hub?

With so many measurements being made, if we used conventional electronics it would require a lot of wiring to be run through the wishbones. To avoid this, we have what is called a Hub Interface Unit (HIU) mounted on the suspension upright. This is a small computer that acquires signals and converts them so they can all be transmitted through a single pair of wires. The technology is similar to the way many computers in an office can be connected with ethernet cables.

What are the hubs and uprights made of?

These days the upright must be made of a particular type of aluminium and is fully machined. In the past we used titanium or exotic metal matrix composites, and going back even further the upright was made from welded steel. The hubs or axles are generally titanium, although maraging steel is also popular.

Does the design of the wheel and hub play a part in the super-fast pitstops we see these days?

Very much so, and the thread form used on hubs and wheel nuts now bears no resemblance to any other thread found in engineering. It is very coarse to reduce the number of turns needed to tighten it, but is tough enough to cope with a rapid pitstop without sustaining damage. It is also designed so that it is easy to start a wheel change without cross-threading the nut.

Do hubs play any part in the aerodynamics?

All external parts affect aerodynamics. We have already discussed how the brake duct and wheel design affects air flow, but using flow within the hub in a design known as a 'blown hub' is very popular. Here, additional air flow is taken in by the brake duct and blown straight through the middle of the hub and wheel nut. This helps



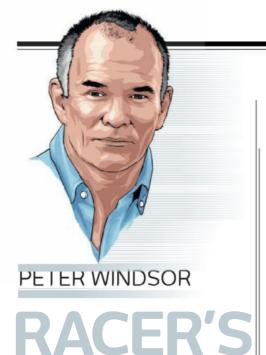
move the front wheel wake outwards, which is the holy grail of aerodynamicists.

We rarely see wheels come off the cars these days in accidents, why is this?

A wayward wheel is dangerous as it is very heavy and can bounce in any direction. To prevent this, uprights are attached to the chassis by tethers made from a Zylon/Nomex hybrid that can withstand a load of seven tonnes and absorb 7,000J of energy before failure. ②

NEXT MONTH FRONT WINGS





EDGE

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

So there I was, reading Condé Nast
Traveller on the A380, drooling, as you do,
over the Cheval Blanc St-Barth Isle de France,
and the Lux South Ari Atoll, when it struck
me: the reason I've never stayed at any of the
places with the stilts and the exotic names is
that hotels are so much a part of my everyday
life that I'm kind of allergic to them. Unless
they're either perfect or essential, in other
words, I'd rather leave the suitcase empty.

Mind you, my time in temporary rooms over the years hasn't exactly been colourless; my recent view from the 17th floor of Singapore's Mandarin Oriental being a case in point. In the way of today's penchant for absolutes, therefore, here are my Top Five F1 abodes:

1. KYALAMI RANCH, KYALAMI, SOUTH AFRICA

The big 747s arrived in the mornings, which meant a burning sun was upon you even as you alighted from your taxi. There were always *people* at the Ranch – and they always seemed to be there first, however early you arrived.

You registered in a grass-roofed hut to the tinkle of poolside chatter. A white-shirted porter seized your bags. "Ciao Clay! Hey Mario! See you in a bit..!" A shoe-box-sized lizard would zap into the grass. "Don't mind

'Home' is where the grand prix is...

them, boss. Plenty in your room." You'd listen to the growing sound of typewriter-tapping: Heinz Prüller, journalist, author, at work in his swim suit at his desk-on-the-terrace. The rhythm of ranch life was as potent as the drums at Rorke's Drift: swim, breakfast, racetrack, swim. The restaurant was more residents' mess than Raymond Blanc: a buffet spoke of fish, salad and fruit. "Frue-eat," as Carlos Reutemann, resident of Room 144, would say. "Can I join you?" Ken Tyrrell would ask, laden with plates. "Sure. Great job yesterday, by the way. Does Jackie like that new front wing?"

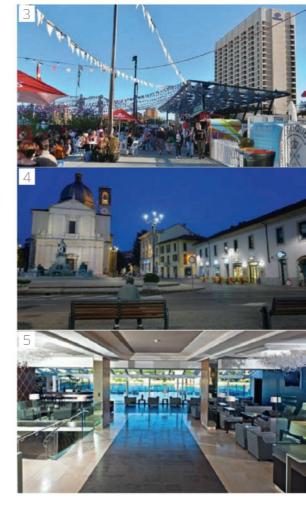
You checked out of the Ranch only reluctantly: "Thanks for staying with us. Same room next year?"

2. EDGEWATER HYATT, LONG BEACH, CALIFORNIA, USA

Everything at Long Beach seemed brand new. Air conditioning. Cable TV. A delicate breeze to flavour your early-morning runs. And sumptuous eggs benedict in the hotel coffee shop. It was as if we were standing on the edge of tomorrow. Of course, the gorgeousness of the Long Beach circuit was the centre thread. As the sun went down and the lights came on you couldn't separate the feeling of being back in that immaculate hotel room from the unadulterated motor racing pleasure of watching them plunge into Turn 2 or hanging with them all later, drivers free to chat, engineers there to talk.

Early in the week, Bernard Cahier would call a departure time of 10:30 and down to Newport we'd drive, to barbecue with the owner of an old warbird or to race karts with Ronnie and Mario. In the evenings, we'd be on parade in Beverly Hills with Hollywood players. *John Frankenheimer! Clint Eastwood!* Nothing was bigger, more alive, than the F1 race at Long Beach. And at its epicentre was the Edgewater Hyatt.

"At the Ranch, you registered in a grass-roofed hut to the tinkle of poolside chatter"



3. HILTON ADELAIDE, ADELAIDE, SOUTH AUSTRALIA

Just as the Australian Grand Prix was born to be the last race of the season, the Adelaide Hilton – slightly unpolished, slightly sleepy – was born to be the soul of the Australian Grand Prix. First would be the golf – the Pro-Am for the South Australian Open. You'd talk wedge angles with Wayne Grady and the rigours of touring with Greg Norman. Then, before the concert, we'd eat fish and chips with the rest of Adelaide town. Sting would sit at the bar late at night, asking F1 questions and talking music. In its own, more placid, gum-tree-park sort of way, Adelaide was the nearest thing to Long Beach – and the Hilton was right there with it. There was a nightclub, too, in the basement.



It rocked on Sunday nights, when F1 relieved itself of another tempestuous season. My phone rang at 03:30 one Monday morning. It was Keke Rosberg, laughing. Then... click.

4. HOTEL SELIDE, DESIO, NEAR MONZA, ITALY

In the 1970s the Selide was the Goodyear hotel, which meant you ate pasta with Leo Mehl or Paul Lauritzen and talked camber angles, sprint cars and blisters. Then, in the 1980s, Renault arrived, bringing with them Alain Prost and Marie-Claude Beaumont. These days it's the ART GP2 and GP3 teams who engulf the Selide, which means that Lewis and Nico and Valtteri have all stayed there and that you bump into Sergey Sirotkin and Nirei Fukuzumi

in the *taverna* round the corner, where the pizzas are matched only by the risotto. The Selide still has the same tiny lifts with little red *en arrivo* signs that mean nothing, and my room is still the same double-aspect one, overlooking both the square and its cathedral, and, to the north, the snow-capped Alps. As noisy as the bikes are as they cackle between the walls, you sleep with the windows open, inviting the morning breeze to lift the scent of coffee from the corner bar below.

5. HOTEL ÎLE ROUSSE, BANDOL, SOUTH OF FRANCE

What was nicer in those balmy, Côte d'Azur days of the French GP? The vast modernism of the Ricard circuit, all blue skies and golden sun, or the drive down to the coast, round hairpins, through corners and along straights, with not a *gendarme* in sight and Jean-Pierre Jarier catching you in a tyre-smoking Renault Alpine? Or was it the île Rousse? Tucked away on the headland of Bandol, this was two hotels in one: the front led you to the pastel colours of Bandol in summer, the back to a Poirot-esque private beach, complete with perilous stairway.

François Cevert and Patrick Tambay were suntanned and cool as they chatted to Johnny Rives or *l'Automobile's* Gerard Flocon. François Guiter of Elf would hold court at the bar, with Ford France's Bob Sicot and Robin Widdows of Moët nudging him along the way.

You didn't ask the price of the room at the île Rousse; you just stayed there. It was a given. •









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POWER

PLAY

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

As Formula 1's new American majority owners take stock of what they've bought, and formulate how to revive the sport's flagging fortunes, the temptation to totally revamp 'the show' along the lines of US sports must be enormous. All the more so since Liberty Media, headed by broadcast veteran Charles 'Chase' Carey, is rooted in Hollywood and the NFL.

In considering options, Carey would be wise to consider a global brand that 30 years ago came under intense pressure from emerging brands and market evolution to such a degree that its owners literally threw out its traditional recipe in their haste to introduce Brand II. That product was as American as Coca-Cola; indeed, it was Coke, and the introduction of New Coke almost killed the brand.

True, one is a fizzy drink and the other an international sporting property, but the word in Singapore, scene of Carey's first public F1 appearance (although he admitted attending "a few grands prix" without quantifying the number when asked by *F1 Racing*) was about how Liberty intends to re-invent F1. Thus the parallel is alarmingly apt, for Coke's masters attempted to reinvent soda pop.

The year was 1985, and Coke faced growing competition from Pepsi, their natural market

Carey could learn a lesson from Coke

competitor, but further threats were looming on the horizon in the shape of diet colas and energy drinks. Traditional consumers increasingly embraced Pepsi, while the Baby Boomer generation went for the zero-sugar option, or, horror of horrors, the newfangled, caffeine-overloaded stuff.

Coke's market share had plummeted from a post-WWII high of 60 per cent to under half that in 40 years; worse, what slice remained was mainly down to historic old-school contracts. Panic set in, and the secret recipe that created the drink in the first place was flushed away. Does this sound familiar?

Coke's executives had commissioned market research, field staff had set up tasting sessions, and focus groups comprising regular consumers and new generationals had been thoroughly debriefed. Everything had been done by the book – and the results showed that Coke had no option but to ditch the old recipe. The mantra was: "New Coke or no Coke".

Just 12 per cent of diehards indicated they would rebel; the rest (including, crucially, many Boomers) enthused about the new taste. And that's where things went horribly wrong: in the process of crunching the numbers, the company assumed the uptake for the new recipe would more than offset lost traditionalists who didn't like it.

So it seemed initially, for sales immediately leapt eight per cent as the launch hype

Carey's challenge is to make F1 appealing to a new generation, without losing existing fans



"Carey does need to freshen up F1... the question facing him is: 'How far to go?'"

prompted people to try the revised product. But then the company's assumption made an ass of the entire strategy: New Coke bombed as traditionalists expressed their outrage, with one lobby group receiving over 60,000 call-ins demanding the classic recipe be reinstated. The company obliged after 79 days, and New Coke stubbornly spluttered on (albeit renamed Coke II) for a number of years, while Classic Coke's sales rocketed.

F1 itself offers a recent parallel in the form of the knee-jerk changes made earlier this year to its qualifying format, and the initial stubborn refusal of the sport's masters to revert to the old system that had served it so well since 2010. Twenty-eight days after introduction they made a U-turn, but only after proposing a hybrid version. Fortunately, though, there was no Quali II recipe operating in parallel.

Therein lies the moral: Carey and Co do need to freshen up F1, for not only is it coming under pressure from in-house 'diet' products such as WEC and Formula E, but, equally, from other, more energetic, sporting genres. In addition the new 'Boomers', known as 'Millennials', have adopted different lifestyles to their elders, being more ecologically and environmentally aware. Thus the question facing Carey is: 'How far to go?'

Does he go the full nine yards and make dramatic changes to the sport's format and swingeing improvements to its media palette, risking a defection of F1's traditional fan base while hoping to attract the Millennial audience? Or does he initially offer a hybrid F1 in the hope of straddling the divide, then gradually ramp up the changes?

Without doubt the latter option seems less precarious, but, equally, F1 needs to tap into those unaccessed audiences ASAP before all chances of switching them are lost, and one thing F1 does not have is a lot time. Contracts are running out, TV ratings are down 30 per cent over five years and promoters are pushing for sanctioning-fee reductions in the face of dwindling live attendances.

Plus, just to ratchet up the pressure on Liberty, the media company does not have the option of "New F1 or No F1", or running F1 II alongside Classic F1. ①





JENSON BUTTON

THE LONG INTERVIEW

WORDS JAMES ROBERTS
PORTRAITS STEVEN TEE/LAT

Jenson Button has had an enviable F1 career, and he remains a familiar and much-loved figure to all those who work in and follow the sport. But next year, for the first time this millennium, he won't be lining up on the grid for the season-opening grand prix. Here, exclusively in F1 Racing he tells us why

Wearing a neatly pressed, blue-check shirt and black slacks, a tanned Ron Dennis holds the microphone to his lips. The assembled journalists, seated on the top floor of McLaren's glass-and-silver paddock edifice, fall silent in anticipation. Then Ron speaks. "Jenson, I believe you've got something to say..."

Over the course of the next 20 minutes the world learns that Jenson Button won't be racing in Formula 1 next year. His 16 consecutive years of driving in the top flight of the sport have come to an end. His dream is over.

Replacing him is the quick, talented Belgian Stoffel Vandoorne. The once youthful, boy-next-

door Jenson Button, now 36, has been usurped by a fresher, leaner, *younger* hot-shoe who is 12 years his junior. It's the unfortunate reality that will hit us all one day.

But, wait. That's not the full story. Jenson hasn't *quite* been handed the carriage clock and pension letter; there is more to this revelation. Ron takes the microphone once more: "To avoid any confusion, forget the word 'retirement' — that's not in the vocabulary," he clarifies. "Jenson is one of the team's drivers for the next two years and if he's needed for any reason — he'll drive."

Confused? Ron has just announced Stoffel Vandoorne will partner Fernando Alonso at \rightarrow



McLaren next year but that Jenson also has a new two-year deal. In 2017 Button will be an ambassador and reserve driver for the team, and, in 2018, if McLaren take up the option he'll be back in the car, presu

option, he'll be back in the car, presumably to replace Alonso when his three-year contract expires.

McLaren's press release describes the line-up as "innovative." Afterwards, various paddock figures express their own views about this tripartite agreement, ranging from it being "a fudge" to "a win-win for Ron."

Five days after the announcement in Monza, Jenson is back at McLaren's Technology Centre playing a role he's well versed in: that of the corporate ambassador. Today, guests from Exxon Mobil have descended upon Woking for a guided tour of the glass-and-steel Norman Foster-designed campus. They swoon over the display of historic racing cars on the lakeside Boulevard and are charmed by the smooth-talking, 15-time grand prix winner.

This is Button's seventh year at McLaren, the team he joined straight after his 2009 *annus mirabilis* title-triumph with Brawn. Prior to that he'd been with BAR-Honda for six years, endured two disappointing years at Benetton/Renault and enjoyed a sparkling rookie season with Williams in 2000.

The years he spent at Brackley from 2003-9, with a team that shifted ownership and identities through BAR to BAR-Honda, to Honda proper and then to Brawn GP, came

Button announces his 2017 hiatus, as McLaren reveal their three-driver line-up for the season ahead to define his Formula 1 career, wherein a driver of considerable talent seemed in constant search of machinery to match his ability.

There was a remarkable third

place overall in the drivers' championship in 2004, thanks to ten podium finishes, but that achievement was soured by the discovery of BAR's fuel-system illegalities and a consequent two-race ban in 2005. The long-awaited breakthrough win came with the drizzle of the Hungaroring in 2006, but was tempered by subsequent failures of car performance. Over the following two seasons, before Honda's withdrawal (and Brawn GP's rise from the ashes), he scored a measly nine points.

Yet as Button passes his 300th grand prix start (a milestone he hit in Malaysia, after this interview took place, and one eclipsed only by two other drivers – Rubens Barrichello on 322 and Michael Schumacher on 306) he's arguably as strong as ever. Despite being punted off during the first lap at Monza, he beat his team-mate through better tyre conservation, and a week earlier described his qualifying lap at Spa as "one of the best of my career." We should note, however, that Jenson's proclamation of excellence came at a moment of key meetings about his future and after team-mate Fernando Alonso had suffered a problem in Q1 – rendering him unable to provide any barometer of performance.

We leave the Mobil 1 executives milling about in the MTC's basement juice bar and take a glass lift upstairs to a room





where JB has deposited his possessions. There's a laptop on the table, a banana skin on the side and, in preparation for his significant milestone, some sort of commemorative model car with a '300' clearly visible. Then he begins to explain to us exactly what's going on...

Jenson Button: Next year I'll be an ambassador for the team, so I will be at races. I'll spend time here at the MTC and I'll do stuff in the simulator and work with a few of the sponsors. I will still try to help them develop the car from the outside. I think it will be quite interesting to step back and see what I've missed for so many years and there will definitely be things I learn that I can put to good use in 2018. Apart from that, I don't know what I'm going to do.

For me, having the free time is what I need in my life right now. I'll spend more time with friends and family. I might race something. Cars? I will do triathlons and hopefully qualify for the 70.3 Ironman World Championship. That's one thing I want to do, so I'll come back super-fit. I'll be even fitter than now if I do come back to race again in 2018.

Jenson's triathlon fascination dates back to the eve of the 2006 season, when he spent time in a training camp in Lanzarote. Working with his then trainer, Phil Young, Our 'Jenson don't go!" front cover from December 2014, when Button was first rumoured to be on the



For me, having the free time is what I need in my life right now. I'll come back super-fit. I'll be even fitter than now if I do come back to race again in 2018



Button took his fitness to a higher level through triathlon competition. The '70.3' Ironman championship denotes total mileage covered in the race: a 1.2-mile swim, a 56-mile bike ride and then a 13.1-mile run.

When the stars aligned for Jenson

Honda's shock decision to quit Formula 1 at the end of 2008 gave rise to Jenson's 2009 annus mirabilis – as related exclusively to F1 Racing by Ron Meadows, who was Brawn GP's team manager

"In December 2008, Honda's management told us they were going to pull out of Formula 1. So we had to figure out how we could get the team to carry on. Honda had invested a lot of money in Brackley, and we believed we'd created a good car for 2009.

"When we got the engine from Mercedes we knew we had an opportunity as we'd done some clever stuff with the car [with the double-diffuser], but we assumed everyone else had done the same.

"Rubens Barrichello flew over from Brazil and rented a motorhome and stayed in the car park for four days waiting for us to make his seat. Then we went to Barcelona testing and just smashed everyone.

"It was thought we'd taken the ballast and fuel out of the car to try to attract sponsors because we desperately needed the funding, but we all knew it was a good car.

"We went to Melbourne and stuck in on the front row and Jenson easily won the race. Rubens struggled because of two shocking pitstops, but I'd had to let all of the test team and some of the race team go because we didn't have the funds. It was a horrible time as some of them were really close friends who were good at what they

did. But if you can't pay them...

"Even Jenson went without salary until he was able to negotiate a deal with Ross [Brawn], and even though it wasn't the same as what he had with Honda, he was happy to stay with us when he saw how competitive the BGP 001 was.

"Financially it was very tight and we didn't have the funding to have a spare chassis until six or seven races in. There were more important things like front and rear wings to be made, but if there had been a proper crash we probably wouldn't have won the championship. That was a close secret within the team.

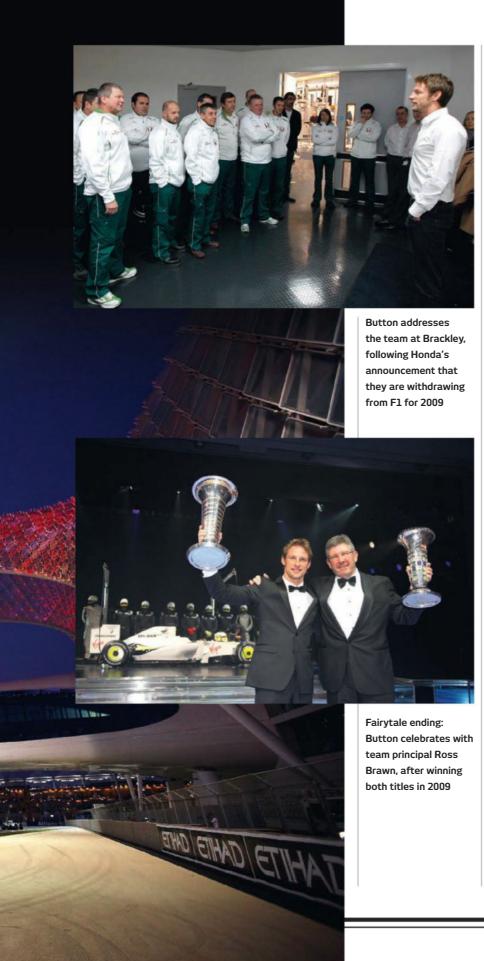
"Jenson won six of the first seven races but then didn't win a race again. His next best result was second at Monza and at that point I knew he'd win the championship. It felt like we got battered in the

second half of the season, but if you add up all of the points from mid-season [Hungary] onwards, Red Bull outscored us only by one point, as a team [61 points to 60].

