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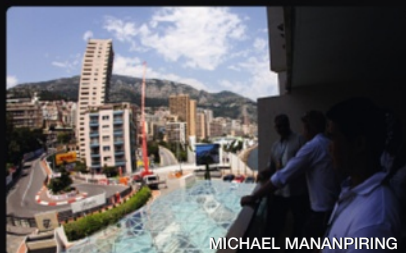
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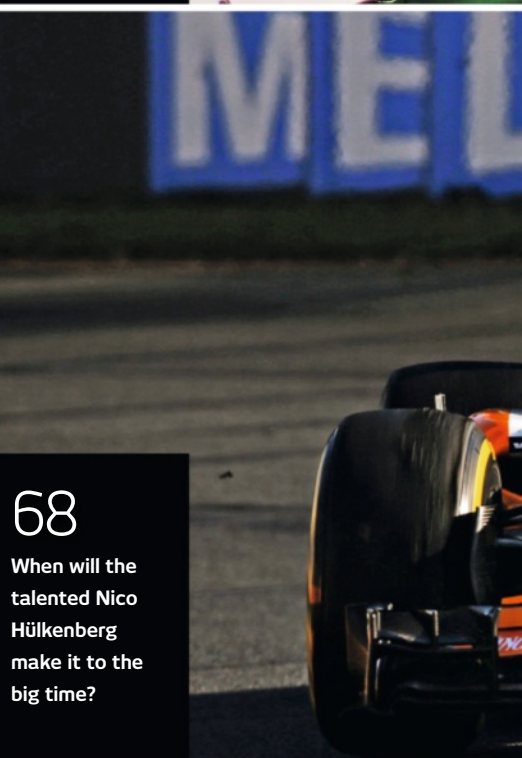
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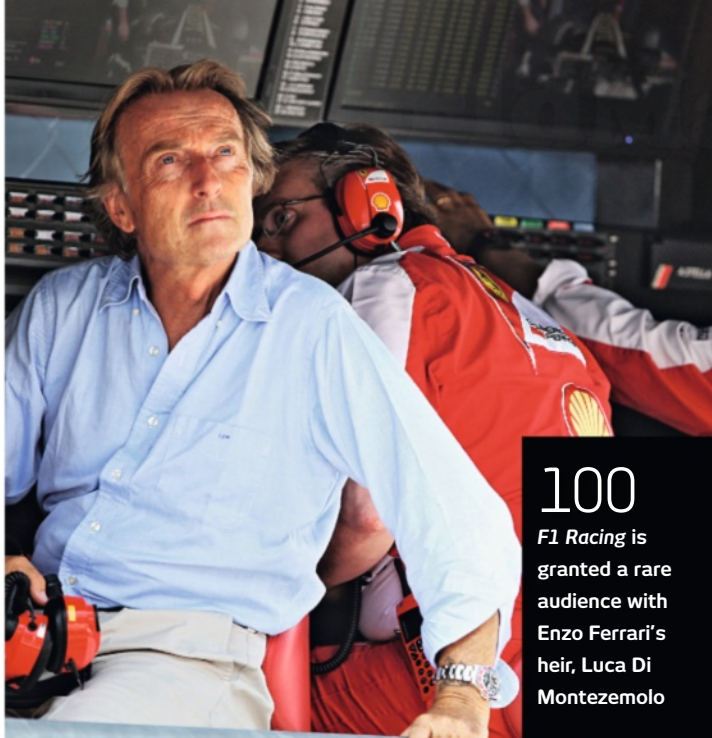


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Ignition / Anthony Rowlinson / 03.14

## Why Senna's flame burns ever brighter

**It's a journalist's duty**, we're told, to be impartial and dispassionate, to interrogate facts, separate lies from truth, analyse knowledge as presented, then convey said information to a reader, viewer or listener.

But then along comes Ayrton Senna, a man, a driver, who channelled emotions in a manner never previously experienced and who touched a million souls – *right there* – in such a way that they felt connected with their hero, for all that he knew nothing of their existence.