"When Jenson finally took fifth in Brazil and won the world championship it was really emotional. Mainly because of all the effort that had gone into it over the previous winter and remembering all the staff we'd lost. Then you think back to all of the struggles with the car in the previous years, too.

"We all knew Jenson was a super-talented guy from when we first ran him in 2003. Remember in 2004 when he put the car on pole at Imola and ran away from Michael Schumacher in the opening laps? So we always knew that he was gifted, but it took us until 2009 to give him a car worthy of his talents...





As a professional athlete who has been pushing himself competitively every fortnight for the past 16 years, Button is likely to find lack of competition unsettling. Triathlons will help fill that adrenaline-fuelled void. As would racing elsewhere. Button earlier said to an Esso guest that his former team-mate Barrichello had recently competed in the world karting championship, at the age of 44, and that he'd like to copy him by also returning to his racing roots. There's been talk, too, of Japanese GTs and Le Mans – so would sportscars be an option?

JB: It does appeal and I love the camaraderie, the team effort and the passion. And after 24 Hours of Le Mans, there's the celebration whether you've won or not. I have interest in that and if the right team and situation was available I would – but that won't be over the next two years.

We've been here before with Jenson, haven't we? The December 2014 cover of F1 Racing cried: 'Jenson don't go!' since we all thought the 2014 Abu Dhabi Grand Prix would be his last. With Honda power and Fernando Alonso arriving for 2015, McLaren boss Ron Dennis initially planned to retain Kevin Magnussen, who had been impressive enough in 2014 and was somewhat younger than Jenson. In theory that made him a better bet for the future, and if not... well, there was always Stoffel Vandoorne, who would be available for 2016 or 2017 if he proved himself in GP2.

Then, following a kerfuffle in the boardroom, Jenson was handed a reprieve. McLaren shareholders Mansour Ojjeh and Mumtalakat, the investment arm of the Kingdom of Bahrain, fought hard to retain him. Honda, too, made it clear that they liked the concept of having two world champions in their line-up. Last year Jenson wasn't kept waiting so long, and he announced at Suzuka that he would be driving for McLaren in 2016 – but only after protracted negotiations behind the scenes over money with Dennis, who was playing hardball once again.

So we go to Abu Dhabi once more, not fully knowing whether it will be the last time Button will drive an F1 car in anger. I tell Jenson about watching him drive out of his Yas Marina garage in 2014, gunning the engine and laying two black rubber lines on the garage floor, perhaps thinking his time in F1 was up. Would he do something similar again next month? He smiles at the memory...

JB: Well, I actually judged that to perfection because you're not allowed to spin your tyres in the pitlane and I stopped just before I got there. That was just a cheeky little thing, as someone doesn't like black lines in the garage.

He doesn't say who that "someone" might be, but he doesn't need to. Only the meticulously clean and tidy Ron Dennis would be perturbed by that rubbery mess.

QG

I'm still at my best, but I was never not going to be at my best... I wouldn't do something if I didn't think I was good enough"





JB: I don't know what I'm going to do in Abu Dhabi. I'm going to enjoy the rest of the season, out of the car I'm going to be more relaxed. Racing won't be any different. But at the end of the season, the last race of the year? I don't know. But I won't think about it too much. If it is my last race in Formula 1, it is, and I don't have any issues with that whatsoever. I will have a lot of friends there and family to celebrate the last race of 2016 and – possibly – my last race in the sport. So we'll make it a special occasion and it's the perfect place as well to get friends and family to visit.

F1 Racing: You're driving as well as ever. Beating your teammate at Monza, that qualifying lap at Spa...

JB: Yeah, I'm still at my best, but to be fair I was never not going to be at my best because I wouldn't do something if I didn't think I was good enough. I'm fit, I eat right, I work my arse off for this team... [And this is where it gets interesting...]

I'm the one who's in all the aerodynamics meetings – the direction of the car, I put a lot of time and effort in to making sure I have my say and the car will go in the direction I want it to – so I am in a good position this year, I don't want that to change. So this is the right call, to take a break next year.

The emphasis on Jenson himself being the driver in all the aerodynamic meetings is, by implication, a reference to another driver in the team who isn't. There's just a hint there that he doesn't want it all to end, before he comes back to say, that, yes, he does want a break.

And while Jenson won't be on the grid in Melbourne, it won't be the first race he's missed since his F1 debut in 2000: there were two Monaco absences. The first in 2003 when he crashed heavily at the chicane in Saturday morning practice and the second two years later during that BAR-Honda ban. Still, it will seem odd without him...

F1R: You won't be on the grid in Melbourne in 2017 – will that seem strange for you?

JB: Actually it won't be all that strange because I've already booked in a triathlon on that weekend. [Has Bernie already leaked the 2017 calendar to him, we wonder?] I'm going to be getting up at 5.30am, watching the TV, eating white bread with honey on it — so I'll be doing all that while you lot will be preparing for the first grand prix of the year. Then I'll go out swimming and I'll run my arse off. So I won't really be thinking about it.



There are F1 'lifers' who cannot break away from the sport. Whether they're mechanics or engineers, journalists or photographers, their lives are defined by escaping into the Formula 1 bubble and leaving their domestic lives behind them for a few days every fortnight. Long after some have finished racing in the sport, they continue as ambassadors for sponsors or as TV pundits to maintain the jet-set lifestyle. It's hard to imagine Jenson, who has known only this life since he was a teenager, suddenly giving it all up...

F1R: Will you stay in the sport and work in TV like Martin Brundle or David Coulthard have?

JB: The reason I want to have a break is because I live by Bernie's schedule. I have done for my whole grown-up life and I don't want to any more — especially not next year. I wouldn't want to be in the position of still going to every single race because if I was doing that I'd want to be driving a car.

I might still do some stuff in F1, but I wouldn't do more than four or five races. Maybe there's a possibility of doing TV elsewhere, outside of F1 [*Top Gear* comes to mind...], but I don't know. I don't want to spend my whole life following the calendar – that's the reason for what is happening.

Interesting then, if he's so keen to stop it all and leave the travelling behind, that he's open to starting it up again in 2018. It makes you wonder whether really he would prefer not to stop at all. Let's see when he might next be at the wheel of an F1 car after this season is over.

F1R: When will you drive the 2017 car? Or the simulator?

JB: I'm sure I'll have some simulator days this year. But I don't know if I'll drive the '17 car at all on a circuit, and actually we haven't had that conversation yet. But there are something like 25 days of testing next year – it's massive. So they might ask me to drive it at some point, to get my feedback, but also to have me race-ready in case I need to jump in.

F1R: Shame that you're stopping before you get to try the new formula... [For a while now Jenson has been vocal about wanting to race faster cars, which the new aerodynamics regulations and wider tyres will bring next year.]

JB: Yeah, but that formula isn't going away, it will still be around in 2018. I'd rather be in a winning car with the current regulations than a car in eighth or ninth with next year's regs. You know what I mean? So I like the idea of where the sport is going but if you're not going to win...

F1R: You're coming up to your 300th GP start. Did you ever think you would be in Formula 1 this long?

His first F1 Racing front-cover appearance, way back in May 2000 when he was racing in his debut season with Williams





JB: No, never. I remember when I was about 20 and I'd just signed for Williams and I was talking with my dad about a driver who was in his thirties – I think it was Damon Hill – and I said to him 'I won't be racing in *my* thirties. Ten years in Formula 1...' and now I've done 17. So time does fly and people struggle to find anything else in their life to do when they're good at one thing.

F1R: But your longevity is down to your consistency. Look at someone like Jaime Alguersuari [who raced for Toro Rosso between 2009 and 2011] he was the youngest person to enter F1 and the youngest to retire from it.

JB: Look at McLaren. This is a team that is normally full of very talented drivers and high-achievers. Heikki Kovalainen was here for two years, Sergio Pérez for one year, K-Mag [Kevin Magnussen] for one year, and this is my seventh season with them.

So there's a lot of pressure on Stoffel. He's the bestprepared driver there can be, but there is a lot of pressure coming into such a big team that has achieved so much. The drivers who have raced here and who have been on their books — and still are on their books...



I said: 'Ron, this is my feeling right now and I've had weeks to think about it.
I need to start my life basically'



It's good to see Jenson's still got that competitive edge and is subtly piling the pressure on young Stoffel's shoulders. But however we got to this point contractually, you must admit that it's a clever bit of dealing by Ron Dennis. If for any reason his man Vandoorne isn't quite up to the job (although everyone expects he will be) then he still has Jenson under contract, someone who could replace the Belgian rookie at a moment's notice.

In the meantime, when Alonso's contract expires at the end of 2017, Ron can use Jenson as a negotiating tool. If Fernando's financial demands are too high, then he has a fit, rested world champion, eager to return.

And ultimately Ron keeps sponsors and the Ojjeh-Bahraini shareholders happy by keeping Jenson under contract.

Alonso does a limited amount of PR and Vandoorne is not a household name. As Jenson continues to draw a salary and can't be poached by another team, it's win-win all round. So is that the reason why Jenson has not looked to find another drive elsewhere?

F1R: There were initial conversations with Williams, but they came to nothing. Would you have considered driving for them or for a team like Force India next year?

JB: They have their own objectives and see a long-term future with a driver, and both of those two teams could do well. But, again, I don't want to race next year. A team that can win over the next couple of years is here and it's going to be an exciting challenge with the new regulations. The whole thing is about not racing. I went to Ron's office and said: "I don't want to race in 2017." I didn't say anything else but that.

F1R: What was his reaction?

JB: He said to me: "Give it a couple more weeks and see how you feel, then come back to me and we'll talk about it." I said: "There's no point Ron, this is my feeling right now and I've already had weeks to think about it. I need to start my life basically." Then we started talking about the possibilities of racing and he said: "Why don't you take a year off?" and added "We'll see how you feel in 2018. When you come back, you'll be even better than you are now. Michael's done it, Mika's done it [Although Mika didn't quite do it – see sidebar on p44], Alain Prost did it." He said: "Fitness and age are not an issue, and if you've got more drive to come back and be competitive, then I'll get back a better Jenson." I responded: "Am I not doing a good enough job now?" He replied that

F1'S BIGGEST COMEBACKS - AND THE ONE THAT NEVER HAPPENED

Niki Lauda

After winning world titles with Ferrari in 1975 and '77, Lauda joined Brabham for 1978 but didn't enjoy the same success. At the penultimate race of 1979, he climbed from his cockpit during practice and quit on the spot. He left F1 to run his airline business, but returned with McLaren in 1982. He beat Alain Prost by half a point to win his third title in 1984, before retiring for good at the end of 1985.



Alain Prost

He won championships with McLaren in 1985, '86 and '89, then joined Ferrari to try to continue his winning streak. The relationship ended in acrimony when he compared his Ferrari to "a truck" and was sacked prior to the last race of 1991. With no top drive available, Prost sat out 1992 and returned to F1 with Williams the following year. He took his fourth and final title before retiring for good.



Kimi Räikkönen

Ferrari replaced their 2007 champion with Fernando Alonso for 2010. Despite looking elsewhere for an F1 drive, nothing materialised, so Räikkönen moved to the World Rally Championship instead. He took part in a NASCAR Truck Series race in 2011 before returning to F1 in 2012 with Lotus. He won a GP in his first year back and in 2013 before returning to Ferrari for 2014.



Michael Schumacher

The seven-time champion announced at Monza in 2006 that he was retiring from F1. He raced in a national motorbike series in Germany, but damaged his neck in an accident. When Felipe Massa was injured in 2009, Schumacher was expected to stand in, but doctors advised against it. He finally returned to F1 with Mercedes in 2010, managed one podium and retired in 2012.



Mika Häkkinen

After winning two titles in 1998 and '99, Mika Häkkinen revealed in 2001 that he would take a sabbatical. Mid-way through that year he decided he wouldn't return and announced his full F1 retirement. However, he came very close to making a comeback with Williams or BAR for 2005, prompting us to feature him on our front cover in October 2004, but he again decided against an F1 return and chose to race in the DTM instead.



I was doing "a superb job", but that this way I would come back even better than before.

What we'll never know is whether Jenson could see the writing on the wall, and already knew that Ron was going to sign Stoffel, so pre-empted his seat disappearing by saying he wanted to stop. Or if he genuinely wanted to stop racing, following a great summer break.

F1R: Tell us where you were when you had the epiphany that you didn't want to race next year. What were you doing over the summer that brought about this decision?

JB: I just had an amazing time. I didn't think about Formula 1 at all. I was with my friends and family — actually I was with family in London for the last few days. I was with one of my sisters and I was able to relax and just be me. I probably see my family only five times a year and three of those are at grands prix or Goodwood.

I need time with my family; time has flown by and the kids in my family have grown up. I have a niece who's 31 and has five kids. I can also do stuff I haven't done for 17 years such as Ironman, maybe driving a Rallycross car and travelling the world on my terms and seeing places I want to see, rather than fitting in with the F1 schedule. And also living at home, waking up in my bed, living a normal life...

Actually, as readers of Daily Mail Online will know, Jenson is being rather economical with the actualité here. He spent most of the summer shutdown in California with his new girlfriend, the model Brittny Ward.

F1R: If you do return in 2018 after a year on your own time, it's going to be a shock to the system... **JB**: [Laughs] I know – especially if it's 35 races by then. It's an interesting time for the sport.

Overnight, the news broke that Formula 1 had new owners. Liberty Media had purchased a controlling stake and their arrival could herald a generational revolution in the sport. At Monza, Felipe Massa called time on his career and with Jenson also stopping (for now), there is a sense of 'out with the old and in with the new...'

JB: New owners will change the sport and hopefully make it bigger in America – but not, I hope, too big as a lot of drivers like going to America on holiday because no one knows who



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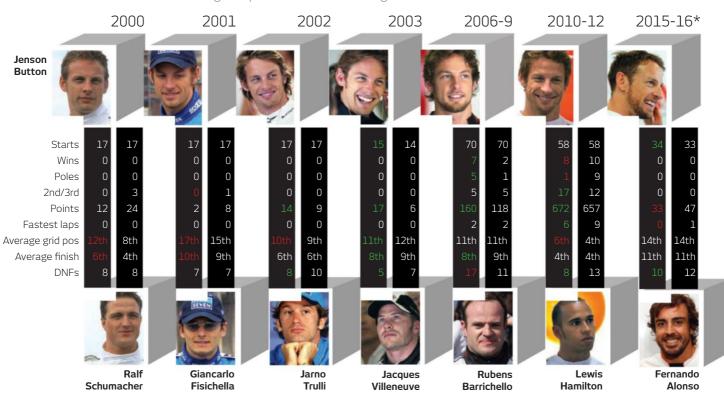


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SO JUST HOW GOOD IS JENSON?

We rank his statistical achievements against those seven of his team-mates who were grand prix winners – or would go on to be



we are. They will encourage social media and get youngsters involved; that's probably something Bernie isn't good at.

It's about getting youth interested in F1. The people who are still watching it from when I started are in their 30s and 40s. We need more youngsters, and I've heard they're going to keep historic circuits and races on the calendar – which is fantastic. It's interesting and hopefully a positive step.

F1R: On that note, we must stop. But enjoy your retirement.

JB: Thank you.

F1R: Sorry – you're not using the 'R' word are you?

JB: No...



Button with Damon Hill, a man who knows life after F1: "There is such a high in your career and then it ends in your mid-30s – and then what?" With that, our time has come to an end and Jenson has more meeting and greeting to do. As we drive away from Woking, the dial on the radio is tuned in to TalkSport, not a station where much time is spent discussing anything other than football. But today, presenters Andy Jacobs and Paul Hawksbee have Damon Hill in the studio plugging his new autobiography, *Watching The Wheels*. As we ponder the future of F1 without Jenson Button, thoughts return to what he will do, how he'll cope, and Damon is as prescient as ever.

"There is such a high in your career and then it ends in your mid-30s – and then what?" asks Hill. "There's this emptiness that a lot of sportspeople feel and they don't know what they're doing or where they're going. The adrenaline is something you become used to, and the pattern of preparing for a competition and then preparing for the next one – and that routine goes out of your life and it's very difficult to readjust to not having those targets."

So what will Jenson do next? Yes, there is a chance he could race in 2018. He might even be on the grid next year if anything happens to Alonso or Vandoorne – but this could also be the end. F1 is on the verge of a significant change and one that will seem very odd without the not-so-young Jenson Alexander Lyons Button on the starting grid. \square



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THE BOY WHO UNDID BUTTON

He's watched, he's waited. Now nothing's going to stop **Stoffel Vandoorne** kicking in F1's front door, as McLaren's new star

WORDS STUART CODLING PORTRAIT STEVEN TEE/LAT

Until Max Verstappen upset the model

by rocketing straight in from Formula 3, most young talents joining F1 in the past decade have come from either GP2 or World Series by Renault. Nico Rosberg, Lewis Hamilton, Nico Hülkenberg, Romain Grosjean and Jolyon Palmer arrived as GP2 champions, while Robert Kubica, Kevin Magnussen and Carlos Sainz topped World Series before making the leap.

Stoffel Vandoorne could be the best yet, a record-breaking winner in GP2 on his way to the 2015 title, and a man whom no less an eminence than Mercedes motorsport supremo Toto Wolff has described as "exceptional". So exceptional, in fact, that Toto quietly tried to whisk him out of the McLaren empire in which Stoffel has been embedded for the past few seasons.

McLaren's approach to this interest in 'Stoff', as they call him, has been as unequivocal as the late Charlton Heston's riposte to those who wished to part him from his beloved firearms:

"Out of my cold, dead hands..." Management have done everything they can to keep Stoffel on the books – from ushering Kevin Magnussen out of the door 12 months ago so Stoffel could fill the 'reserve driver' role, to paying Jenson Button to sit out 2017 as a brand ambassador, thus rendering an F1 race seat available. And since Honda enjoyed the cachet of having two well-known world champions in the team, McLaren found Stoffel a drive in the Japanese Super Formula series to build awareness of him in their engine supplier's native market.

Yes, he's that good.

With the likes of Wolff and Stoffel's GP2 team boss Frédéric Vasseur, now in charge of Renault F1, looking to snatch back the driver they had developed, McLaren knew they couldn't keep Stoffel in a holding pattern any longer. They had to give him a drive or give him up. Thus, at this year's Italian Grand Prix, the announcement came that Jenson Button would be taking a

'sabbatical' in 2017 and Stoffel would be taking his place. The following weekend, Stoffel claimed his maiden win in Super Formula.

"It was quite a big week with the announcement in Monza and then winning a race in Japan — it was pretty cool," says Vandoorne. "Everything is going as planned, let's put it that way. I thought that the earlier it was sorted out, the better. It gives me some time to think about a lot of stuff between now and the start of next season. Every time I've got a question, I can go to the management and ask how I should prepare for next year. Obviously I know the team and I know the people, which makes it easier for me to settle in. I'm just looking forward to getting in the car now."

Vandoorne's almost casual use of the word 'planned' offers just a glimpse into how this talented and personable but fiercely determined driver has run his career, leaving nothing to chance. Without access to great family wealth









Stoffel Vandoorne impressed in GP2, winning the 2015 title with four races to spare and collecting five feature race wins, 12 podiums and four pole positions along the way

or lucrative sponsorship deals, he advanced through the lower tiers of the junior formulae by winning scholarships. As such, his career was governed by the same principles of up-or-out as Dr Helmut Marko's infamously cut-throat Red Bull junior programme. Making the short list for the FIA Institute's new Young Driver Excellence Academy in 2011 put him in contact with F1 mover-and-shaker Alex Wurz, who, in turn, introduced him to McLaren head of comms (and former editor of *F1 Racing*) Matt Bishop.

Rather than tuck their business cards into a drawer, Vandoorne kept up communication about his racing activities, the news percolated up the line, and, at the start of 2013, McLaren signed him to their young driver programme. Much has changed at Woking since then, including the departure of team principal Martin Whitmarsh, a key figure in signing him. But those in charge, post-restructure, saw Vandoorne as a valuable asset, and kept him within the fold.

"There's always change in Formula 1," he says.
"Always people joining or leaving. It's something you have to get used to."

There's a reason for his air of understated self-confidence. He knows he's ready, having encountered highs and lows during two seasons in GP2, building on all that previous experience of up-or-out racing, and then tackling the potential banana skin that was his F1 debut (filling in for Fernando Alonso in Bahrain earlier this year) with impressive assurance. McLaren's racing director, Eric Boullier, had been watching Vandoorne's progress in GP2 and viewed his F1 debut as the sealer of the deal.

"What impressed us about Stoffel was his maturity in racing situations as well as his success in the junior categories," says Boullier. "He doesn't have the same level of experience as Jenson and Fernando, but under their influence he'll continue to grow and develop that. What showed us — and I think everybody else — that

he was ready, was the race in Bahrain where he substituted for Fernando at short notice. It was a high-pressure situation, but he made it *seamless* for the guys in the garage, and he delivered the goods on track. He was very impressive."

Being fast is enough for most teams, but what other interested parties, including Wolff and Vasseur, also covet is the ability to lead and to motivate, virtues that come to racing drivers only with age – and to some, not at all. Vasseur, in fact, is adamant that big-picture thinking, whether in the cockpit or in the garage, is more valuable than being technically gifted.

"He did two superb seasons in GP2 with us and he broke the record for the number of wins in that category," says Vasseur. "If I remember correctly, he took four pole positions in a row in his first season. He's *very* competitive.

"More than that, he's a real team leader. All drivers at his level are technically very well educated, so, for me, it's more important that \(\rightarrow\)





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Vandoorne will step up to a McLaren race seat, replacing Jenson Button (centre) for 2017, having built up relations with Honda thanks to his win in Japanese Super Formula (top right)

the driver operates as a leader, really pushing the engineers, lifting them when they're down, avoiding too much euphoria when they're at the top. He understands the life of the team – he has a very positive effect on the people around him.

"He knows when he has to push, when he has to calm down, and he's a good team player. He responds very well to instruction.

"For me, it doesn't matter how old a driver is; what matters to me is the position on the grid and the position at the end of the race. I remember his first GP2 race weekend with us, in Bahrain. He qualified P2 for the feature race and then went on to win it, but in the sprint race he struggled with the tyres. From this day onwards he understood tyre management! It only happened this one time.

"Among his great strengths in that category was his ability to maximise his qualifying performance, and then when he had got himself in a leading situation he was able to manage the

field, never pushing too much unless he had to. But he was able to lift his pace when required, and fight his way through the field. He's a very intelligent racer, and mentally strong as well."

Some people in the F1 paddock viewed Vandoorne's Super Formula gig as little more than a sop to keep him out of the hands of other suitors. But while it might not have been conventionally useful in terms of keeping abreast of the specifics of tyre management (Super Formula rubber isn't designed to the same rapid-degradation brief as F1's), it has enabled Vandoorne to improve his relationship with McLaren's engine partner. Honda have had a long-standing preference for maintaining two world champions within the McLaren line-up.

"It hasn't always been easy for me to be the only European in a Japanese team, in a Japanese series," says Vandoorne. "But it's been a really useful experience because at the beginning of this new McLaren-Honda relationship, there were some similar struggles with communication and with different working approaches. It's given me an insight into the Japanese culture, the way of thinking, and the way Honda works.

"A lot of the senior Honda management we see here in Formula 1, they come along to the Super Formula races as well, so they have an interest in that. When I'm in Japan I pop into the head office to say hello. It's been a great opportunity for me to create a more personal relationship with them, which is massively important if you want to build a team around you."

It's rare indeed for a driver to slip into a full-time F1 race seat for the first time with absolutely no doubts remaining about their abilities. But Stoffel Vandoorne is one of those rarities: an old head on young shoulders, prodigiously fast on track, and a galvanising figure in the garage and engineering office. He'll go far – but, of course, the people who've been fighting to keep him on their side knew that already... •



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Now that was a car

No. 55: The Ligier JS17
No turbo power meant this beauty wasn't the winner it should have been





2,993cc 513bhp

Hewland 5-speed manual

Michelin 589kg 2,780mm

Jacques Laffite, Jean-Pierre Jarier,

Jean-Pierre Jabouille, Patrick Tambay,

Eddie Cheever

WORDS STEWART WILLIAMS PICTURES JAMES MANN

Ahead of the 1981 Formula 1 season, there were high hopes of a first French manufacturer success since Matra had clinched the championship double with Jackie Stewart in 1969. Renault had become regular race winners and could justifiably count themselves as contenders, but the real money was on Ligier and their JS17.

Ligier had won a race in their second season, 1977, and by 1979 they were consistently picking up podiums and victories. With DFV Cosworth power replacing the Matra V12, and a neat Gérard Ducarouge-designed ground-effect car, they finished third in 1979, and then runner-up in the 1980 constructors' championship, with five wins across the two seasons.

Their growing success made the French car industry sit up and take note, particularly in the boardroom of the newly re-established, Peugeot-owned Talbot company, who increased their investment and took a 49 per cent stake in the team. Other than a change of name to the clumsy 'Équipe Talbot Gitanes', what could possibly go wrong?

Well, to start with, one of the strengths of the JS11 and JS11/15 had been its finely honed ground-effect aerodynamics. But for 1981, FISA, the sport's governing body, brought in regulations designed to constrain ground effect, thereby reducing cornering speeds. These

changes included a ban on sliding skirts (necessary to create an effective ground-effect 'seal') and a minimum ride height of 60mm. How Ducarouge and former Matra man Michael Beaujon interpreted these changes was to make all the difference.

Talbot, meanwhile, had negotiated a deal with Matra to provide the team with engines. Ligier had been promised a twin-turbo V6 but it wasn't ready, so they had to make do with the far less effective V12s they'd used in 1976-78.

The JS17, then, was only ever intended as an interim car until the V6 turbo engine was ready. Parts of its chassis were an evolution of the JS11/15, so although certain sections were made of carbon fibre, the core of the monocoque was still aluminium honeycomb. The thirsty Matra engine necessitated a larger fuel tank and a longer wheelbase, and while the greater length allowed for longer sidepods, the increased size wasn't compatible with life at the sharp end of the grid. Hewland's five-speed gearbox was retained, and this, along with Michelin tyres, was one of the car's few non-French components.

There was a suitably patriotic driver line-up, too: Jacques Laffite, already a four-time winner for Ligier, was due to be partnered by Jean-Pierre Jabouille, but Jabouille had to miss the first two races



LIGIER JS17/17B RACE RECORD



Starts
Did not qualify
Retirements

Wins
Poles

Other podiums Points TALBOT

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CONTRACTOR STATES

CONTRACTOR S



of the season while he recovered from a broken leg. Fellow Frenchman Jean-Pierre Jarier stepped into the breach.

The team were optimistic as they headed for the season-opener at Long Beach, but it soon became obvious that Ligier had missed a trick. To circumvent the minimum-ride-height rule, rivals Brabham had developed a rudimentary form of active suspension. On track, the car would run as low to the ground as possible, but back in the pitlane the driver would flick a switch and a small hydro-pneumatic jack would raise the car so it would pass the 60mm minimum ride-height test.

Both Ligiers retired at Long Beach, but Laffite did manage to score a point in Brazil. Williams won both of those races, with Brabham taking the next two wins in Argentina and San Marino. By now, Ducarouge and Beaujon had started work on an active-suspension system of their own, based on the hydro-pneumatic system used in Citroën road cars for many years. By the time it made it onto the car for round five, the Belgian GP at Zolder, they still had just one point, leaving Laffite 24 points behind championship leader Reutemann.

Things picked up thanks to the suspension modifications: Laffite finished second at Zolder, third at Monaco and second at Jarama. Spain was Jabouille's final race as he decided to quit racing, meaning Patrick Tambay was drafted in for the rest of the season. The Spanish GP was also Ducarouge's last race with Ligier: he was blamed for the early-season poor results and sacked just before the home race in Dijon — a decision that Guy Ligier would later admit was a mistake.

Results continued to improve, albeit for Laffite only, and two more thirds in Britain and Germany lifted him to third and Ligier to fourth in the standings. In Austria, Laffite trailed the two turbocharged Renaults of Alain Prost and René Arnoux and then gradually reeled them in. Prost retired with suspension trouble, and on lap 39 Laffite dived ahead of Arnoux and brought the car its first win.

Retirements in the next two races, Holland and Italy, meant that despite a superb win in awful conditions in Canada, Laffite started the final race at Las Vegas with only an outside chance of the title, behind Nelson Piquet and Carlos Reutemann. As it was, he finished sixth, dropping him to fourth in the drivers' standings. He'd scored all of the team's 44 points, which put Ligier fourth in the constructors' table, but they were a long way behind champions Williams on 95.

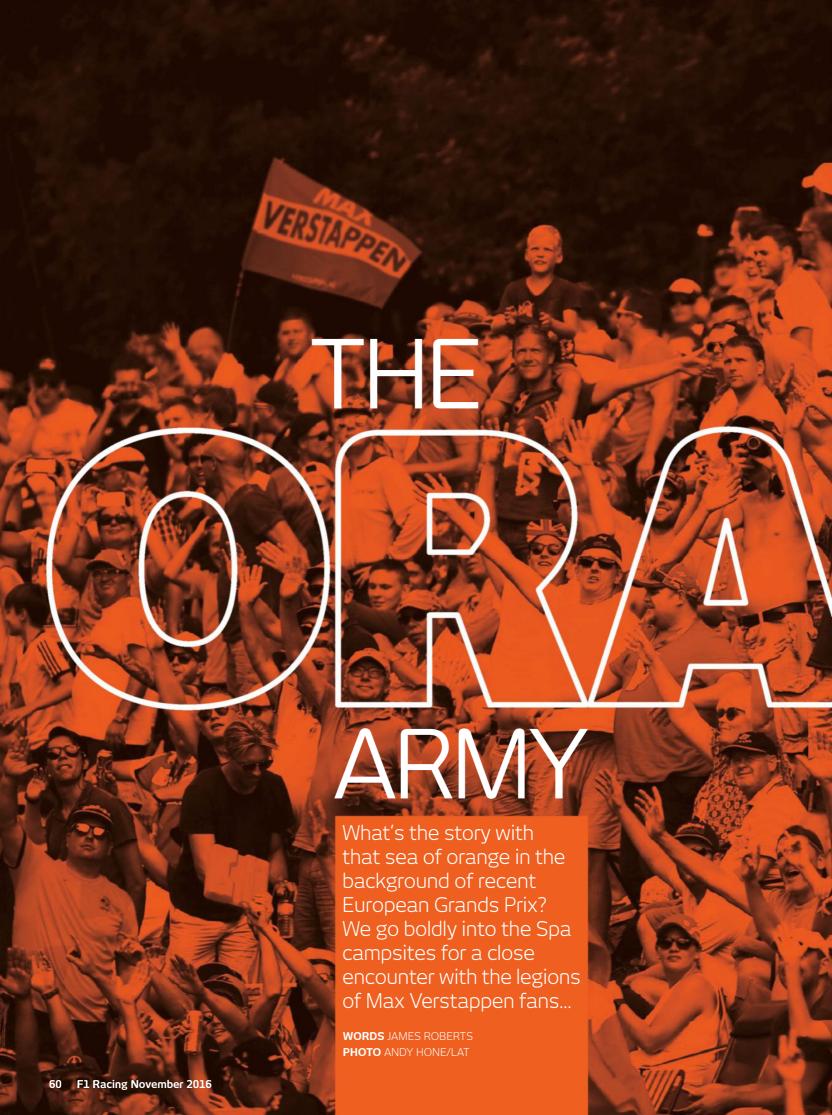
Laffite could take some consolation from having outscored all of his championship rivals massively from Zolder onwards, and finishing the season just six points shy of champion Nelson Piquet. Had the team been on the pace from the start, a drivers' title for Laffite would have been the least Ligier and France could have expected.

No lessons were learnt, and for 1982, with no sign of the promised twin-turbo V6 nor a JS18 ready to race, a B-version of the JS17 raced for almost half the season. Podiums for Eddie Cheever in Belgium and Detroit were the high points and the JS17B made a final appearance at the British GP, before being replaced with the JS19. Ligier, Matra and Talbot went their separate ways at the end of the season.





NEXT MONTH THE BRM P153 (E)





he army that had driven south, deep into Belgian territory had come prepared. Their caravans were stocked with orange flares, red-white-andblue flags, and, most importantly, beer.

Ever since Max Verstappen won his first grand prix back

in May (on only his 24th F1 start - and his first with Red Bull), growing legions of followers have been filling grandstands around the world to show their support for the teenage sensation.

Verstappen's fan club was out in force at Hockenheim, but when the Formula 1 circus arrived at Spa-Francorchamps, the numbers had risen even higher. Short of reviving the Dutch Grand Prix, Belgium is as close as Max can get to having a home race, and of the estimated 85,000-strong race-day crowd, a sizeable chunk were wearing orange. Indeed, intelligence from the Dutch TV team revealed that 30 coachloads of Max fans were heading down the E42 motorway on race-day morning alone.

Verstappen, who races under the Dutch flag, was born 60 miles from Spa in Hasselt, a town in Flanders – a Dutch-speaking region in the north of Belgium. And with the border to the Netherlands just 20 miles north of Spa, it's easy to see why the campsites and grandstands were packed full of Max's supporters.

"ON THE BANKS LINING POUHON THEY CHEERED WHEN MAX RECORDED THE FASTEST TIME IN FP2 ON FRIDAY AFTERNOON, AND WERE JOYOUS WHEN HE PUT HIS RED BULL ON THE FRONT ROW OF THE GRID ON SATURDAY"



On Friday, during the day, many them took up residence on the bank on the edge of the Kemmel Straight, just a short walk from one of their campsites at Les Combes, on the road that used to form part of the old circuit. That night, Verstappen made a low-key visit there to meet some of his supporters, including one donning an orange plastic Elvis wig and another who demonstrated his skills on a 'bucking bronco'.

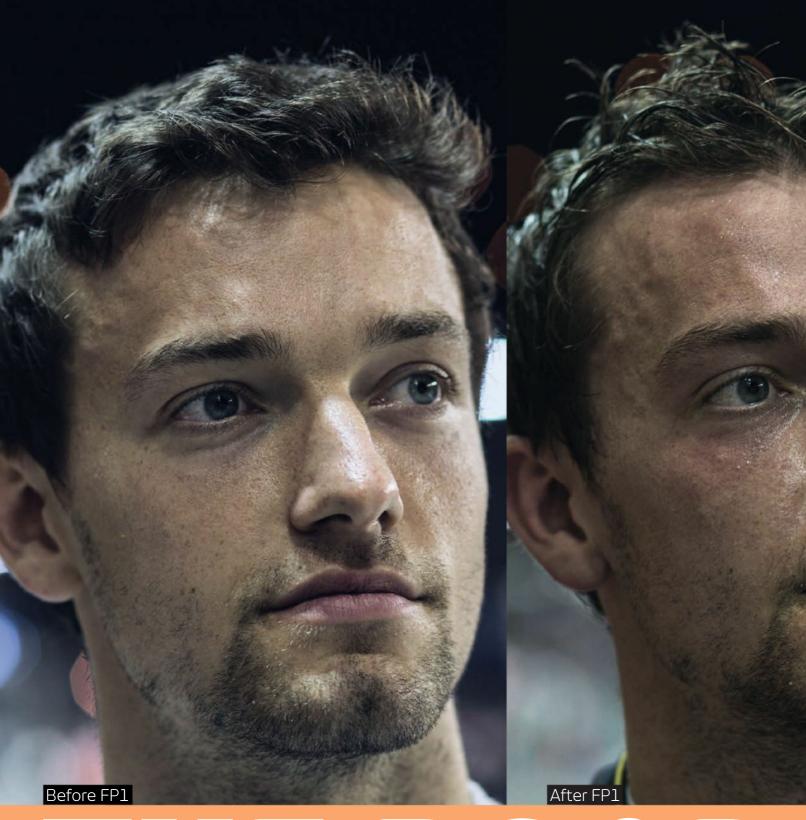
The campsites came alive as the sun set. There was a mobile disco, inflatable paddling pools, portable barbecues and crates and crates of beer. One series of tents was roped off with the ring pulls of empty beer cans threaded through the perimeter cordon. "How many?" one camper pondered when asked for a beer-can audit. "I'd say about 400. You want one?"

Imagine the scene: sacks of rubbish heaving with empty cans. Caravans painted in Red Bull colours, orange T-shirts printed with 'Jos was the boss. Max is the boss' or 'Race to the Max' and Dutch flags fluttering from flag poles or draped from car windows. Fast-food outlets serving frites avec mayo and queues of happy, sunburnt beer-bellied fans queuing for a €3 shower.

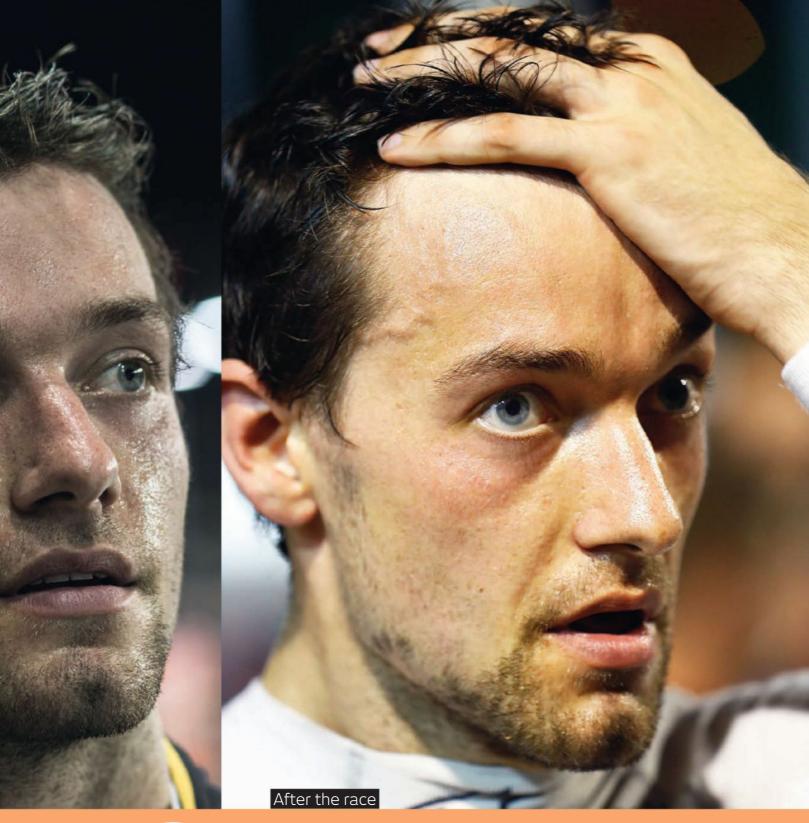
On the banks lining Pouhon they cheered when Max recorded the fastest time in FP2 on Friday afternoon, and they were joyous when he put his Red Bull on the front row of the grid on Saturday. There was no win this year, but if he ever does manage to stand on the top step of the Belgian GP podium, you can expect the orange army to be delirious with joy. For these fans, there really is only one man in town: Max. •







THE ROAD



The Singapore Grand Prix is F1's longest, hottest, most bone-jarring race – an event that even the most experienced call a "killer". So how will a rookie like Jolyon Palmer fare? Justin Hynes investigates

PORTRAITS STEVEN TEE & ANDREW FERRARO/LAT

he Wednesday after the

Singapore Grand Prix, over a shocker of a long-distance telephone line from Sri Lanka, Jolyon Palmer is reflecting on his first experience of what is frequently referred to as Formula 1's toughest race weekend – the Singapore Grand Prix.