Senna destroyed impartiality almost from the beginning, possessing as he did an ability to make the rational irrational and the cool heads hot. For the media, he was dynamite and his influence went far, far beyond their (our) petty squabbles.

A few sporting greats do this without trying, as do the great political leaders, or era-defining musicians, artists and thinkers. It's how they conjure an ardent worldwide following when operating at their peak and why, when removed from their field through death, political upheaval, or the waning of their powers, they remain as iconic points of reference for future generations.

Twenty years after his death, Ayrton Senna occupies such a spot, remaining as vivid a figure for any F1 follower as he was on 1 May 1994, and as he had become over the preceding seasons of polarising brilliance.

Indeed, as Richard Williams, author of *The Death of Ayrton Senna* argues on page 44, Senna's eminence has grown in the post-Imola decades, leaving him

untouched and untouchable, as a totem of everything a racing driver could ever be.

This is not to say that Senna was a *model* racing driver, for his conduct often showed an overarching degree of arrogance (excused by supporters as spiritual conviction). If that were his only legacy, he'd be an ill-remembered figure, not a feted demi-god. But can anyone posit that there has existed a *better* racing driver than Senna? I, for one, doubt it – and I'm not alone.

Take Richard West, the former Williams commercial director who was the last man to interview Senna on that saddest of days. Sharing his remarkable story of 1 May (p50), West recalls how Senna galvanised all around him to perform at their best, not by the power of his reputation, but by the force of his deeds. The void he left, West tells us, was immense.

These emotions seem to have been experienced by anyone who felt anything for the man. And as we assess the fall-out from the 2014 Australian GP and prepare for a year of 'he said, she said', perhaps this is the right moment to reflect on why we fall in love with F1 and remember the fallen hero(es) who imbue our sport with a soaring spirit that transcends on-track competition.

"Only connect" wrote EM Forster in *Howards End*, making reference to one of the few constant points of value in human existence. There could be few better epitaphs, 20 years on, for a racing driver who connected like none before or since.

## Contributors



### Richard West

The last person to interview Ayrton Senna

Former Williams commercial director, and now an international motivational speaker, Richard has never told his story of Senna's final hours – until now (p50)



### Richard Williams

Jazz buff and doyen of sports journalism

As the author of *The Death of Ayrton Senna*, among other great sports books, Richard is perfectly placed to assess Senna's ongoing legacy (p44)



### Glenn Dunbar

More than just a Formula 1 snapper

Glenn's trackside work and F1 portraiture features regularly in these pages, but we had something different in store for him this month. See p94 to find out more



### Emerson Fittipaldi

Racing legend and F1R's new columnist

Forty years after his landmark world title, McLaren's first double, Emerson brings his wisdom to bear in a must-read monthly column (p39)



Thanks to Martin Anayi, Banksy, Idoia Bilbao, Matt Bishop, Renato Bisignani, Russell Day, John Dunbar, Sophie Eden, Drew Gibson, James Gilbride, Ross Gregory, Will Hings, Oliver Kraus, Emma Lay at Whittlebury Hall, Bradley Lord, James Mann, Chris Murray, Tracy Novak, Sophie Ogg, Fernando Paiva, Stéphane Samson, Andy Stobart (for the wheels), Deborah Tee, Roberta Vallorosi, Benjamin Wachenje, Tom Webb, Steve Wright



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### THE TEAM

**Editor**  
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**Managing Editor**  
Stewart Williams  
**Deputy Editor**  
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### PUBLISHING

**Director**  
Ian Burrows  
**F1 Racing Custom**  
Emma Shortt

### ADVERTISING

**International Sales Manager**  
Chris Gowland  
**UK Sales Manager**  
Ben Fullick  
**Advertising tel**  
+44 (0)20 8267 5179/5916

### LICENSING

**Licensing Manager**  
David Ryan

### PRODUCTION

**Production & Publishing Manager**  
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### CONTRIBUTORS

**Columnists**  
Peter Windsor  
Dieter Rencken  
Emerson Fittipaldi  
Murray Walker  
**Technical Consultant**  
Pat Symonds  
**Special Contributor**  
Tom Clarkson  
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Photographers  
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### SUBSCRIPTIONS

**Email** F1racing@servicehelpline.co.uk  
**Fax** 01795 414 555  
**Customer Hotline**  
0844 848 8826  
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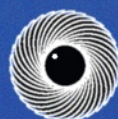
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# Parade

**Mumm's the word** Nico Rosberg sprays the contents of his jeroam of Mumm champagne to celebrate victory in the opening grand prix of the season. Since the inception of the world championship in 1950, the winner of the first race has gone on to be champion 32 times. What chance 33 in 2014?