"Even in FP1 you realise that the heat is beyond intense," he says of the 50°C-plus temperatures drivers experience in the cockpit. "The thing is, FP1 isn't a difficult session; it's always punctuated by spells in the garage. You're really only doing around eight laps a time, but it's easily the hottest I've been all season, especially because it's a street circuit and especially because in FP1 you're working overtime just to feel the grip and build up the speed.

"As soon as you come into the garage you want that cold blower; you really want a cold drink. I expected it to be very tough and it was definitely that."

Prior to this year's outing, Palmer's most recent experience of the Marina Bay Street Circuit was three years ago in the GP2 feature race when he overcame a poor start to convert a 13-second deficit to Felipe Nasr into a 13-second lead over the Brazilian by the chequered flag.

Palmer branded the victory his "finest hour in a racing car". Then, though, he was a two-season veteran of the F1 feeder category, a driver able to bring a deep reservoir of car and series experience to the challenge. This year, however, the adept had become apprentice: an F1 rookie taking on one of the calendar's most fearsome circuits — a sinuous, viperish marathon run described by Sebastian Vettel, a four-time

winner here, as a "killer". The 28 laps in GP2 become 61 in F1; the time in the car increases from 88 miles of racing to 191.

"After the race you are shattered; in pieces," said Jenson Button ahead of his second-place finish at a 2011 Singapore Grand Prix that lasted for more than 117 minutes. "It's one of the races we think is too long, that they maybe need to shorten."

Former F1 racer and Sky TV pundit Martin Brundle explains the degree of difficulty even more succinctly: "Physically, this is the drivers' toughest race of the season. Racing for two hours in that heat and humidity is the pinnacle of all the training they do throughout the year."

One man who can speak with authority about how much training helps is McLaren's Clayton Green. After working as Lewis Hamilton's trainer in 2010 and 2011, Green stepped up to run the human performance division at the McLaren Technology Centre, overseeing the fitness of the team's drivers.

"For a driver, Singapore is undoubtedly one of the most unpleasant experiences on the F1 calendar," he says. "The body is looking to maintain a normal core temperature of around 36.5-37.5°C, but as that temperature increases, it places more and more strain on the body. You're looking at feelings of nausea, loss of concentration, inability to focus. Reaction times slow down; it gets debilitating from a performance perspective.

"Normally you'd just sweat. Your sweat would evaporate and your body would cool down, but in fire-proofs drivers are in what's termed an 'uncompensable heat environment', where it's almost impossible for cooling to occur. You get a gradual build-up of heat within the body. In Singapore, core body temperatures would be pushing towards 40°C. If core temperature exceeds 40°C for prolonged periods of time, that is considered life threatening."

It's not just rising core temperature that's an issue: dehydration is also a major concern. "You can see fluid loss of 1.5-2 litres per hour, as much 4 litres across the race, which is extreme," explains Green. "It's not uncommon in Singapore for a driver to lose up to 3kg of body weight.

A loss of two per cent body weight impairs cognition and performance. A loss of four per cent is severe. So, for a 70 kg driver, 3kg is just over four per cent of their body weight – that means severe dehydration."

By the time Palmer reached Friday night's second practice session, the true nature of F1 at Marina Bay had begun to sink in.

"FP2 is the first time you really feel the strain," he says. "I did around half a race distance and that's your first real feeling of just how tough it's going to be. It was long. It was without a drink bottle as well because we didn't run with one on Friday.

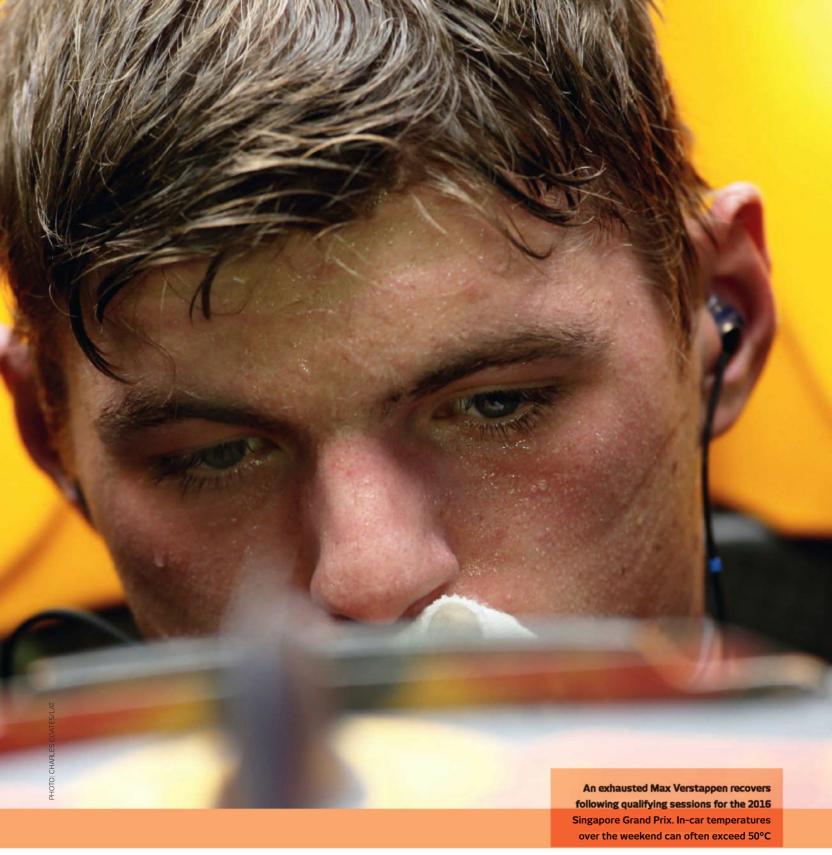
"When you're driving, you don't notice it because you're so focused," he explains. "It's more on in-laps and when you jump out of the car that you really feel it; you're really overheating. Then you realise you need to get some more liquid on board, fast."

Daniil Kvyat is a driver with first-hand experience of the deleterious effects of dehydration and of running without a drinks bottle. In 2014, his debut season with Toro Rosso, he was on his way to the grid when the team informed him there was a malfunction with his drinks system and he would have to race without it.

"Let's just say it wasn't pleasant," he says.
"You often just need to keep some fluid in
your mouth because sometimes when you
drive, the saliva disappears and you have
a burning feeling there."

It was so debilitating that at one point Kvyat radioed his engineer to request permission to quit the race.

"The last 15 laps I was really struggling," he remembers. "I wasn't able to concentrate. I was making mistakes. It was like I wasn't thinking any more about driving but just about finishing."



THE TOLL ON THE MACHINES

While Singapore gives drivers a complete workout, its effects on the cars is just as extreme, with this year's winner Nico Rosberg admitting: "the whole car was on the edge, it always is in Singapore".

The chief concern is the brakes. With 24 per cent of the lap spent under braking, high ambient temperatures and a dearth of straights, the Marina Bay Street Circuit gets a nine out of ten rating on brake manufacturer Brembo's severity scale.

While Mercedes' Paddy Lowe insisted that his team's concerns during the race were "a question of management", the frantic radio messages

between pitwall and drivers suggested the management was under intense stress. As early as lap 10, Rosberg was told: "This is serious Nico, we need that brake management." Lewis Hamilton, meanwhile, complained of issues throughout the race's early stages. However, Lowe's verdict was borne out during the closing stages, when, after Rosberg had asked whether he would be able to lean on his brakes in the final laps, he was told that he would "have more at the end".

Gearboxes also take a beating in Singapore, with drivers making around 82 gear changes per

lap. That's 20 more per lap than in Monaco and almost double the number made in Monza (88).

One problem that is no longer of concern to the teams, is the mysterious underground energy bursts near the Anderson Bridge section of the track that have caused gearbox breakages in the past. McLaren's technical director Tim Goss explained last year: "The first time we went to Singapore it was quite a serious problem, but we now know what countermeasures to take, such as electrical shielding on the car and a few other software changes."



Curiously there was a repeat of the incident this year, with Palmer's Renault team-mate, Kevin Magnussen, having to run the entire race without access to fluid. "I don't know what the problem was. I'm not sure if there was any water or if the bottle failed, but the team definitely owes me a drink! In the end I just had to block it from my mind and get on with it."

These incidents are extreme examples of the effects racing in Singapore can have on a driver, but Kvyat is quick to point out that even without the exceptional circumstance of coping without water in temperatures above 50°C he was, in his rookie year, simply unprepared for how much tougher Singapore is than other races.

"My first year in Singapore was a real physical test for me," he says, "but by the time of Malaysia the next year it was already better and easier. Singapore was still a challenge, which I think it should be, but this time it didn't drop my performance. The first year I really lost performance."

For Kvyat, the Singapore race further heaps pressure on rookies in that its myriad demands harshly expose an inexperienced driver's ability to multi-task. "Driving takes so much concentration," he explains. "When you are a rookie, you haven't any spare brain, so you forget to drink and your mental capacity drops. "In my first race in Melbourne I forgot to use tear-offs, and at the end of the race I came in with a visor that was impossible to see through. I only realised it on the final lap. As you gain more experience you develop more spare brain."

Engaging that surplus mental capacity is no easy task, however, especially when your brain is being rattled around on Singapore's wildly uneven surface – an experience Lewis Hamilton has described as "crazy".

"You're being thrown around, bounced all over the place," he told the BBC in 2013. "There is compression on your spine. Your legs are moving. You're vibrating all the time, hoping not to lock up the brakes."

After the race Palmer is quick to confirm Hamilton's view. "The bumps are a massive part of the difficulty," he admits. "I've got bruises everywhere. Because I'm quite a tall driver, when I hit a bump on the pedals I don't have a lot of space between my legs

and the bulkhead. I was getting a lot of bruising on my knees.

"I also had a headache, partly because of the heat, partly because I was sweating so much, but also because I was basically being shaken around so much. You're bashing over kerbs and bumps every moment. Put simply, your brain gets rattled. And while that's happening you're trying to concentrate hard. It's just not easy."

It sounds straightforward, but the key to combating the huge demands of the circuit is preparation. However, as three-time podium finisher Daniel Ricciardo explains, no amount is ever enough.

"Singapore is one of those races where you're never completely satisfied with the amount of preparation you do," he says. "I'm sure every driver would say the same – that they'd do more preparation, but it is what it is. You just have to do what you can and hope it's enough. If it isn't, you'll find out about three-quarters of the way through the grand prix."

Clayton Green insists that careful preparation can ameliorate some of the worst effects of Singapore's punishing heat and 80 per cent humidity. "The more you can acclimatise the better," he says. "If the drivers can experience what it feels like to be in those conditions when they're training, then psychologically they can prepare themselves for how it's going to feel and they can try to train themselves to relax a bit more in those conditions. If they are able to relax for longer, then they can focus better and deliver better."

For Palmer, that meant a steady course of hydration across the weekend, particularly in the build-up to Sunday's race.

"I knew it was going to be a long, hot race so the prep was pure hydration. It's important to take it in a good chunk before the race. At some point you need to stop though as you'll just need a piss when you're in the car and that's not comfortable! I drank maybe two or three litres in the few hours before the race. Then, in the hour and half before, I slowed that down a lot."

Overhydration, cooling vests, towels drenched in ice water — all are regularly employed, but Green admits there is no silver bullet and that in taking on the Singapore Grand Prix, drivers are pushing themselves to the limits of what's possible in such conditions: "The human body is remarkably resilient. It has these mechanisms to cope, but they are purely *coping* mechanisms," he says. "This is a sport where even tiny fluctuations in performance can make a huge difference to the outcome. So for the drivers, although the body might be able to cope, they can be severely limited in what they're capable of doing. That's not acceptable when you want to compete at the highest level, but it is the nature of the beast."

And what a beast it is. With the debilitating effects of heat and duration being compounded by the physicality of wrestling a car through corners some 1,400 times, Green, who has worked with some of F1's fittest and most gifted racers, believes that the Singapore Grand Prix is Formula 1's ultimate physical and mental test.

"Drivers are always in uncomfortable conditions in the cockpit, but the humidity and heat, coupled with the fact that Singapore is mentally the hardest race on the calendar, well, it's a massive step up on other races. Honestly, I'm impressed that more drivers don't collapse after the race."

For Palmer, this year's race didn't approach that level of physical duress – "I was driving a pretty lonely race for the bulk of it" – but his first tilt at this most extreme of grands prix will remain a landmark experience.

"For me, it was certainly right up there with the biggest challenges. I can easily see that if you're underprepared you can really be caught out. It's the nature of the circuit as much as the heat. It's the hardest thing I've done all year. F1 is physically demanding, but with most races everyone is physically fit enough to get through it. Just not in Singapore. With Singapore, if you're not up to full fitness, you will be found out."

Spa, Suzuka, Silverstone, Monza – all call for the deployment of particular weapons in a driver's arsenal, but in weighing up the exceptional assault Singapore makes on a racer, and how close it comes to total war, perhaps Singapore can be classed as the sport's greatest challenge.

Sex... Drugs... Religion...

This is what they talked about

It's 40 years since James Hunt won his F1 world title, a feat that made him a national celebrity and a sportsman famous enough to earn his own fanzine. But *The James Hunt Magazine* didn't last long, and one interview never made it into print... until now

WORDS MAURICE HAMILTON
PHOTOS LAT ARCHIVE & SUTTON IMAGES





hile carrying out research for a book I was writing to mark the 40th anniversary of James Hunt's 1976 world championship victory, I came across a forgotten transcript of a conversation between James and Stirling Moss. This had been set up in 1977 to provide material for *The James Hunt Magazine*, the first fanzine in motor racing. I worked on it during my second year as a professional journalist.

At the time the meeting took place, Moss had been in retirement for 15 years, but his name, experience and forthright views would make for a very lively discussion between these two British heroes.

We'd arranged the encounter for Sunday 28 August. It took place in the Bowes Palace Hotel at Zandvoort following qualifying for the 1977 Dutch Grand Prix. This was an appropriate venue since James had won the grand prix here for the past two years in a row.

But for reasons now forgotten, the planned issue of the issue in which it was to appear was never published, so the conversation between the two has remained unseen - until this F1 Racing exclusive.

On the day, my role was more that of 'host' than 'interviewer', but to get the conversational ball rolling, I asked a question about their respective periods of racing...

Maurice Hamilton: Stirling, given the choice, would you prefer to have raced in your day or now?

Stirling Moss: It was more fun in my day but, financially, obviously it is far better to race today. In my best year, 1961, I paid tax on £8,000 after

expenses, gross. I think it was £32,000 or something like that. Back then I had airfares to buy and that year I won the European Grand Prix and it was worth £1,000 in prize money.

We also had to pay for our tyres. Other drivers I know were paying 25 or 50 per cent depending on how good they were, and I got to a position where I was able to say: "Look, I'm going to use your tyres and I want them for free." Money has changed, obviously, but the pressure on you today is far greater than it was for us.

James, do you agree that the world title is the worst thing in motor racing? It does the sport harm because drivers of your

calibre go into a race and instead of trying to win, try to consolidate third or fourth or whatever they need for the title. Don't you think that's wrong?

James Hunt: Well, I would never do that. Let me answer the question backwards. I believe that attack is the best form of defence. I believe that in



"DO YOU AGREE THAT THE WORLD TITLE IS THE WORST THING IN MOTOR RACING? IT DOES THE SPORT HARM BECAUSE DRIVERS OF YOUR CALIBRE, INSTEAD OF TRYING TO WIN, TRY TO CONSOLIDATE WHAT THEY NEED FOR THE TITLE" STIRLING MOSS

everything in life. So if I needed three points to sew up the title, I'd sooner do it with nine and really rub it in.

SM: I know what you mean, but you're in a minority.

JH: I probably am. But I've always believed that if I can't beat the guy in front, I'll keep going flat-out because pressure might force him to make a mistake or he might run out of petrol.

If you let him cruise, he will have less chance of going wrong himself. The championship is by no means perfect, but we have to have a championship. If we just had individual races we wouldn't have a good series.

SM: I wasn't suggesting we do away with it, but it's a malady that the sport has to suffer and it does cause drivers not to drive as hard, as you've said.

JH: Not often. It may happen twice a year when someone is protecting a championship lead, but not in a race when everyone is going flat-out.

SM: Look, come on, how many drivers do you feel are real competitors to you when you start a race?

JH: Four or five. It never really goes up or down much.

SM: Exactly, it's always been like that. Ever since René Dreyfus was racing in the Paris-Madrid, he probably only had four or five blokes to race against. It's just one of those things.

JH: Stirling, one thing I want to ask you; you apparently used to say 'no sex the night before the race'. Did you really do that?

SM: When I was competing with Mike Hawthorn – when he won the title [1958], I lost by one point. It was very close and I thought: 'Sod it, I really do think that I am better than he is.' And then, as you said, you relax when the pressure is off. When I did, I found that I won a race or two even though I had been on the sack – not the night before admittedly – but I did find it a hardship. If I was racing neck and neck with A N Other and if I looked across at him and thought 'Well I know that he had a beer and was screwing around last night, he must be more tired' – it made me feel better.

JH: Oh yes, I work on that principle very much, certainly at three quarters distance; I'm sure that these days the cars are much more tiring to drive. The G-forces are so much greater, and that's what really knackers you.

SM: Yes, you've got the G-forces, we had the heat.

JH: We still get a fair bit of heat. Late into a race when I feel knackered I always console myself that I know the guy beside me is feeling worse. But I don't drink around a race, I feel that is a matter of discipline. I've got nothing against two or three beers or a glass of wine at dinner because I think there is no way that it can do you any harm: only quantity can because it tires you physically. I feel that if you have a rule you must stick to it, as it shows a general weakening of the spirit if you start breaking them. Luckily for me, I never made 'no sex' a rule.

[Hard to imagine today's drivers talking like this! In the lull that followed, due to mild panic on my part that they were veering into an area not suitable for publication, I nudged the subject back to driving...]

MH: Stirling, are you aware of the G-forces when you watch today's F1 cars?

SM: What James says is absolutely true. The G-loads are way over two times the ones we used to have. When I was racing, the biggest problem was heat, particularly when they went rear-engined. \Rightarrow

"ONE OF THE MOST IMPORTANT LESSONS IN WINNING IS LOSING. LOSING FIRST WILL MAKE WINNING A LOT MORE IMPORTANT" JAMES HUNT

JH: Really?

SM: Yes, people thought that because the engine was at the back it was cooler. That was bullshit because the radiator was at the front, the water was at nearly 100°C and the oil at even higher temperatures, and it was taken past you on both sides. That was like central heating. We were lucky because we didn't have the gear that you have to wear.

When I started racing my father turned to me and he said that if I was going to race then I had to wear a crash helmet and I said: "Dad, that's sissy. The

other guys have all got cloth helmets on." Luckily he made me and I think that he was right. Also I always used to race in short sleeves back then so that I could get a tan.

JH: Today's cars are physically hard work to drive. You can get blisters through three layers of gloves.

SM: That was the same in our time, but have you noticed that some guys get far worse hands than others?

JH: Well, they probably cling on harder because they're more frightened.



James Hunt after winning the Dutch GP at Zandvoort in 1975. He won it again in 1976, and this interview took place there in 1977

SM: Maybe, but I've always thought that it was the sweat.

JH: I've got sweaty hands. I always have to use a towelling grip when I'm playing squash. With a leather grip my hands get too wet. It's purely heat.

SM: Mine will only sweat if I frighten myself and get scared. Tell me, if you frighten yourself, do you get that sort of dreadful sickening feeling in your stomach? I'd go round a corner and I'd usually feel the fear once the fear was over.

JH: Yes, I do get that. I think that

it's a sort of delayed reaction.

SM: When you go around a corner and know that you are lucky to still be on the road, then what do you do?

JH: It's very quick. You've got to get it out before you get to the next corner and I think that it's all part of the way of thinking.

SM: Do you thank God for the fact that you are alive?

 $\mbox{\sc JH:}$ Ah, well I thank some body. I'm not a religious person. **SM**: No, neither am I. But are you a believer in the fact that there is a power greater than you?