**Where** Albert Park, Australia **When** 6.50pm, Sunday 16 March 2014

**Photographer** Lorenzo Bellanca

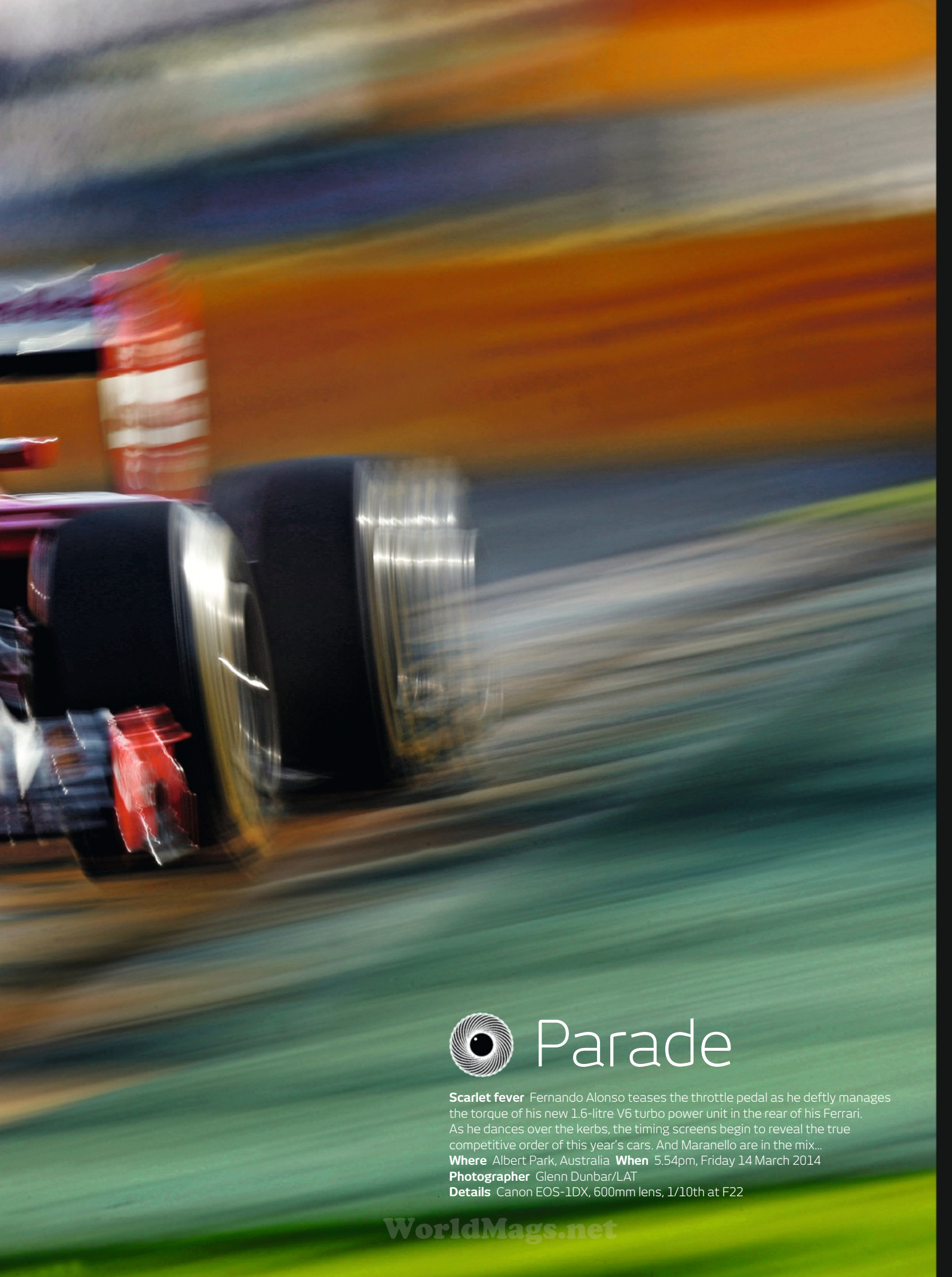
**Details** Canon EOS-1DX, 300mm lens, 1/2000th at F5.6