JH: Yes, I'm a sort of believer in fate and things like that, but I can't channel it. I'm agnostic. I believe that there is something, but I don't know what it is.

The fanzine, Jan.

SM: So, 'God' is a word for it. It could be anything?

JH: Yes.

SM: I know that when I came around a corner after a moment and I knew that I was alright I would thank God because 'God' is a name that one knows and I happen to utilise. You do the same? Or do you just think 'well...'

JH: Not particularly, I don't have time. I just pull myself together and get on with what I'm doing because there is the next corner coming up. It's a conditioned reflex to be able to put it out of mind.

MH: Stirling, do you reckon driving technique has changed much over the years?

SM: It has, and I think that is the greatest difference between the two eras. With the type of tyre that I used, if I went into a very fast corner like Woodcote [at Silverstone] for example, which wasn't quite flat, you would just roll off the throttle. If I was going in and it wasn't steering quite enough, I would just roll back and get a set oversteer and I was round the corner. With the modern tyre as I see it, when I tried that technique it didn't work: if I wanted to have more steering, then I had to put my foot down that bit harder.

JH: No, that doesn't normally apply.

SM: I'm glad to hear it.

MH: Stirling, if you had been in James's car when you had your accident at Goodwood [Moss had been forced to retire at the peak of his powers after his accident in a privately-entered F1 Lotus 18/21 on Easter Monday in 1962] would you have been unhurt and still driving today?

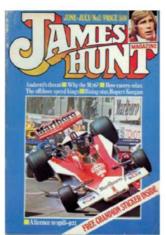
SM: If I had been wearing a proper harness then I wouldn't have been hurt. Well, I would have been hurt but I wouldn't have been unconscious because it was banging my head that put me out. I once went to a leading neurologist and showed him my helmet, which, in those days, was just a polo hat and I asked him if I had been wearing a modern helmet whether

I would have been better. He said: "Mr Moss, in my opinion you would have been dead because your helmet was so weak that when you took the impact it absorbed it by breaking, whereas the modern one would have transmitted it."

JH: I wouldn't necessarily agree with that. You do split modern helmets before you hurt yourself. I drove into a catch fence in Sweden and was hit on the head in a low-speed crash. I had a hell of a clunk on the head and the helmet was split but I wasn't hurt.

The fanzine, James Hunt Magazine, where this interview was originally meant to have been published







SM: I've nothing against the modern helmets, it's just the principle that they have outlawed the use of the type of helmet I wore when having so many accidents – yet my head is alright.

JH: Well, things change you know, Stirling. One needs a full-face helmet because you have so many things flying about when you have an accident, such as fence poles and wire netting. There have been plenty of times where I would have had no face left at all because of catch fencing and my helmet has been scratched raw.

MH: What do you make of Niki Lauda's comeback? [A reference to Hunt's 1976 title rival having made an extraordinary return to the Ferrari cockpit six weeks after being badly burned during the German GP.]

SM: When you have an accident, you have to decide whether you want to go back to racing. If that is your decision then you have to get back as soon as possible. Personally, I was unable to get back into the car because I was paralysed on one side and it kept me off for nine months. In my opinion, Niki decided that he was going back and he did it as quickly as possible.

JH: I have fantastic admiration for Niki but not in the ways that other people have. I admire the way he has handled his disfiguration. He has come out of the accident stronger, more relaxed and more objective about life. Last year Niki had the best stimulation anyone had ever had. He had me out there chipping away at his championship lead and he had everything to go for. So he had terrific motivation to win.

SM: This is what people don't understand. They say that it's about taking part. That is bullshit. This thing is to take part and win! It doesn't make you a bad sport. I'd love to play tiddlywinks and be beaten. That doesn't worry me at all because it isn't an important thing to me. But if it's something that is your life...

JH: The thing you learn if you get beaten is that it will stimulate you to get better and come back and win next time. We always race to win, but one of the most important lessons in winning is losing. To learn the value of winning you have to lose first. Nobody walks in and wins their first race, or if they do, they are very unlucky because then they're off to a bloody awful start. Losing first will make winning a

lot more important to them... @

• A further extract from this interview will appear in Maurice Hamilton's forthcoming book, James Hunt, published on 20 October 2016 by Blink

MASK THE QUESTIONS

Felipe Massa

When this popular, respected racer announced his retirement, his paddock peers couldn't wait to get his views on a variety of subjects

WORDS JAMES ROBERTS PORTRAITS GLENN DUNBAR/LAT

In an emotional press conference at Monza,

Felipe Massa revealed that this season of F1, his 14th, will be his last. Massa, 35, chose to make the announcement at the Italian GP, just as his great friend and Ferrari mentor Michael Schumacher had done ten years earlier.

For eight seasons Massa was a Ferrari racer and scored all of his 11 wins with the Scuderia. Two landmarks stand out in his career: the championship he held for a matter of seconds until Lewis Hamilton passed Timo Glock at the final corner of the 2008 Brazilian GP to snatch the title from Massa's grasp; and the accident that nearly cost him his life.

Massa sat out the second half of 2009 after he was injured by a spring that broke off Rubens Barrichello's Brawn during qualifying for the Hungarian GP. A year later, on the anniversary of that accident, he was leading in Germany when the now infamous call came through from race engineer Rob Smedley: "Felipe, Fernando is faster than you. Do you confirm you understand that message?" Dutifully he pulled over and won many admirers that day for his dignified response – just as he had the day he lost the title.

When Massa, now into his third season at Williams, bids farewell at the end of the year, it will be an emotional occasion. Like Jenson Button, he has enjoyed a long career in the sport and commands great respect from his peers.

To demonstrate that, we're marking his retirement with a special twist on our 'You Ask The Questions' format, in which the questions come from the great and the good of Formula 1. Whatever Massa does next, he'll be remembered in F1 for his good grace and sportsmanship. We'll miss his sense of humour, his passion and his ever-present family. With that in mind, what better place to begin than this query from his former Ferrari team-mate Fernando Alonso...

Your son Felipinho plays football very well. When he grows up, would you rather he became a footballer or an F1 driver?

Fernando Alonso

F1 world champion in 2005 and 2006

I would say a football player is much better since that will be a lot cheaper for me! I've already told him that if he wants to play football, I'll pay for that budget. But if he wants to be an F1 driver, then I'll be really restricted in money – and he'll have to find a sponsor.

Felipe, Formula 1 world champion or the winning goal scorer for Brazil in a World Cup Final – which would you choose?

Pat Symonds

Chief technical officer, Williams

Well, I have to say Formula 1 world champion – that has always been my dream and, actually, Brazil have won everything in football already. We are the only country who have won the World Cup five times and now we also have the Olympic gold for football, achieved this summer in Brazil.

What was the most important lesson you learnt during your first season in F1?

Jo Ramírez

Former McLaren team co-ordinator

In my first season I learnt a massive amount. I was only 20 years old, which was really young. I had no experience in F1 prior to coming into a race, all I had was a few tests at the end of 2001. I was always very quick, very competitive, but I was just a kid and all I wanted was to go as



ASK THE OUESTIONS

fast as I could on every lap. As a result, the chances of making a mistake were much bigger.

In F1, every lap needs to be the perfect lap, and if you push the whole time, you don't gain the experience to know when to moderate your performance. You don't know how the tyres are, or the car, or what you need to do in a race compared with qualifying to get a perfect lap. This is what I learnt in my first year back in 2002. I had a lot of attention, had some amazing results, but I also made a lot of mistakes as well.

I know how it felt when you lost the championship in 2008. But tell us how *you* really felt?

Niki Lauda

F1 world champion in 1975, 1977 and 1984
It was harder for the people watching on TV.
They were analysing the race and watching what was happening. I didn't have that. I knew I was in first place and that was all I needed to do. In my mind, I knew things could change every lap and all I could do was win the race – which is what I did. So the victory helped me. I couldn't do anything else. I started on pole, got the fastest lap and won the race. That was a big help for me.

Are you driving better than ever?

Carlos Sainz

Toro Rosso racer

I would say so. I think so. The experience helps and I'm trying everything I can in the car. It doesn't matter if you look in the mirror and see that you are 35 years old and you have 15 years of Formula 1 behind you. I still try everything that I can in the car, and I can say that am still as competitive as I was earlier in my career.

What advice would you give to the young Felipe Massa sitting on the grid for his first grand prix in Australia 2002?

Guenther Steiner

Haas team principal

It's similar to what I said earlier. The specific advice would be to make the first corner because, if you remember, I couldn't! Not that it was my fault, but another car hit me at Turn 1. The advice would be: 'Don't worry about the start, get to the first corner, make it round and then your chances of finishing the race will be much better.'

How the hell did you survive the pressures of Ferrari?

 $All an\ McN ish$

Le Mans winner and F1 broadcaster

[Laughs] I don't know man! It's true I had a lot of pressure at Ferrari. There is more pressure at Ferrari than at any other team in Formula 1.

F1R: Why is that?

FM: Ferrari is like a religion, so you have a lot of pressure from people working inside the team. And from the fans, the media – especially the Italian media, who apply pressure all the time. Whether you have a fantastic car or a difficult year, the pressure is massive, every single day. But I managed to get through eight years – nine if you include my year as a test driver – and it was definitely a good but difficult time.

What was your favourite road car?

Romain Grosjean

Haas F1 racer

This is a difficult question. I have had many favourites throughout my whole life. My first car was a Fiat Palio, a 1,000cc-engined car that was really slow, but I had no money so I was just happy to be able to own my first car. But I think my dream car is a La Ferrari – which I now own.

What is your favourite dish?

Lewis Hamilton

FI world champion in 2008, 2014 and 2015
I love all different types of food. I love Italian food and I probably eat more of that than anything else. I like meat, fish, Japanese – unfortunately we cannot eat as much as we'd like

"Ferrari is like a religion, so you have a lot of pressure... But I managed to get through eight years and it was definitely a good but difficult time"



to. We need to take care of our diet and do a lot of sports, but when I have a little more time in Brazil I love to eat a white rice and black bean dish with a grilled steak and French fries. I always dream of that when I think of going back home.

When you pass Fernando Alonso, do you think about Hockenheim 2010?

Martin Brundle

Le Mans winner and F1 broadcaster

[Laughs] To be honest, no, when I pass Fernando Alonso I'm actually just really happy because he's a very good driver. He's very aggressive and not easy to overtake, so when I pass him I'm happy.

After F1, what will you do next? Would you drive in another series or stay on in F1 – maybe as a sporting director?

Marc Gené

Le Mans winner and Ferrari test driver
For sure, I will keep racing since that is what I love to do. Where? I don't know, but I will keep working on it. A sporting director? I won't do that, for sure, but I would consider another championship. I love to race. I need to do what I love, but time will tell what I actually do.

Why did you go the Italian F3000 route on your way up to F1? How did you manage to shine when most drivers progressed through International F3000?

Marc Hynes

British F3 champ and Lewis Hamilton's advisor I had the chance to go to Formula 3 since I had an offer from [former Renault boss] Flavio Briatore to join his junior programme there. I also had an offer from Pedro Paulo Diniz to be part of his young driver setup — at the time he owned part of the Prost team. After I won the two Formula Renault titles in Eurocup and in Italy in 2000, I had an offer from Toyota. Everyone was trying to sign me, but I said no to Toyota, no to Diniz, no to Briatore.

My manager at the time was Adriano Morini, the founder of the Draco Formula 3000 team. He wanted me in his team whatever the cost and he helped me say no to all of these people and crucially he was the guy who helped me get to Ferrari. So I know now that it was a good thing to say no to all these other people.

Why don't you accept that you crashed into me in Canada in 2014?

Seraio Pérez

Force India racer

[Laughs] So, actually, why don't *you* accept that you crashed into me? That memory is part of our history together and I tried everything I could to get to the podium in that race. I was fourth going



for third and unfortunately you moved the car under braking – but I'm sure you've learnt and you won't do that any more.

What went through your mind when you pulled out of the Singapore pits in 2008 with the fuel hose still attached?

 $Mark\,Arnall$

Kimi Räikkönen's trainer

That was a mistake in the pitstop with a guy who was controlling the red and green lights in front of me. But these things happen. I was so disappointed because I had the victory in my pocket. I qualified first and was running well ahead of second – the race was mine. Later I was so disappointed when I discovered why we had the Safety Car in the race [Nelson Piquet crashed to enable his team-mate Fernando Alonso to win] and for me that was not part of the sport. It was the worst thing that happened in 2008.

How did you face getting back into a car after what happened to you at Hungary in 2009? And how were you able to carry on with no apparent effect on your driving?

Ivan Capelli

Former Ferrari racer and F1 broadcaster I don't remember anything about my accident. What I can recall is about six months afterwards

Damon Hill F1 world champion in 1996

I would say so, but I missed the championship. This is something I always dreamed of – as every driver does. I passed really close and I would say I have been a very successful driver with a great career in F1. I can say I am very proud of everything that I have achieved.

when I got back into a racing car again. I wanted to be quick and I managed to do quick lap times and I understood that everything was normal. Not remembering anything about the actual crash was probably the best thing that happened to me, because if I did remember something, that might have changed how I felt about it.

As a driver who has survived a serious head injury in Formula 1, what is your opinion on F1 having halos or aeroscreens... or nothing at all?

Jonathan Palmer

Former F1 driver and racetrack owner
The halo is a very important thing. I think that
we need to be 100 per cent sure we don't have

problems with the halo. I also think it's important that we continue to have safety improvements. Only recently I saw an accident in the IndyCar race at Pocono, where in the pitlane Helio Castroneves was very lucky [when the car of Alex Rossi was launched close to the Castroneves' head]. It's more proof that the halo is important and they need to hurry up with introducing it. We need to get it on the car and drive, rather than just doing installation laps or simulation work — that's the best thing we can do and I'm all in favour of it. \Box

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Toro Rosso's team principal, Franz Tost, talks to F1 Racing about Jochen Rindt, the business-minded Austrian racing driver and posthumous world champion, who inspired his life-long passion for F1

Jochen Rindt was a hero to me as a young boy, and because of him my interest for F1 and motorsport in general began. I had posters of him and his racing cars on my bedroom wall, and I was fascinated by the way he drove and by his incredible car control. There were hardly any pictures where the car wasn't sliding around, but Jochen always had everything under control. This was something special.

In Austria, we were lucky that the ORF broadcast many races. Heinz Prüller was the commentator, and also, in the evening, there was a summary of what happened not just in Formula 1, but in Formula 2 as well. And they talked a lot about Jochen, Jackie Stewart and Formula 1 in general. This was fantastic. When I came to Germany in 1988, no Formula 1 race was broadcast there. I couldn't believe it. Only later, when

Michael Schumacher came along, did they start to show it.

So I watched all the races that were broadcast, and I know that many Austrians of my age were influenced in the same way, and many of them got involved in motorsport because of Jochen. They were fascinated by him, by his personality, by

his remarkable skills – you know, there was never an accident where he lost the car because he was too fast. It was only when the car had a technical failure, as was the case, unfortunately, in Monza, when he died.

One time at school, I had to give a talk to the class. The teacher asked, "Okay, what's the topic?"

I said: "I will talk about Jochen Rindt."

"But two weeks ago you talked about Jochen Rindt!"

"If you want a speech from me it's the only topic I'm interested in, and either you accept it or I don't talk."

I still know it by heart. 'Jochen Rindt, born in...' and so on. So the whole class heard it and, for sure, this class remembered Jochen Rindt. They knew everything.

He was born in Germany, on 18 April 1942, and his parents had a company in Mainz. Then, during the



war, they were killed [in a bomb attack on Hamburg in 1943] and he went to Austria, to live with his grandmother, in Graz. He ended up at school with Helmut Marko. He raced under an Austrian licence, but because of where he was born, sometimes the Germans would say he was

German. The Austrians were fighting for him!

I saw him in action for the first time in an F2 race – people called him the King of Formula 2 because he won so often – and then in F1 with Brabham and later with Lotus. Before that, he had won Le Mans in 1965, driving a Ferrari with Masten Gregory. It was a surprise victory, and a great one, because they had problems with the gearbox and only just made it to the end. In those days drivers raced far more often, and across more disciplines, than they do now.

There are still many connections between Jochen and modern-day F1. Ron Dennis was his mechanic at Cooper, and Jochen took him along when he moved to Brabham because he liked and respected Ron's meticulousness. In the 1960s you were more likely to have an accident because of a technical failure than for any other reason, so a great technician was worth keeping. And, of course, Bernie Ecclestone was Jochen's manager.

I think it was also a friendship between him and Bernie. They played backgammon and spent plenty of leisure time together. They also created an F2 team together, and maybe if Jochen hadn't died they might have run an F1 team as well. I've never asked Bernie what he did with Jochen's white crash helmet, because he went to the Parabolica and picked it up after the accident.

Jochen was very enterprising. He created the Jochen Rindt Show, a racing car event held in the winter months when there wasn't usually any racing on. It was launched in Essen, Germany, but then he took it to Vienna. People always wanted to go and enjoyed it very much.



"I'm not sure Jochen would have retired because he was a racer; a pure racer. This was his life. Maybe he would have taken a sabbatical, but he was a racer and he would have come back"

It's difficult to say what he would have gone on to do with his life if he hadn't had his accident. Some people have said he was planning to retire because so many top drivers had been killed in 1970, including his friend Piers Courage. I can't say for sure, but I don't believe he would have retired at the end of 1970 because he would have just won the championship.

Maybe he would have changed teams. He had a lot of discussions with Colin Chapman at Lotus in 1970, and when he had brake failure at Jarama, the first race with the new Lotus 72, he went back to Chapman and said: "I don't want to drive this car any more." And then Chapman

convinced him by making everything a bit stiffer. So Jochen decided to continue with it, but it was a car failure that caused his death at Monza.

I'm not sure Jochen would have retired because he was a racer; a pure racer. This was his life. Maybe he would have taken a sabbatical, but he was a racer and he would have come back. He was a very good businessman and a very good negotiator. I think he and Bernie would have built up a Formula 1 business — possibly very much in the way Bernie did on his own, transforming F1 after Jochen's death.

Franz Tost was talking to Stuart Codling





Jochen Rindt

Born 18 April 1942, Mainz, Germany

Died 5 September 1970, Monza, Italy

1961 Black-flagged in his firstmotor race for dangerous driving1963 Enters Formula Junior in

wins his second race
1964 Begins racing in Formula 2,
a category he dominates until
1970. Makes his F1 debut in a

1970. Makes his F1 debut in a Rob Walker-entered Brabham at the Austrian GP. 1965 Wins Le Mans 24 Hours

in a Ferrari shared with Masten Gregory, and contests a full F1 season with Cooper as Bruce McLaren's team-mate

1966 Becomes team leader at Cooper after McLaren's departure, finishes third in the championship

1968 Moves to Brabham, taking his mechanic, Ron Dennis, with him. But the twin-cam version of the Repco V8 engine is unreliable

1969 Joins Colin Chapman's Lotus and finishes fourth, taking his first F1 win at Watkins Glen

1970 Establishes his own F2 team with manager Bernie Ecclestone, but continues in F1 with Lotus. Wins five grands prix but is killed in an accident during practice at Monza, becoming F1's only posthumous champion





Formula 1 enjoyed all the trappings of success as the new millennium brought ever greater riches – but the new loot inflamed old hostilities that threatened to split Formula 1 in two

WORDS STUART CODLING PICTURES LAT ARCHIVE & SUTTON IMAGES

By the late 1990s sponsorship was at a lucrative peak, with most cars bedecked in title-sponsor livery from tobacco firms, while the presence of multiple big-name car manufacturers on the grid injected money into the sport

mpires come and go. The ebb and flow of on-track form made for spectacular battles at the turn of the century as the once-dominant Williams, now shorn of their works Renault engines and technical genius Adrian Newey, faltered. What had been a one-sided battle for title honours became a fascinating two-way contest between Ferrari and newly ascendant McLaren. And as an ominous backbeat to the on-track battles between Mika Häkkinen and Michael Schumacher, rancour swept through F1's corridors of power as wannabe masters-of-the-universe sought to usurp Bernie Ecclestone's supremacy.