# Parade

**Scarlet fever** Fernando Alonso teases the throttle pedal as he deftly manages the torque of his new 1.6-litre V6 turbo power unit in the rear of his Ferrari. As he dances over the kerbs, the timing screens begin to reveal the true competitive order of this year's cars. And Maranello are in the mix...

**Where** Albert Park, Australia **When** 5.54pm, Friday 14 March 2014

**Photographer** Glenn Dunbar/LAT

**Details** Canon EOS-1DX, 600mm lens, 1/10th at F22





# Parade

**Bash is back** Kamui Kobayashi returns to Formula 1 with a bang in Melbourne. Heading into the first corner of the race, he smashes into the back of Felipe Massa's Williams, eliminating them both. Despite the initial outcry from Massa, the stewards found that Kamui's rear brakes had failed

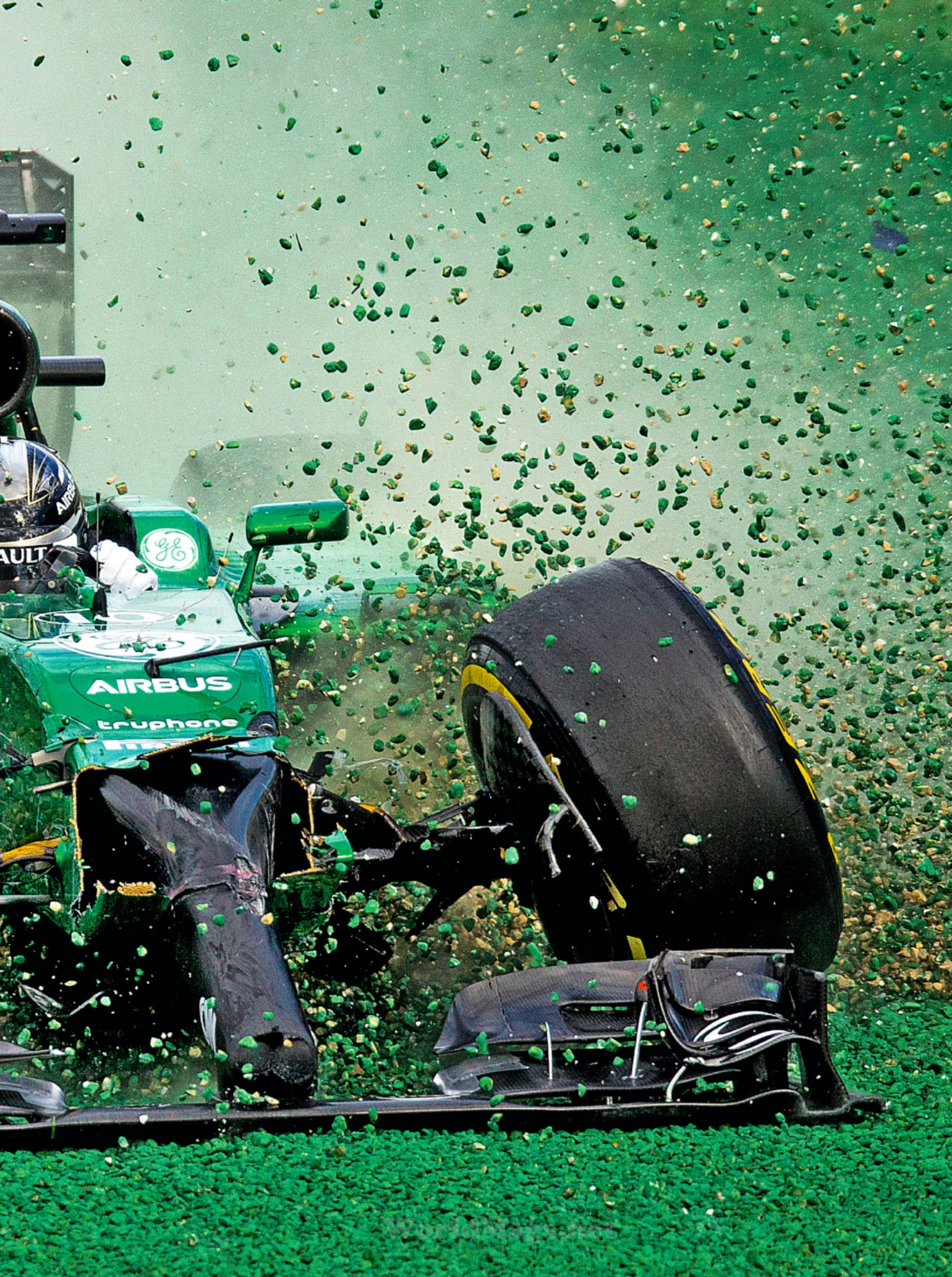
**Where** Albert Park, Australia **When** 5.07pm, Sunday 16 March 2014