In many ways, Ecclestone brought this situation upon himself. As a cunning and astute player, he should have been acutely aware of a gaming maxim memorably expressed by Kenny Rogers in his song *The Gambler* – never count your money while you're sitting at the table.

Ecclestone incurred the ire of Formula 1's stakeholders and the European Commission, due to a belief that he'd worked with FIA president Max Mosley, an old associate, to transfer the lease on F1's commercial rights from the FOCA team body to his own Formula One Group (see 'The History of F1: Part 10,' F1 Racing, October 2016). Then, having placed his shares in the business in an offshore trust that would benefit his family after his death, he set about trying to float the Formula One Group on the stock exchange. When the news broke, the reported value of the sale, \$2.5bn, raised alarm.

"It seems the teams had not really thought about his side of the business until that point," wrote Mosley in *Formula One and Beyond: The Autobiography.* "They, too, were doing very well, with massively increased sponsorship and the involvement of several major car manufacturers. But what Bernie paid them, although it had steadily increased, eventually became a great deal less than his total receipts from the promoters."

Owing to the opacity of the Formula One Group's reporting practices – especially frustrating for Salomon Brothers, the investment





"Ecclestone incurred the ire of F1's stakeholders and the European Commission, due to a belief that he'd worked with FIA president Max Mosley, an old associate, to transfer the lease on F1's commercial rights from the FOCA team body to his own Formula One Group"

bank advising on the putative 1997 flotation – quite how much money was involved, and where it went, was hard to pin down. The flotation ran aground in sync with the on-track form of Williams, as Jacques Villeneuve made winning the title with the best car look very hard work. Renault's brief withdrawal from F1 then paved the way for a resurgent McLaren and Ferrari to do battle: Häkkinen vs Schumacher.

In 1998, both the BBC's *Panorama* and HM Revenue & Customs investigated Ecclestone's financial affairs, prompted by his transfer of the Formula One Group shares into the offshore company SLEC Holdings (named after his then wife, Slavica), thence into another holding company called Bambino. The scheme meant his wife and daughters would have no control over the business, but would inherit the wealth if he died – and pay no tax if that happened within the inheritance tax threshold of seven years. There were serious concerns over his health at the time, and he underwent a triple heart bypass in 1999.

Ecclestone and the FIA remained under fire from the teams and the European Commission. Rebel teams were briefly brought to heel and persuaded to sign a ten-year extension to the Concorde Agreement in 1998, most likely after being offered the chance to become shareholders should the business ever float. The European Commission were more troublesome, and Mosley accused them of incompetence and of leaking confidential documents as they examined whether the FIA's conduct had impoverished other motor racing codes to the benefit of F1.

Ultimately Ecclestone had to sell his company International Sportsworld Communicators (to which the FIA had granted the commercial rights to non-F1 motorsport in the 1995 deal) and resign as a vice-president of the FIA, while the FIA had to give up its commercial interest in F1. This deal was announced in January 2001, but had been concluded behind the scenes several months earlier, the result of tense negotiations that created friction in many old allegiances. It compelled Mosley to sell the commercial

rights, but when the upper echelons of the FIA membership would not agree, he was forced into a fudge: extending the lease on the commercial rights by 100 years for an additional \$300m.

In July 2000, The Economist published the results of their own investigation into the F1 business: 'Grand prix, grand prizes'. In an excoriating piece, they sought to draw together the threads of a complicated financial mechanism of wheels within wheels - or companies within companies - all based offshore. Thus it was an incomplete picture, but many figures were already in the public domain - for instance, that Ecclestone had raised \$1bn for SLEC Holdings, the family trust, through a bond issue, and that the trustees had sold 50 per cent of SLEC to two financial companies, which were then sold on (for \$1.8bn, making a healthy profit) to EM.TV, an ambitious German media company that then went bust. The magazine's leader column did not equivocate in its demand for greater transparency in the sport's financial reporting:

"If the murkiness around this were limited to the internal workings of this particular sport, that would be bad enough. But everybody touched by F1 has accepted a way of doing business they would not tolerate elsewhere. It is not just politicians such as Mr Schröder and Mr Blair [German and British premiers and recent visitors to the F1 paddock] who risk being tainted. F1 is no longer the preserve of rich eccentrics or speedcrazy aristocrats; silk scarves and goggles went out a long time ago. The sport now features such familiar car makers as BMW, DaimlerChrysler, Honda, Jaguar (owned by Ford), Ferrari (owned by Fiat), Renault and Toyota. Among the big car firms only General Motors and Volkswagen are steering clear of F1. And beyond the car companies stand a host of oil, tobacco, banking and consumer-goods firms that plaster their decals on cars and on trackside posters... Those proud car firms might yet regret their tame acceptance of Mr Ecclestone's grip on this sport."

In this last regard, *The Economist's* editorial was way off the mark. Mosley batted off the \rightarrow



Right: The GPWC, formed in 2007, comprised manufacturers including (left-right) Jaguar, BMW, DaimlerChrysler, Fiat, Renault and Ferrari, who wanted to start a breakaway series. Below: Alonso and Renault broke Ferrari's dominance in 2005 by winning both championships



The FIA, headed by Max Mosley (left) extended the lease of F1's commercial rights, for anther 100 years, to TV magnate Leo Kirch (right), to the benefit of Bernie Ecclestone (centre), in whose SLEC Holdings trust fund, Kirch was a shareholder







magazine's enquiries with a flippant response: "Most of your questions are misconceived and there is little I can usefully do, short of attempting to write your article for you." He and Ecclestone would find the heads of the car firms flooding in to F1 rather less open to such high-handed treatment, and anything but tame.

The 100-year extension of the commercial rights provided the tipping point. In the latter part of 2000, the FIA courted both Ecclestone and Paolo Cantarella, boss of Fiat and chairman of the European Automobile Manufacturers' Association. Mosley was under pressure from the FIA's senior membership to complete a deal quickly, but both potential suitors had compelling reasons to prevaricate. Cantarella, representing the F1 manufacturers, was at a disadvantage because he would also have to secure approval for any deal from his fellow heads of F1-involved car manufacturers - and in any case, as a self-styled big beast of the industry, he would not allow himself to be railroaded into a deal to suit the FIA's timetable. Ecclestone, for his part, had already negotiated the price of the deal - \$300m - but was in no rush to complete; separately, he was negotiating with German pay-TV magnate Leo Kirch to take over the ailing EM.TV empire's 50 per cent stake in SLEC Holdings, the entity that was about to extend its grasp on the commercial rights by 100 years. Ecclestone wanted Kirch's money, rather than his own, to fund the extension.

The deals went through in early 2001, just after the EU settlement was announced, and with interest, the deal having been delayed by several months, the FIA received \$313.6m.

Kirch, having put up the money and exercised an option to extend the shareholding in SLEC to

75 per cent, in effect became the majority owner of F1. Cantarella, and his fellow car-industry executives, were incandescent – they had lost out in the game, but more pressing was the prospect of a sport in which they had invested so heavily migrating to subscription-only TV channels.

For the car makers, this was a deal-breaker. They had spent vast sums on F1. Fiat had owned Ferrari for 30 years; Mercedes had taken a 40 per cent stake in McLaren in 2000; BMW had returned as an engine supplier to Williams; Renault had bought out Benetton; and Toyota were setting up their own entry. The return on their investment depended on exposure they would not get in the closeted environs of pay-TV.

Mosley held a press conference at the 2001 Monaco GP to explain the 100-year extension, appearing with a carbon-fibre helmet as a prop to describe the safety research the FIA's recently acquired monies would fund. Eight years later Felipe Massa would be glad of it, but, there and then, the FIA president faced a barrage of angry questions. Chief among the complaints was that in comparison with the \$1bn Kirch had paid for the rights to broadcast the 2002 Football World Cup, \$313.6m seemed rather insubstantial.

Perception is all in F1. It does not matter if the president of the FIA and F1's ringmaster *were* in cahoots – what *does* matter is that F1's other stakeholders thought so, and acted accordingly.

In November 2001, Fiat announced the formation of Grand Prix World Championship (GPWC), to run an independent series once the existing Concorde Agreement expired in 2007. Cantarella was named chairman, joined on the board by Jürgen Hubbert of Mercedes-Benz, Wolfgang Reitzle of Ford, Burkhard Goeschel of BMW and Patrick Faure of Renault.

"Cantarella, and his fellow car-industry executives, were incandescent – they had lost out in the game, but more pressing was the prospect of a sport in which they had invested so heavily migrating to subscription-only TV channels"

This was a very significant threat since GPWC members were the principal players in F1. Ferrari dominated from 2000-2004 (Michael Schumacher won 11 out of 17 races in 2002 and finished on the podium in every round), and but for an inability to synchronise competitiveness and reliability, Williams-BMW and McLaren-Mercedes might have offered a more consistent challenge. Instead it was Renault who ended Ferrari's rule, with two hard-fought world titles for Fernando Alonso in 2005 and 2006. Alonso, along with Kimi Räikkönen and Lewis Hamilton, was part of a new generation of talented drivers from unmoneyed backgrounds who broke through thanks to manufacturer largesse.

Hindsight gives us a fresh perspective on this peculiar era. The global economic shunt of the late 1980s, and the subsequent hardship of the early 1990s, had been ushered offstage into the realms of fading memory by a series of debt-fuelled bubbles. The world's developed economies were on a white-knuckle magical mystery tour. Ordinary people were persuaded to live beyond their means on cheap credit. Swashbuckling entrepreneurs built business empires on shifting, heavily leveraged sands. Property values spiralled upwards. The wealth of nations turned upon a series of promissory notes.

In this context, you see the logic of Mosley's argument that he got the best deal he could at the time, with only one 'tenant' willing to commit to his 'leasehold' within his deadline. Equally you see that the £1bn Kirch paid to show the World Cup was excessive, one of many extravagances that brought down the group in 2002.

The effects of the 100-year deal reverberate even today. As Mosley wrote later: "In retrospect, I think Bernie (or his family trust) made a major mistake in ceding control. He would have been better off issuing bonds private equity-style and keeping a majority of the shares. It would have saved him from the wranglings of a board of directors including the unpleasant individuals who tried to undermine me in 2008 then later turned on him."

HISTORY TIMELINE

1998

British American Tobacco buy Tyrrell. New regulations mandate narrower cars and grooved tyres. Goodyear withdraw from F1.

1999

Ferrari's one-two at the inaugural Malaysian GP is reinstated on appeal after an alleged breach of technical regulations. Stewart are sold to Ford.

2000

World Intellectual Property Organisation reject FOM's claim to own formulal.com domain. Ford rebrand Stewart as Jaguar Racing.

2001

Traction control allowed from Spanish GP on. Peugeot leave F1. Benetton are sold to Renault. KirchMedia buy F1 stake from defunct EM.TV.

2002

Kirch empire collapses, leaving F1 business in the hands of creditor banks. FOM acquire formula1.com domain name for a reported \$10m.

2003

One-lap qualifying is brought in. The HANS device is made mandatory. GPWC offer teams an 85 per cent stake in a breakaway championship.

2004

Mosley announces his resignation as FIA president then rescinds it. One-engine-perweekend rule is introduced.

2005

New aggregate-time qualifying system brought in then abandoned. CVC Capital Partners buy controlling stake in F1's commercial rights holder.

2006

Engines are reduced from 3-litre V10s to 2.4-litre V8s. Michelin withdraw from F1. The GPWC are effectively over as member teams sign entry to F1 from 2008 onwards.

2007

McLaren are fined a record \$100m over the Ferrari 'Spygate' scandal. The new Concorde Agreement remains unsigned and the existing one rolls over to 2008 and beyond.





The FIA were perceived to favour Ferrari – a view reinforced by Ferrari's win at the farcical 2005 US GP, in which only the six Bridgestone runners took part



"In this game of perception versus reality, it did not matter that Ferrari had spent the whole season at a disadvantage because their tyre supplier, Bridgestone, had adapted less well to a new cost-cutting rule mandating that tyres must last the entire race"

Shared dislike of the regime aligned on-track competitors who would otherwise have had little to say to one another, except in court. The ability of Ferrari technical director Ross Brawn to spot loopholes in the regs and drive a proverbial HGV through them left his rivals furious; the saga of the dimensions of the F399's barge boards in Malaysia in 1999 was only the start. As Mika Häkkinen left the field and Ferrari and Michael Schumacher began to dominate, barely a race went by without F1 Racing being passed photos purporting to show illegal movable aero devices at work, or recordings of an engine flutter that could have evinced traction control. But even in March 2003, after Ferrari's most dominant season, McLaren's Ron Dennis and Martin Whitmarsh flew to Maranello for a secret GPWC summit with their Ferrari counterparts.

Mutual suspicion between competitors and the commercial and sporting heads festered, and gave birth to the most self-destructive pettiness. By 2003, manufacturers were spending upwards of \$1bn a year on engine development and build alone. Teams would go through several engines a weekend. Yet even though it was in their interests to spend less, their default response to cost-cutting proposals was profoundly negative. When the FIA brought in a rule to put cars into parc fermé between qualifying and the race, so they could not be worked on overnight, a number of teams took the governing body to arbitration.

Ecclestone was busy trying to ensure that the controlling stake in the commercial rights, now

in the hands of Kirch's three creditor banks, went to an investor willing to keep him on as CEO. He was also pursuing every legal avenue to take ownership of the Formula 1 name, having registered it as a trademark (some years before he had lost out to a South African entrepreneur who had registered the formula1.com web domain, and been forced to buy her out at great expense). Therefore it suited him, as it had with Jean-Marie Balestre in the '80s, to let Mosley swagger and make himself unpopular as he wished.

It's surprising, given his intelligence and political savvy, that Mosley fell into this trap. And yet he did. Much of the Mosley Project – in F1 terms, conquering the sport's dumbly entrenched profligacy – was far-sighted and logical. Even the engine manufacturers came to accept the sense of new regulations that demanded, over a number of seasons, greater longevity. To craft a racing engine and throw it away after a day's use, was madness. But until Mosley took a stand, it continued 'because that's what we've always done'.

In pushing through his changes, Mosley put noses out of joint. Putative rule changes were issued by fax and copied to the world's media, as were Mosley's often sneering responses to any criticism. Alongside this was the perception that Ferrari always landed butter-side-up in any FIA business; it became a standing joke that FIA stood for 'Ferrari International Assistance'. This impression was bolstered rather than negated by the farrago that was the 2005 US GP, in which

a stand-off over tyre safety led to just six cars taking the start. Ferrari won, but it was their only victory that year.

In this game of perception versus reality, it did not matter that Ferrari had spent the whole season at a disadvantage because their tyre supplier, Bridgestone, had adapted less well to a new cost-cutting rule mandating that tyres must last the entire race. It was the end of Ferrari's supremacy, and that season became a McLaren vs Renault battle between Räikkönen and Alonso. But Ferrari and Bridgestone were back on form in 2006, and once again an impression formed that they were getting the rub of the green in every political battle with Renault - who were forced to can their tuned mass damper, a technical innovation that had enabled them to maximise front-tyre potential. And, on track, Alonso was penalised for impeding Ferrari's Felipe Massa in qualifying at Monza when he appeared to be well out of range. When Alonso bagged the title at the end of the year, there was a feeling that the right man had won.

The GPWC fizzled out before it even began. Ecclestone picked off its members one by one in a game of divide-and-rule. Tempted by an offer of more money, Ferrari were the first to sign an agreement to renew their F1 entry from 2008 on – and the other GPWC members soon followed.

But the idea of a breakaway series had not gone away. The signing of the new Concorde Agreement was a fraught process, held up by further disputes such as a Mosley proposal to cut costs by letting teams field 'customer cars' bought from other manufacturers. While the idea had merit, as did his notion of instituting a budget cap, for many stakeholders it cut to the heart of what Formula 1 should be about.

F1 seemed to be returning to a scene from 30 years earlier: teams uniting to take on those in power. Only now the rebels from three decades earlier had become the establishment. At a meeting in Maranello in 2008, Ferrari's Luca di Montezemolo was anointed leader of the Formula One Teams' Association, a new entity with rebellion on its mind, which was willing to break away if it didn't get what it wanted.

What it wanted, among other things, was Max Mosley's head on a platter. ②





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Reports Previews

Analysis

Opinion



The triple double is on...

The constructors' championship is already in the bag and the drivers' title can only be won by a Mercedes driver. The big question is: will it be Lewis or Nico?

DEBRIEF



96 SINGAPORE GP Rosberg fights off a valiant charge by Ricciardo to take a peerless win



100 MALAYSIAN GP Ricciardo tastes both victory and the contents of his shoe



104 JAPANESE GP Nico is now 33 points clear of Lewis as Merc take the constructors' title

OPINION



112 INBOX F1's new owners mustn't throw the baby out with the bathwater

PREVIEWS



108 US GP The Texan track that combines the best bits of the classic circuits



109 MEXICAN GP The crowds will be at fever pitch at this recently returned grand prix



110 BRAZILIAN GP A critical race in the title battle - will Interlagos reveal a new champion?



114 DAMON HILL On the incredible career of Bernie - F1's very own Wizard of Oz

RACE DEBRIEF by Stuart Codling



Nico's Singapore flyer

After a stunning pole, Rosberg was uncatchable in Singapore, despite a brave chase by Ricciardo

It's felt like a long time since the outcome of a race has seemed genuinely in doubt before it has begun. But so it was in Singapore, one of FI's most physically and mechanically demanding venues. Until this weekend, only champions had won this race – and the outcome of the 2016 Singapore Grand Prix may yet mean that record comes to include champions-elect.

Nico Rosberg is among the cleverest drivers on the grid. He knows that when his three-time champion team-mate struggles, the opportunity *has* to be maximised. So when Lewis Hamilton lost track time to a hydraulic leak on Friday, and struggled to find an effective chassis and braking setup thereafter, Rosberg had to be on top form.

And excel he did, leaving nothing on the table when the moment counted in qualifying. Not just pole position but a crushing 0.7s faster than his illustrious team-mate. Then he managed the race exquisitely, stymied by having to keep soaring brake temperatures in check, but staving off a late charge by Red Bull's Daniel Ricciardo. It was a tough grind in the evening heat, and every man from first place to tenth richly deserved the points they fought to bring home.

Red Bull sent both drivers out on supersofts rather than ultrasofts in Q2. The onus was then on Rosberg to build enough of a gap to have a pitstop in hand, or at least to avoid the dreaded undercut. The threat from Ricciardo grew when he qualified P2, ahead of Hamilton, and Max Verstappen was right in there as well, despite being unable to get his front tyres into the temperature 'sweet spot' in qualifying.

But no Singapore GP has passed without a Safety Car, and here it happened immediately, triggered by Verstappen. Max had felt a problem with his clutch on Saturday; the team had to obtain FIA permission to examine it in parc fermé but found nothing wrong. Replacing it would incur a penalty, so Verstappen would just have to work around its snappy engagement. As Rosberg, Ricciardo, Hamilton and Kimi Räikkönen got away cleanly, Verstappen's clutch bit hard and his rear wheels spun up impotently.

That left the two cars immediately behind him on the grid, Carlos Sainz's Toro Rosso on row three and Nico Hülkenberg's Force India on row four, with a narrowing vista of circuit real estate. Sainz swerved right but so too did the slightly faster-launching Hülkenberg, who clipped the side of the Toro Rosso and spun into the wall.

Rosberg had a frightening moment when he accelerated away at the green flag, only to encounter a marshal still on the track, but he held his nerve. An instruction to manage brake temperatures prevented him from unlocking the full performance of the Mercedes, and Ricciardo remained in touch, with a frustrated Hamilton – also hindered by brake management – in third. The Red Bull tried to undercut Rosberg three times, but on the first two occasions he lifted his pace as best he could and remained clear, assisted the first time by Ricciardo emerging from the pits behind Felipe Massa's Williams.

When Ricciardo made his third and final stop on lap 47 of the 61, for a new set of supersofts, it was touch-and-go for Rosberg, who had just 25.4s over his rival – barely enough to come in, change tyres and remain ahead. When Rosberg then encountered traffic, Mercedes aborted his stop and instructed him to run to the end – 14 laps – on the soft tyres he had taken 13 laps earlier. It was within the theoretical lifespan of the tyres, but would leave him vulnerable at the end, with Ricciardo now eating up the lead margin at up to three seconds a lap. Ultimately it was too much to ask and Ricciardo fell just short, but with another lap it might have been different.