**Photographer** Vladimir Rys

**Details** Canon EOS-1DX, 400mm lens, 1/2500th at F6

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# FI INSIDER

NEWS ■ OPINION ■ ANALYSIS

## ANALYSIS

# Normal service resumed for Red Bull?

Despite a pre-season testing programme about as disastrous as imaginable, Red Bull look set to be title contenders again this year

### The reigning constructors champions

made a strong start to the season in Melbourne, having recovered impressively from myriad reliability problems during the winter.

Red Bull and engine partner Renault are not on top of all of their problems yet, but their car nevertheless displayed an impressive turn of speed at the first race.

So just how did Red Bull bounce back from pre-season testing, in which the longest single run they managed was a mere 20 laps? At the first race, Daniel Ricciardo finished second before he was disqualified because his car exceeded the fuel-flow limit.

Their problems in testing were twofold. Renault were months behind with their engine programme, and the rear of the Red Bull was packaged too tightly, causing problems with overheating. The team applied their formidable resources and the incomparable mind of design chief Adrian Newey to the car issues, which were mostly solved by the second test.

Renault, meanwhile, were suffering from allowing their engine design and build programme to lag way behind that of their rivals. Sources say Renault developed the internal combustion turbo element and the energy-







Engine woe: Ricciardo breaks down at the first pre-season test (left) and Vettel retires from the first race (below)



recovery parts of their engine separately, and did not run the entire engine together on the test bed until mid-December. That is incredibly late – and months behind Mercedes.

When the Renault did run, its parts were failing to ‘talk to each other’ properly, and it was breaking regularly as well. It was at this point, Renault’s teams report, that the Renault base at Viry-Châtillon in France, stopped answering emails. The belief is that Renault had been panicking about the situation for some time,

before finally admitting to their clients that they were in significant trouble.

That is why Renault were so underprepared for the first test in Jerez, which was a “disaster” in the words of more than one insider. And the first Bahrain test was not much better.

Since then, however, Renault’s teams have been impressed by the rapid progress made.

“If they carry on like this,” a senior figure from one of their teams said, “by Spain, I don’t think people will be talking about a power difference between the Renault and the Mercedes.”

If that is so, it could put Red Bull up there with Mercedes, especially since the team are rumoured to have a major upgrade for that race. Team boss Horner has denied claims that this will effectively be a new car, though.

“We will have an updated car as we have every year,” he said, “and that will come with developments at each grand prix – not just for the European season, but each grand prix throughout the year. There is no silver bullet in this game, and it is a matter of engineering solutions to engineering problems.”

Red Bull’s rivals have not been surprised by the pace of the RB10, nor by their ability to apply their resources to work around their problems.

“You could tell,” said Lewis Hamilton. “Christian kind of gave it away – the things he was saying led me to believe they were going to be sorting it soon. Plus they’ve led the championship for several years now, and you know they are a strong team. Things can turn around quite quickly with a lot of work, particularly when you have a direction. They’re a great team but we’re here to battle with them and to give just as much if not more back.”

Red Bull are also the subject of some debate at the moment. Rival teams are unhappy about Red Bull’s failure to put camera mounts on their car, instead providing a hole in the ‘vanity panel’ on the nose and saying that is for the camera.

The problem is that the F1 cameras cannot physically be fixed there – and the rules say the teams have to provide a place where the cameras

Ricciardo certainly looked fast in Melbourne, but until the appeal against his disqualification is heard, the jury’s out



## NEWS DIGEST

# The month’s big stories at a glance



**24.2.14** Susie Wolff to make selected F1 outings for Williams

**24.2.14** Trojan virus strikes Marussia computers at Bahrain test  
**28.2.14** Teams’ body FOTA officially disbands  
**28.2.14** All three engine manufacturers make homologation deadline  
**2.3.14** Bahrain names first corner after Michael Schumacher  
**6.3.14** Long Beach City Council defers decision on potential F1 return  
**6.3.14** Martini return to F1 with Williams  
**7.3.14** Pirelli confirm tyre tests at Bahrain, Barcelona and Silverstone  
**12.3.14** Schumacher showing “small, encouraging signs” according to manager  
**13.3.14** FIA warns there will be “no tolerance” for teams exceeding 100kg fuel weight limit  
**15.3.14** Lotus and Marussia are first teams to break working-hours curfew  
**16.3.14** Daniil Kvyat becomes youngest driver to score F1 points, aged 19 years, ten months and eight days

can be mounted. The FIA may yet insist that Red Bull provide conventional camera mounts.

And although Daniel Ricciardo finished second in Australia, he was later disqualified because his car had gone “consistently” beyond the maximum fuel-flow limit.

Red Bull insist this was a problem with the FIA’s sensor, but the FIA says Red Bull were warned about the problem earlier in the weekend and refused to address it. Until the matter is resolved, no conclusion can be drawn about the team’s performance shown in Australia.



# Wolff: Hamilton and Rosberg "free to race"

Team are keen to avoid bad feeling between drivers, but stop short of saying team orders will be banned altogether

**Mercedes have stated** that Lewis Hamilton and Nico Rosberg will be able to compete against each other on an equal footing, as the team seek to win their first world championship since 1955.

The issue became a talking point at Mercedes at the start of the year, when it became clear that they were in a dominant position and that Hamilton and Rosberg were evenly matched.

Mercedes are sensitive to the issue following controversy at last year's Malaysian GP, when former team boss Ross Brawn's decision to order Rosberg to stay behind Hamilton would have caused more debate had it not been the race at which Red Bull had their own, far more dramatic, team-orders controversy.

Mercedes executive director (business) Toto Wolff described Malaysia 2013 as "a perfect storm". He said the team have learned from it and that he and executive director (technical) Paddy Lowe have sat down with the drivers to discuss how they will handle a title fight.

"They are completely free to race," Wolff said. "We have had some discussions about it. I don't think this is going to be an issue."

But Mercedes have kept open the possibility of using team orders if they feel it is appropriate.

"Our main competitors are other teams," Wolff said. "We need to make sure that as a team we are running strongly and then it's to be decided on a case-by-case basis what goes on in the cars. But we have discussed this and we have found a solution acceptable to Nico, Lewis and the team."



Rosberg (left) and Hamilton (right) appear to be evenly matched in dominant Mercedes machinery

The issue has also focused attention on whether Hamilton and Rosberg can maintain a friendly relationship amid the pressures of a title battle. Both insist they can.

Hamilton said: "Everyone is talking about the relationship between us. We have been racing since we were 13 and been in championships to the end. I've won one; he's won one. This is a more serious championship. A lot is riding on it, but I don't see any issues."