"Last year we were absolutely nowhere here," said Rosberg. "We got destroyed by Red Bull and Ferrari, and we understood what went wrong, and came back this year and beat them on their best track."

With Räikkönen hovering, Hamilton locked up at Turn 7 on lap 32. Räikkönen was due to pit at the end of the lap, but barged his way through at Turn 10. Mercedes then swapped to plan B, ran Hamilton on a short 11-lap stint on softs, then brought him in again for some scrubbed supersofts on lap 45, just before Red Bull rolled the dice with Ricciardo's third stop. Räikkönen could feasibly have run to the end on his soft tyres, which were as old as Rosberg's, but Ferrari decided to bring him in... and Hamilton swept by as he left. Track position is all in Singapore.

Sebastian Vettel claimed fifth place with an inspired charge from the back of the grid after a suspension failure in qualifying, aided by a two-stop strategy with a long first stint on softs. Verstappen recovered to sixth after his poor start and a lively battle with Daniil Kvyat.

Fernando Alonso parlayed his P9 start into a P7 finish for McLaren, built on a strong first lap and a calm drive under pressure early on. Sergio Pérez put in what he described as one of the best races of his career, coming back from a penalised 17th on the grid via a two-stop strategy in which he had to eke out a set of softs for 36 laps. The embattled Kvyat managed what could be a career-saving performance for ninth, and the sole remaining point for tenth was perhaps a scant reward for plucky Kevin Magnussen, whose car was so slow he was eliminated in Q1. \square



the championship by

eight points

Singapore Grand Prix stats

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

THE GRID



2. RICCIARDO RED BULL 1min 43.115secs O3



4. VERSTAPPEN RED BULL 1min 43 328secs 03



6. SAINZ TORO ROSSO 1min 44.197secs Q3



8. HÜLKENBERG **FORCE INDIA** 1min 44.479secs Q3



10. BOTTAS WILLIAMS 1min 44.740secs Q2



12. BUTTON McI ARFN 1min 45.144secs Q2



14. ERICSSON SAUBER 1min 47.827secs Q2



16. NASR SAUBER 1min 46.860secs O1



18. PALMER **RENAULT** 1min 46.960secs Q1



20. GROSJEAN** HAAS 1min 45.723secs Q2



22. VETTEL*** **FERRARI** 1min 49.116secs O1

1. ROSBERG **MERCEDES** 1min 42.584secs Q3



3. HAMILTON **MERCEDES** 1min 43.288secs Q3



5. RÄIKKÖNEN **FERRARI** 1min 43.540secs Q3



7. KVYAT TORO ROSSO 1min 44.469secs O3



9. ALONSO **McLAREN** 1min 44.553secs O3



11. MASSA WILLIAMS 1min 44.991secs Q2



13. GUTIÉRREZ HAAS 1min 45.593secs Q2



15. MAGNUSSEN **RENAULT** 1min 46.825secs Q1



17. PÉREZ* FORCE INDIA 1min 44.582secs Q3



19. WEHRLEIN **MANOR** 1min 47.667secs Q1



MANOR 1min 48.296secs Q1

THE RACE



THE RESULTS (61 LAPS)			
1st	Nico Rosberg Mercedes	1h 55m 48.950s	
2nd	Daniel Ricciardo Red Bull	+0.488s	
3rd	Lewis Hamilton Mercedes	+8.038s	
4th	Kimi Räikkönen Ferrari	+10.219s	
5th	Sebastian Vettel Ferrari	+27.694s	
6th	Max Verstappen Red Bull	+71.197s	
7th	Fernando Alonso McLaren	+89.198s	
8th	Sergio Pérez Force India	+111.062s	
9th	Daniil Kvyat Toro Rosso	+111.557s	
10th	Kevin Magnussen Renault	+119.952s	
11th	Esteban Gutiérrez Haas	+1 lap	
12th	Felipe Massa Williams	+1 lap	
13th	Felipe Nasr Sauber	+1 lap	
14th	Carlos Sainz Toro Rosso	+1 lap	
15th	Jolyon Palmer Renault	+1 lap	
16th	Pascal Wehrlein Manor	+1 lap	
17th	Marcus Ericsson Sauber	+1 lap	
18th	Esteban Ocon Manor	+2 laps	

Retirements		
Jenson Button McLaren	43 laps – brakes	
Valtteri Bottas Williams	35 laps – engine	
Nico Hülkenberg Force India	0 laps – acciden	

THROUGH SPEED TRAP (QUALIFYING)



Romain Grosiean Haas

Fastest: Pascal Wehrlein, 195.42mph



DNS - brakes

Slowest: Carlos Sainz, 186,47mph

TYRE COMPOUNDS USED



CLIMATE











FASTEST LAP

Daniel Ricciardo, lap 49, 1min 47.187s



Lewis Hamilton, 28.315s (entry to exit)

DRIV	ERS' STANDINGS	
1st	Nico Rosberg Mercedes	273pts
2nd	Lewis Hamilton Mercedes	265pts
3rd	Daniel Ricciardo Red Bull	179pts
4th	Sebastian Vettel Ferrari	153pts
5th	Kimi Räikkönen Ferrari	148pts
6th	Max Verstappen Toro Rosso/Red Bull	129pts
7th	Valtteri Bottas Williams	70pts
8th	Sergio Pérez Force India	66pts
9th	Nico Hülkenberg Force India	46pts
10th	Felipe Massa Williams	41pts
11th	Fernando Alonso McLaren	36pts
12th	Carlos Sainz Toro Rosso	30pts
13th	Romain Grosjean Haas	28pts
14th	Daniil Kvyat Red Bull/Toro Rosso	25pts
15th	Jenson Button McLaren	17pts
16th	Kevin Magnussen Renault	7pts
17th	Pascal Wehrlein Manor	1pt
18th	Stoffel Vandoorne McLaren	1pt
19th	Esteban Gutiérrez Haas	0pts
20th	Jolyon Palmer Renault	0pts
21st	Marcus Ericsson Sauber	0pts
22nd	Felipe Nasr Sauber	0pts
23rd	Rio Haryanto Manor	0pts
24th	Esteban Ocon Manor	0pts

CONSTRUCTORS' STANDINGS

1st	Mercedes	538pts
2nd	Red Bull	316pts
3rd	Ferrari	301pts
4th	Force India	112pts
5th	Williams	111pts
6th	McLaren	54pts
7th	Toro Rosso	47pts
8th	Haas	28pts

9th Renault	7pts
10th Manor	1pt
11th Sauber	0pts



F1 statistics visit www.forix.com





Christopher Ward

christopherward.co.uk

RACE DEBRIEF by James Roberts



Lewis loses his bearings

A distraught Hamilton blames a "higher power" as a combustion-unit failure puts him out of the race

The result of the Malaysian GP was, according to Lewis Hamilton, determined by a "higher power". Bad luck scuppered him on lap 41, when a bearing failure inside his W07 Hybrid's internal combustion engine brought him to a stuttering halt at Turn 1 in a blaze of fire and smoke.

This divine intervention handed victory to Red Bull's Daniel Ricciardo, who finished 2.5s ahead of his team-mate Max Verstappen. Nico Rosberg was third following a recovery drive from the tail of the field, after he was knocked into a spin by Ferrari's Sebastian Vettel on the first lap.

This was Ricciardo's first win for two years and the first ever Red Bull one-two in the 1.6-litre hybrid turbo era. In some ways it was justice for Ricciardo, who had suffered a mismanaged pitstop at the Monaco GP in May, which had handed victory to Hamilton. This time round, while Ricciardo entertained the crowds by glugging sparkling wine from his boot on the podium, Hamilton was before the TV cameras, publicly giving his Mercedes team a hard time.

"There's been 43 engines from Mercedes and only mine have gone," he complained. "Someone has to give me some answers..."

At the start, the two Mercedes got off the line well, but behind them Sebastian Vettel jostled out from behind third-placed Max Verstappen and braked deep into the first right-hander. As Rosberg turned in, he felt a smack at his rear that pitched the Mercedes into a pirouette. Vettel was out on the spot with broken suspension, while Rosberg resumed the race in 21st. This was Vettel's fourth first-corner incident this year and the stewards handed him a three-place grid penalty to be served at the next race in Suzuka.

After nine laps, the race was neutralised when Romain Grosjean lost control of his Haas after suffering brake failure entering the final corner. During this Virtual Safety Car period, Red Bull switched strategy and pitted Verstappen, now back in third, for another set of soft rubber. But the team kept Ricciardo out in second, just a few seconds behind leader Hamilton.

Hamilton pitted on lap 20, with Ricciardo stopping one lap later, and both switched to Pirelli's hard tyre. Six laps later, Verstappen also stopped for the hard compound and started to close in on his team-mate. Verstappen's plan at this stage was to run to the end of the race, and it became particularly tense on the Red Bull pitwall as the pair ran in close formation on track.

Verstappen radioed his engineers, seeking the co-operation of his team-mate ahead to be able to

fight Lewis for the win: "I'm starting to get held up now," he said. "If you want me to get to the end, do something,"

Afterwards, team boss Christian Horner revealed that Ricciardo thought he could also make it to the end, so the team-mates were allowed to fight for position. Verstappen tried to drive around the outside of Ricciardo at T5, but Ricciardo held on around the outside of the switchback at T6, and then it was a case of who would brake first into Turn 7. Ricciardo repelled his young team-mate and managed to stay ahead.

Up front, Hamilton was trying to eke out a big enough gap from the Red Bulls so he could make a final pitstop and come out in the lead. That plan was crushed when his engine blew on the start/finish straight. When he returned to the paddock he was outspoken, saying "something doesn't feel right" when speaking of the number of engine failures he'd suffered this year.

"I just can't believe that there's eight Mercedes cars [on the grid] and only my engines have been the ones that have been going this year. It's just odd." He then added: "Something or someone doesn't want me to win this year..." When invited to expand on who or what this outside agency was, he raised a finger and said: "A higher power."

Team boss Toto Wolff said he understood why Hamilton had been so outspoken. "This is a mechanical sport and I'm gutted in the same way. Every remark is allowed after such a frustrating moment and he's allowed to say everything he wants. Each of us express emotion in different ways. In this case it's a freaky situation that has no rational explanation."

Hamilton's stricken Mercedes forced the race into another Virtual Safety Car, and then it made sense to pit both Red Bulls to ensure they had no tyre concerns in the dying laps. When questioned, Horner said neither had been ordered to slow. "I made the decision that both were free to race, but I asked them to respect the 43 points," he said. "They were both in the same engine modes and power stakes, so there was no advantage to either of them. But Max's tyres got a bit more of a workout in dirty air."

On the podium, Ricciardo was emotional at winning his first race since Spa 2014 and celebrated with his now infamous 'shoey' ritual.

Hamilton was 16 laps away from taking the 50th win of his F1 career, and with a points finish for his team-mate, Mercedes were all set to seal the 2016 constructors' title too. As it was, the championship-winning T-shirts they'd brought to Malaysia remained unpacked. The party planned for Sunday night was cancelled. As the team's garages were dismantled late into the night on Sunday, the celebrations were taking place 30,000ft in the air as Ricciardo enjoyed a whisky or two on the way to Japan. \mathbf{Q}



Malaysian Grand Prix stats

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

THE GRID



2. ROSBERG **MERCEDES** 1min 33.264secs Q3



4. RICCIARDO RED BULL 1min 33.467secs Q3



6. RÄIKKÖNEN FERRARI 1min 33.632secs Q3



8. HÜLKENBERG **FORCE INDIA** 1min 34 489secs O3



10. MASSA **WILLIAMS** 1min 34.671secs Q3



12. GROSJEAN HAAS 1min 35.001secs Q2



14. MAGNUSSEN RENAULT



16. SAINZ TORO ROSSO 1min 35.374secs Q2



18. NASR SAUBER 1min 35.949secs Q1



20. OCON **MANOR** 1min 36.451secs Q1



22. ALONSO* McI AREN 1min 37.155secs O3

1. HAMILTON **MERCEDES** 1min 32.850secs Q3



3. VERSTAPPEN RFD BULL 1min 33.420secs Q3



5. VETTEL **FERRARI** 1min 33.584secs Q3



7. PÉREZ **FORCE INDIA** 1min 34.319secs Q3



9. BUTTON **McLAREN** 1min 34.518secs Q3



11. BOTTAS WILLIAMS 1min 34.577secs O2



13. GUTIÉRREZ HAAS 1min 35.097secs Q2



15. KVYAT TORO ROSSO 1min 35 369secs O2



17. ERICSSON SAUBER 1min 35.816secs Q1



19. PALMER RENAULT 1min 35.999secs Q1



21. WEHRLEIN **MANOR** 1min 36.587secs O1

THE RACE



THE RESULTS (56 LAPS)			
1st	Daniel Ricciardo Red Bull	1h 37m 12.776s	
2nd	Max Verstappen Red Bull	+2.443s	
3rd	Nico Rosberg Mercedes	+25.516s*	
4th	Kimi Räikkönen Ferrari	+28.785s	
5th	Valtteri Bottas Williams	+61.582s	
6th	Sergio Pérez Force India	+63.794s	
7th	Fernando Alonso McLaren	+65.205s	
8th	Nico Hülkenberg Force India	+74.062s	
9th	Jenson Button McLaren	+81.816s	
10th	Jolyon Palmer Renault	+95.466s	
11th	Carlos Sainz Toro Rosso	+98.878s	
12th	Marcus Ericsson Sauber	+1 lap	
13th	Felipe Massa Williams	+1 lap	
14th	Daniil Kvyat Toro Rosso	+1 lap	
15th	Pascal Wehrlein Manor	+1 lap	
16th	Esteban Ocon Manor	+1 lan*	

Retirements		
Felipe Nasr Sauber	46 laps – brakes	
Lewis Hamilton Mercedes	40 laps – engine	
Esteban Gutiérrez Haas	39 laps – lost wheel	
Kevin Magnussen Renault	17 laps – brakes	

THROUGH SPEED TRAP (QUALIFYING)



Romain Grosjean Haas

Sebastian Vettel Ferrari



Wehrlein, 208.53mph



7 laps - brakes

0 laps - collision

Slowest: Carlos Sainz, 197,04mph

TYRE COMPOUNDS USED









CLIMATE

TRACK TEMP





FASTEST LAP

Nico Rosberg, lap 44, 1min 36.424s



Nico Rosberg, 23.476s (entry to exit)

DRIVERS' STANDINGS Nico Rosberg Mercedes 288pts Lewis Hamilton Mercedes 265pts 3rd Daniel Ricciardo Red Bull 204pts 4th Kimi Räikkönen Ferrari 160pts Sebastian Vettel Ferrari 153pts 6th Max Verstappen Toro Rosso/Red Bull 147pts 7th Valtteri Bottas Williams 80pts 8th Sergio Pérez Force India 74pts Nico Hülkenberg Force India 50pts 10th Fernando Alonso McLaren 42pts 11th Felipe Massa Williams 41pts Carlos Sainz Toro Rosso 30pts 13th Romain Grosjean Haas 28pts 14th Daniil Kvyat Red Bull/Toro Rosso 25pts Jenson Button McLaren Kevin Magnussen Renault 7pts 17th Jolvon Palmer Renault 1pt 18th Pascal Wehrlein Manor 1pt Stoffel Vandoorne McLaren 19th 1pt Esteban Gutiérrez Haas 20th 0pts 21st Marcus Ericsson Sauber 0pts

CONSTRUCTORS' STANDINGS

Felipe Nasr Sauber

Rio Harvanto Manor

Esteban Ocon Manor

lst	Mercedes	553pts
2nd	Red Bull	359pts
3rd	Ferrari	313pts
4th	Force India	124pts
5th	Williams	121pts
6th	McLaren	62pts
7th	Toro Rosso	47pts
	Haas	28pts

23rd

9th Renault	8pts
10th Manor	1pt
11th Sauber	0pts
(10100

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0pts

0pts

0pts

*30- and 15-place grid penalties for use of additional power-unit elements



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RACE DEBRIEF by James Roberts



Rosberg edges clear in title chase

Mercedes seal the constructors' title at Suzuka, as a poor start costs Lewis Hamilton dearly

The back-to-back races in the Far East have played a pivotal role in the run-up to this year's title showdown. Lewis Hamilton needed to reclaim lost ground to his Mercedes team-mate Nico Rosberg, but after that engine failure in Malaysia he came to Japan needing even more urgently to swing the momentum back his way.

At Suzuka, he tried not to let the events of the previous Sunday get to him, but clearly they had. On Thursday he larked about in the FIA press conference. Snapchat images of him and Carlos Sainz in bunny ears spread across the internet. He was then criticised by various media outlets.

As darkness descended on Saturday evening, Hamilton arrived at the print media press briefing at the Mercedes hospitality unit. There he revealed that due to what had been written about him after the FIA press conference, he wouldn't be speaking to the media.

"The smiles on your faces will soon be no longer as I am not actually here to answer your questions," he said. "The other day was a super lighthearted thing and if I was disrespectful it was honestly not the intention – it was a little bit of fun. What was more disrespectful was what was written worldwide. And I don't plan on sitting here many more times for these kind of things."

Some might argue that the pressure was starting to show as he realised the championship was slipping out of his grasp. So when he lit up the rears and fumbled his start (falling to P8 at the end of lap 1), some questioned his state of mind. Yet, when up against it, he drove brilliantly to come back to a P3 finish that could have been second but for a late block by second-placed Max Verstappen. And that was enough for Mercedes to secure their third straight constructors' title.

On lap 6 Hamilton was still eighth, but then he passed Hülkenberg – initially by attempting a move into 130R, before using DRS on the start/ finish straight. Then he moved through the field when Ricciardo, Verstappen, Räikkönen then Vettel all made early pitstops to switch from softto hard-compound rubber. On lap 13 Hamilton was running second to Rosberg, but when he made his own stop, he slipped to fourth.

Hamilton drove a long middle stint, to give himself more tyre life than the pair he would ultimately be chasing (Verstappen and Rosberg) in the closing laps. Indeed, Verstappen had made a great start and, of the six podiums he has scored this year, team boss Christian Horner described this as one of his most "mature."

"He looked after his tyres very well initially from Seb and then from Lewis at the end," said Horner. "His tyres were five or six laps older than Lewis's and he made no mistakes."

A moment of alarm came on the penultimate lap when Hamilton tried to pass Verstappen into the chicane. He gained a mighty run through 130R and looked to outbrake Verstappen. At the last moment, Verstappen jinked right to block him and Hamilton went the other way, avoided contact, and bypassed the chicane. Horner said the move was: "firm, but fair."

"The lead car is always going to go for the inside and I didn't see anything wrong with it," he said. "It was good racing between the two drivers and Lewis didn't seem to have any problem after the race and said well done to him."

Mercedes didn't agree, and lodged a protest with the stewards that was initially deferred until Austin, and then eventually withdrawn.

Hamilton again did not speak to the print media on Sunday night. The reason cited was that he had to catch a flight with Niki Lauda to return promptly to Europe because he was due to test a 2017 mule car in Barcelona on Wednesday. Team boss Toto Wolff, also due to catch the same flight, did speak to the press. When he sat down, he mocked what Lewis had said in the same seat a little less than 24 hours earlier: "You're laughing now, but you won't be laughing later..."

Asked about the move at the chicane on the penultimate lap of the race between Hamilton in P3 and second-placed Verstappen, he said: "I love hard racing and he [Verstappen] defends very hard. The rulebook says something else. The rulebook says you can't move under braking, but it hasn't been penalised up to now."

Wolff was then asked to explain Hamilton's erratic behaviour over the past few days: "During the week, with all these things around the press conference and what happened yesterday, whether it affects him or not I don't think so, because these are not his priority. I wouldn't say it affected his start because the racing was great afterwards – it was how he recovered."

Immediately after the race, Hamilton was asked about the start and said that he "made a mistake", but Wolff blamed the complicated clutch action, which has been a problem all year for the reigning world champion.