Rosberg said: "The main thing is to have a clear picture of what's going on. But there will be battles between Lewis and me. That's important, for the TV and for us as a team. That's racing. That's what we're here for. But within certain limits. You can't go crazy as team-mates."

We're both here racing for Mercedes. We're both here to have great success for Mercedes and help bring them to the front of F1. At the same time we want to go racing and do some exciting stuff on track. So you need to find the fine line."

Senior figures at Mercedes admit that there will inevitably come a flash point when one or both drivers fail to abide by what has been agreed.

But if this happens, they say they will just have to revisit the issue again.

## QUIZ



### F1 Mastermind

Your chosen specialised subject: the world's greatest sport



**Q1** At which 1975 race did Jochen Mass become the first winner to score half points?

**Q2** What is the only GP for which Ayrton Senna failed to qualify?

**Q3** At the 1979 French GP, Renault claimed the first victory for a turbocharged car. Who was driving?

**Q4** Juan Manuel Fangio took the last victory for a supercharged car in the 1951 Spanish Grand Prix – at which circuit?

**Q5** Troy Ruttman started eight world championship grands prix, but only one of them was a Formula 1 race. Which one was it?

**Q6** At which circuit was the fastest qualifier and race winner traditionally awarded a bonus in the form of bottles of champagne?

**Q7** Only three of the seven classified finishers in the 1996 Monaco GP took the chequered flag on the lead lap. Who was the third?

**Q8** Which Argentine driver was also an accomplished polo player, with a handicap of ten?

**Q9** Who won the only US Grand Prix to be held at Sebring?

**Q10** Which future world champion made his grand prix debut in a March 711, as photographed on p42 of this issue?

**Q11** Arthur Legat contested the 1952 and 1953 Belgian Grands Prix in which type of car?

**Q12** At which 1993 grand prix did Ayrton Senna notch up McLaren's 100th win?

**Q13** Lance Reventlow, the driving force behind Scarab's abortive F1 involvement in the 1960s, was the stepson of which Hollywood actor?

**Q14** What was unusual about Stirling Moss's participation in the 1958 Argentine Grand Prix?

**Q15** At which race did Daniel Ricciardo make his first F1 start?

Answers: Q1 Spanish Grand Prix Q2 San Marino 1984 Q3 Jean-Pierre Jabouille Q4 Pedralbes Q5 1958 French GP Q6 Reims Q7 Johnny Herbert Q8 Carlos Menditeguy Q9 Bruce McLaren Q10 Niki Lauda Q11 Ventas Meteor Q12 Brazil Q13 Gary Grant Q14 He drove a Cooper instead of a Vanwall Q15 2011 British GP



# Crunch court case looms for Ecclestone

F1 supremo wins civil case, but criminal trial is yet to come

**The criminal corruption** trial that could end Bernie Ecclestone's stewardship of Formula 1 begins in Munich this month.

The 83-year-old is charged with paying a \$44m bribe to German banker Gerhard Gribkowsky, who is serving a prison sentence for accepting the money. Ecclestone denies the sum was a bribe. He claims he paid up to stop Gribkowsky giving false information to the Inland Revenue, which would have triggered a lengthy and expensive investigation.

Ecclestone has won a separate but related case at the High Court in London, in which German company Constantin Medien accused him of deliberately undervaluing the business when it was sold to CVC Capital Partners in 2005.

**Ecclestone post-trial in London: "Why shouldn't I carry on? It's business as usual"**



But although the judge said there was no evidence Ecclestone had done so, he did say the F1 boss was guilty of paying a bribe, and added that his evidence had not been "reliable or truthful".

Ecclestone said: "I didn't lie to the court. I told the truth. The judge just didn't see it that way. But even if I did lie and was unreliable, I have been doing a reasonably good job for 35 years. So why shouldn't I carry on? It's business as usual."

CVC have made it clear that Ecclestone will continue to run the business while the Munich trial takes place, but they are actively pursuing a succession plan.