"The clutch system is not perfect; it's difficult to handle," said Wolff. "We've tried to optimise it, but our first assessment is that it didn't function well on the clutch release. It is a difficult mechanism to deploy. The analysis has even come down to the way the glove has been sewn, and someone has even studied the length of Nico's middle finger for the biting point."

The reality is that Rosberg made another strong start, did not err, and held on to take his ninth win of 2016. He now has a 33-point lead with just four races to go. So is it all over?

"This is still a mechanical sport and looking at each weekend as a singular event has been the right strategy for Nico," added Wolf. "Lewis functions best under pressure and when he has a target. And I have no doubt this will be an intense fight to the end. It is far from over."

Four races remain. Is this Rosberg's title? To Austin we go... •



and Hamilton and

Mercedes take the

constructors' title

Japanese Grand Prix stats

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

THE GRID



1 ROSRERG **MERCEDES** 1min 30.647secs Q3



3. VERSTAPPEN RFD RULL 1min 31.178secs Q3



5. PÉREZ FORCE INDIA 1min 31.961secs O3



7. GROSJEAN HAAS 1min 31.961secs Q3



9. HÜLKENBERG FORCE INDIA 1min 32.142secs O3



WILLIAMS 1min 32.315secs O2

13. KVYAT TORO ROSSO 1min 32.623secs Q2



15 ALONSO McLAREN 1min 32.689secs Q2



17. MAGNUSSEN RENAULT 1min 33.023secs Q1



19. NASR SAUBER 1min 33 332secs O1



21. WEHRLEIN** **MANOR** 1min 33.561secs Q1



2. HAMILTON **MERCEDES** 1min 30.660secs Q3



4. RICCIARDO RED BULL 1min 31.240secs Q3



6. VETTEL* FFRRARI 1min 31.028secs Q3



8. RÄIKKÖNEN** **FFRRARI** 1min 30.949secs Q3



10. GUTIÉRREZ HAAS 1min 32.547secs Q3



12. MASSA WILLIAMS 1min 32.380secs O2



14. SAINZ TORO ROSSO 1min 32.685secs Q2



16. PALMER RENAULT 1min 32.807secs Q2



18. ERICSSON SAUBER 1min 33.222secs Q1



20. OCON MANOR 1min 33.353secs Q1



McLAREN 1min 32.851secs O1

THE RACE



THE RESULTS (53 LAPS) Nico Rosberg Mercedes 1h 26m 43.333s 1st 2nd Max Verstappen Red Bull +4.9785 Lewis Hamilton Mercedes +5.776s4th Sebastian Vettel Ferrari +20.269s 5th Kimi Räikkönen Ferrari +28.370s Daniel Ricciardo Red Bull +33.941s Sergio Pérez Force India +57.4959 Nico Hülkenberg Force India +59.177s 8th 9th +97.763s Felipe Massa Williams 10th Valtteri Bottas Williams +98.323s 11th Romain Grosjean Haas +99.254s 12th Jolyon Palmer Renault +1 lap Daniil Kvyat Toro Rosso +1 lap 14th Kevin Magnussen Renault +1 lap 15th Marcus Ericsson Sauber +1 lap 16th Fernando Alonso McLaren +1 lap 17th Carlos Sainz Toro Rosso +1 lap 18th Jenson Button McLaren +1 lap 19th Felipe Nasr Sauber +1 lap Esteban Gutiérrez Haas +1 lap 21st Esteban Ocon Manor +1 lap Pascal Wehrlein Manor +1 lap

THROUGH SPEED TRAP (QUALIFYING)







Slowest: Jenson Fastest: Lewis Hamilton, 196.04mph Button, 188.03mph

TYRE COMPOUNDS USED













TRACK TEMP

FASTEST LAP

Sebastian Vettel, lap 36, 1min 35.118s



313pts

280pts

212pts

Felipe Massa, 22.463s (entry to exit)

DRIVERS' STANDINGS Nico Rosberg Mercedes Lewis Hamilton Mercedes Daniel Ricciardo Red Bull

4th	Kimi Räikkönen Ferrari	170pts
5th	Max Verstappen Toro Rosso/Red Bull	165pts
6th	Sebastian Vettel Ferrari	165pts
7th	Valtteri Bottas Williams	81pts
8th	Sergio Pérez Force India	80pts
9th	Nico Hülkenberg Force India	54pts
10th	Felipe Massa Williams	43pts
11th	Fernando Alonso McLaren	42pts
12th	Carlos Sainz Toro Rosso	30pts
13th	Romain Grosjean Haas	28pts
14th	Daniil Kvyat Red Bull/Toro Rosso	25pts
15th	Jenson Button McLaren	19pts
16th	Kevin Magnussen Renault	7pts
17th	Jolyon Palmer Renault	1pt
18th	Pascal Wehrlein Manor	1pt

Esteban Ocon Manor **CONSTRUCTORS' STANDINGS**

Stoffel Vandoorne McLaren

Esteban Gutiérrez Haas

Marcus Ericsson Sauber

Felipe Nasr Sauber

Rio Harvanto Manor

lst	Mercedes	593pts
2nd	Red Bull	385pts
3rd	Ferrari	335pts
4th	Force India	134pts
5th	Williams	124pts
6th	McLaren	62pts
7th	Toro Rosso	47pts
	Haas	28pts

19th

20th

21st

22nd

23rd

9th Renault	8pts
10th Manor	1pt
11th Sauber	0pts



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1pt

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The United States GP preview

Round 18 / 21-23 October 2016/ Austin, Texas



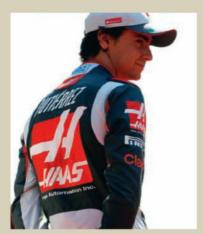
A MODERN TWIST ON FORMULA 1'S CLASSIC CIRCUITS

Qualifying 22 October: 22.00 Race 23 October: 23.00

This grand prix in Austin has become a modern classic, with strong local engagement whenever the event comes to town. And, for a relatively new venue, the layout has won a lot of praise, too. From the very steep climb into Turn 1, to the daunting series of 'S' bends, it presents a challenge that drivers enjoy.

The US GP works well for a European audience because it's broadcast at primetime on Sunday evening. And because the track is in the south of the country, spectator numbers are boosted by motorsport-mad Mexicans, who make the short trip across the border.

Support for Sergio Pérez is always high, but this year there will probably be more attention on his compatriot, Esteban Gutiérrez, who is driving for Haas. The new American team are making their home-race debut and will be pushing for their best result of the season. •



Mexican Gutiérrez, driving for US team Haas, is guaranteed lots of home support

WHAT GOES ON TOUR..

The appeals of Austin are legion: people, climate, music - and the mighty fine Circuit of The Americas itself. Then there's the possibility of popping into Lance Armstrong's own cycle store, Mellow Johnny's, if two wheels are your thing. Or strolling down Sixth Street and stumbling across one of your favourite bands (Blitzen Trapper, if you're wondering) playing live above a bar you pass en route to your hotel.

But these charms pale against the allure of something uniquely 'Austin': the Barton Springs salamander. These harmless, lungless and endangered little critters are visible to any goggle-wearing bather lapping the creek's 900foot length. Look down as you splash and you'll see them in all their 7cm-long glory, waving tiny feet of fury at you as you pass, disturbing the peace of their aeons-old habitat.

Anthony Rowlinson

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

Winner Lewis Hamilton

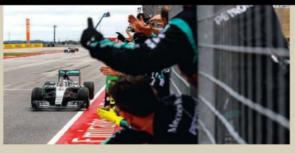
Margin of victory 2.85s

Pole position 1m 56.824s, N Rosberg

Fastest lap 1m 40.666s, N Rosberg

Race leaders 3 Safety Cars 4 Pitstops 47 Overtakes 39

First GP 2012



Lewis Hamilton claimed his third world title here last year, in an exciting race. Qualifying took place on Sunday, due to dire weather, and was followed by a race in which Hamilton and Rosberg battled for the upper hand. Eventually, Hamilton took advantage of a late-race Safety Car to stop for new tyres, forced Rosberg into a mistake at Turn 12 on lap 48 and held on to take both the win and the championship.

The Mexican GP preview

Round 19 / 28-30 October 2016 / Mexico City



MEXICAN GP RACE DATA

Circuit name Autódromo Hermanos Rodríguez

First GP 1963

F1 races held 16

Circuit length 2.674 miles

Race distance 189.738 miles (71 laps)

Direction Clockwise

Winners from pole 8

TIMETABLE (UK TIME)

Friday 28 October

Practice 1 16:00-17:30

Practice 2 20:00-21:30

Saturday 29 October

Practice 3 16:00-17:00

Qualifying 19:00-20:00

Sunday 30 October

Race 19:00

Live coverage Sky Sports F1

Highlights Channel 4

Qualifying 29 October: TBC

Race 30 October: TBC

A HIGH-ALTITUDE SCREAMER WHERE SPEEDS TOUCH 230MPH

This grand prix returned to the calendar last year, but there were mixed emotions about its comeback. One thing that *did* impress, however, were its top speeds. Mexico City is perched at 1.4-miles above sea level and its high altitude, and consequently thinner air, meant the cars didn't produce as much drag as usual, and flew along the straights. Williams' Felipe Massa clocked the highest recorded speed at 226.3mph on the start/finish straight.

Another plus was the huge crowd. Spectator numbers were high and looked and sounded impressive as they cheered on home hero Sergio Pérez through the new, final-corner stadium section. But many mourned the loss of the notorious Peraltada corner, the old signature turn at the end of the lap. Indeed, there were few corners to challenge drivers. Publicly they praised the return of a classic, but privately there was some disappointment.



The 2015 race drew a massive crowd of passionate Mexican motorsport fans

WHAT GOES ON TOUR.

Anyone who has watched the opening sequence of the 2015 James Bond film *Spectre* will have seen a snapshot of Mexico City at the end of October. While we celebrate Halloween in the UK, in Mexican culture the same festival is known as the Day of the Dead. At the height of these celebrations, the city is filled with parades and people in skeletal fancy dress.

Last year the Mexican Grand Prix took place on the same weekend as the Day of the Dead festival, and my hotel room overlooked a theatre that was showing the Mexican premiere of Spectre. I wasn't lucky enough to have tickets, but I could watch and hear interviews from the red carpet with Bond himself (Daniel Craig) and director Sam Mendes, while peering down from the 25th floor of my hotel bedroom window.

James Roberts

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

Winner Nico Rosberg

Margin of victory 1.954s

Pole position 1m 19.480s, N Rosberg

Fastest lap 1m 20.521s, N Rosberg

Race leaders 2

Safety Cars 1

Pitstops 38
Overtakes 27



It was a disastrous race for Ferrari last year. Sebastian Vettel hit Daniel Ricciardo on the first lap and was forced to pit with a puncture. His teammate Kimi Räikkönen, meanwhile, was also involved in a scrap with his compatriot Valtteri Bottas, who came off better in the collision between the pair and finished third behind Hamilton on the podium, with Nico Rosberg taking the win.

The Brazilian GP preview

Round 20 / 11-13 November 2016/ Interlagos, São Paulo



BRAZILIAN GP RACE DATA

Circuit Name Autódromo

José Carlos Pace

First GP 1973

F1 races held 33

Circuit length 2.677 miles

Race distance 190.083 miles (71 laps)

Direction Anticlockwise **Winners from pole** 5

TIMETABLE (UK TIME)

Friday 11 November

Practice 1 14:00-15:30

Practice 2 18:00-19:30

Saturday 12 November

Saturday 12 Novembe

Practice 3 15:00-16:00

Qualifying 18:00-19:00 Sunday 13 November

Race 18:00

Live coverage Sky Sports F1

Highlights Channel 4

Qualifying 12 November: TBC

Race 13 November: TBC

SO OFTEN THE SCENE OF THE CHAMPIONSHIP-DECIDER

Thanks to the excitable Paulistas, the Brazilian Grand Prix has something of a carnival feel about it. On race-day morning, you hear the samba drums beating a rhythm from the grandstands lining the edge of the track, and the intensity increases as the start approaches.

Taking place so close to the end of the season, this is often a crucial race in the world championship. In 2016, it is the penultimate race, so it's possible the title will be decided here. In recent years, Sebastian Vettel, Lewis Hamilton and Jenson Button have all celebrated title success in the hours after this race on Sunday evening.

This year will be emotional for Felipe Massa. He came so close to winning the title here in 2008, until Hamilton pipped him by nabbing fifth at the final corner. This will be Massa's final home race, after 14 years in F1, which will give the crowd extra motivation to bang their drums. \square



This will be the final home GP for Felipe Massa, who retires at the end of the year

WHAT GOES ON TOUR..

When the Chinese GP used to be held towards the end of the season, Jenson Button would treat the British press – his way of saying 'thank you' – by taking us to a roof-terrace restaurant offering spectacular views over Shanghai's skyscrapers.

When that race moved back to a spring date, Jenson continued the end-of-season offering but switched to São Paulo. Every year the highlight of the weekend for us is Jenson's dinner at Fogo de Chão: a traditional Brazilian *churrascaria*. A place where waiters bring to your table skewers of beautifully cooked steak (with an accompanying salad bar for the vegetarians among us).

With red-wine consumption high among a few notorious members of the jacket-wearing Fleet Street brigade, the offer from JB is generous and much-appreciated. And since he won't be racing in 2017, this year will be particularly special.

James Roberts

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

Winner Nico Rosberg

Margin of victory 7.756s

Pole position 1m 11.282s, N Rosberg

Fastest lap 1m 14.382s, L Hamilton

Race leaders 2 Safety Cars 0 Pitstops 49 Overtakes 31



In what was pretty much a repeat of the previous race in Mexico, Nico Rosberg again led a Mercedes one-two. He controlled the race after muscling ahead of Lewis Hamilton at Turn 1, despite making a slower start. As Hamilton's tyres lost their edge he pleaded with the team for a different strategy. They were unable to do that because of the threat from Ferrari's Sebastian Vettel.



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Change F1... but not too much

The acquisition of F1 by Liberty Media raises many interesting questions about the sport's future.

It's possible that plans to expand and/or increase the sport's profile, increase usage of media and move into new territories, could be nothing more than initial noise from the new owners. But whatever they do, any change should not take away from F1's current ethos.

By its very nature, F1 is a fastmoving sport and needs to keep up with change. It's now a far cry from the inaugural 1950 F1 world championship, but the crucial thing is that while things change, they also stay the same, and so the sport continues to enthral and excite people now just as it did then. That's why change should not be made for change's sake.

I'm all for F1 doing what it feels is right to make itself sustainable, but just remember it's the teams and fans that are its real core and their wishes should be respected above all else. Any move to change the valuable concept of man and machine against rivals in a bid to be the fastest (such as making it a spec formula, for example) would just be far too radical.

Sure, expand into new countries, make online content accessible to all, and make races more like what we see at Silverstone - packed grandstands and a fun weekend for all - but don't drastically change what we have now and make lifelong fans switch off.

Michael Brierley Manchester, UK

Friends or enemies?

With reference to Peter Windsor's comment in your 'Mid-term report' (F1 Racing, September, p65) in issue 247 that both Mercedes drivers are "...even buddies when no ones's looking", I must counter his assertion. Most people see something completely different.

Their body language post-race has never suggested what the esteemed Mr Windsor declares. I wince every time I witness the silences between them, and the way they won't even acknowledge each other. Daniel Ricciardo also testified to this very recently.

Tony Allbones Bedfordshire, UK

Survivor and saviour

After reading your recent article about Sir Jackie Stewart, 'The Survivor' (F1 Racing, October, p49), I began to recall the days when I started to follow Formula 1 in the early 1960s, when the likes of Jim Clark, Graham Hill, Jackie Stewart and Jack Brabham were all racing.

Jackie Stewart was initially ridiculed in some quarters of the media at the time for wanting too much protection, and for trying to take the fun and thrill of accidents out of the sport. It's hard to imagine now that such thoughts were once out there and being published.

I even recall reading the following joke at the time: 'How do you find Jackie Stewart's house in Switzerland?' The punchline was: 'Follow the Armco barrier from Geneva Airport.'

I'm glad that attitudes have changed. Many drivers over the years owe a debt of gratitude to Jackie Stewart for pushing for changes to F1 that have helped to contribute to circuit safety and save countless lives along the way.

Richard Geary Hampshire, UK

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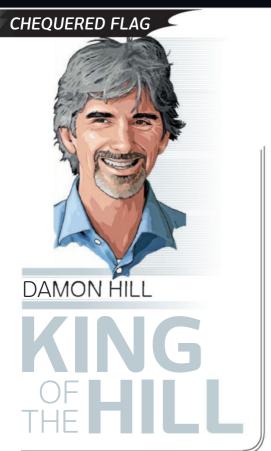
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Cockpit savvy from the 1996 world champ, exclusively in *F1R*

he cult film *Withnail and I*, set in 1969, ends with an apocalyptic vision of the future. "We are 91 days from the end of this decade and there's gonna be a lot of refugees," declares Danny the hippy as he rolls the huge joint he has ennobled with the title of 'The Camberwell Carrot'. His response to an uncertain future is to escape, however best he can, from reality.

F1 now teeters on such a precipice. We are on the edge of the unknown. In a few months, or, at most, a few years, a change will come after four decades of Bernie rule. But just what that change might be is not clear. The title of 'Mr F1' is being transferred from its residence in Prince's Gate, Knightsbridge, to somewhere between London and New York. Mr John Malone of Liberty Media has appointed a lieutenant, Mr Chase Carey, to oversee the change of culture, and he doesn't seem to talk the same language as the old boss. But, as The Who famously cautioned, "Meet the new boss; same as the old boss." Nothing is for nothing.

But could there ever be another Bernard Charles Ecclestone? Impossible, I say. For better or for worse, Bernie has been one of the most extraordinary characters on the world

Imagine the future in a post-Bernie world

stage since he took control of F1. Like him or loathe him, you can't ignore him. Much like the Wizard of Oz he's had the good people of Emerald City quaking in their boots as his outrageous pronouncements boomed across tabloids, broadsheets and TV news headlines.

Here are a few of note:

On Europe in 2004: "What I said ten years ago is that it would soon become a third world economy."

On Hitler: "In the way that he was able to command a lot of people [he was] able to get things done"

On Putin: "He's the guy who should run Europe. He will sort out this other business that is going on in Syria."

On drivers: "They shouldn't even be allowed to talk."

On the death of Ayrton Senna: "The publicity it generated was huge. That was very good for F1."

On women: "Should be dressed in white like all the other domestic appliances."

On attracting young people to F1: "I'd rather get to the 70-year-old guy who's got plenty of cash."

It's so outrageous it borders on funny. But if there's any theme here, it is that all these statements are intended to outrage. Ecclestone is the Johnny Rotten of sport, revelling in reactions and delighting in infuriating what he no doubt sees as middle-of-the-road mediocrity, the muddle of humanity that talks and talks as Rome burns. But he doesn't shoot down the false gods for the hell of it. He takes a pop because he has no respect for those who lack the courage to make a decision and the courage to be held responsible if it all goes wrong.

His apparent insensitivity is what really staggers us. Certainly, there is too much

sentimentality and romanticism around in our TV-drama-sozzled world. But every now and then you wish he hadn't said what he said when he said it. Because, although it may well have been the brutal truth we didn't want to acknowledge, we held our tongues or found subtler ways to say it. Bernie's method is to hit them straight between the eyes. Not that I agree with his approach or point of view on a great deal of things, but at least he's not afraid of incurring displeasure, which seems to be the trend these days in our political discourse. But it may just be that for all the good he has done in organising F1 into a global franchise, his wider unpopularity will be seen to have been his undoing, his own notoriety too much of a



Chase Carey (left) is expected to bring a change in culture to F1's management. After all, there could never be another Bernie

distraction from the main event. It seems there has been a coup going on behind his back.

In another cult classic, *Monty Python's Life of Brian*, there is a scene in which the revolutionaries plot to rid themselves of the hated Romans only to conclude that, on balance, the Romans are the only people who could "keep order in a place like this." It's a bleak truth of human nature that most of us can't handle such responsibility and so, through our dithering, hand power to the Bernies of this world who are immune to dislike and the wrath of the mob. Indeed, they seem to thrive on it. But I wonder what this new lot will bring to the party.

Camberwell Carrot, anyone? •

"The Bernies of this world are immune to dislike and the wrath of the mob"





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