Ecclestone himself told the *Financial Times*: "I've been spending time on this [civil] case and to spend time on Munich

I am not able to give what I normally would do, 24/7, to the business. I've been looking, over the past few years, for somebody who can join me to assist with what I have to do. I will eventually be in a position, if I decide to retire – or unfortunately become dead – to have someone to step into my shoes."

Rumour has been rife that Red Bull's Christian Horner could succeed him, since Ecclestone said that Horner would be "ideal". But Ecclestone claims he mentioned Horner only because, when talking to a journalist, "Christian Horner happened to be walking past so I said 'what about Christian Horner?' That was the end of it."

Ecclestone also sparked controversy by backing Russian President Vladimir Putin's laws banning 'gay propaganda'. Ecclestone said: "He [Mr Putin] hasn't said he doesn't agree [with homosexuality], just that he doesn't want these things publicised to an audience under the age of 18. I completely agree with those sentiments and if you took a world census you'd find 90 per cent of the world agree with it as well."

F1 holds its first Russian Grand Prix in October, a project personally backed by Putin. The fee is said to be \$50m a year for five years.

YOUNG GUNS

Takuya Izawa



Finding the stars of tomorrow, today

**Takuya Izawa** is 29. He was born in Tokyo and will contest this year's GP2 Series with ART Grand Prix.

## Who is he?

Izawa is an experienced racer on the Japanese domestic scene. He has been competing in Super GT and Formula Nippon/Super Formula regularly since 2008.

## What brings him to GP2?

One word: Honda. In preparation for their F1 return as McLaren's engine partner in 2015, they are rebuilding awareness of their historic links with racing by joining McLaren in partnership with one of GP2's most successful teams. Both Nico Rosberg and Lewis Hamilton became GP2 champions with ART before graduating to F1.

## How good is he?

He has been a frequent rather than regular or consistent winner in domestic competition, finishing runner-up in Super GT in 2009 and third in Super Formula in 2012. He won a race in both disciplines last year, but scored just one other podium finish. For Honda, though, it's important to be seen to be promoting home-grown talent, and Izawa has been a Honda man throughout his career.

## How will he fare in GP2?

It depends. He has a quick and highly regarded team-mate in Stoffel Vandoorne, and the rest of the GP2 grid is largely populated by drivers with two or three years' experience.

## Can we expect to see him in F1?

Unless his 2014 results make the earth move for Ron Dennis, we're unlikely to see him in a McLaren. But given Honda's previous tenacity with Satoru Nakajima and Takuma Sato, we may see him in F1 with a customer team.



# Azerbaijan mooted as Indian GP replacement

A race around the streets of Baku could be on the agenda as hopes of a return to New Delhi begin to fade

According to Bernie Ecclestone, the next new country to host F1 could be Azerbaijan. If that seems an unlikely destination, consider that the oil-rich state on the Caspian Sea fits the profile of F1's eastward expansion into places that can pay for it, and which want to use the sport to enhance their global profile.

The capital city of Baku has ambitions to become the Dubai of the Caspian region. It seems to be heading in that direction already: couture designers Tom Ford and Dior have shops there, and Lamborghinis are a common sight on its streets. One F1 insider, describes it as "A cool city – like Cannes, only with better cars". Money is definitely not a problem.

It's little surprise, then, that the groundwork for the scheme was laid by Ecclestone's close friend, former Renault team boss Flavio Briatore, who has opened one of his Billionaire high-end clothing stores in Baku.

Ecclestone admits that organising the street race is "not particularly straightforward" – and those who attended an FIA GT sportscar race

there last year say that while a coastal road that forms part of the track is wide, the rest of the course was single-file only. "It would not be ideal for F1, it's fair to say," one insider told us.

If it does go ahead, the Azerbaijan GP will likely fill the slot that had been pencilled in for the Indian GP. That race was dropped after 2013 because of issues with the way the Indian government taxed the teams and F1 Group.

"At the moment, India won't be on for next year for sure," said Ecclestone. "Probably 2016... they're gradually getting over all the bureaucracy with the tax position inside the country and the general finance."

In theory, the Mexican Grand Prix and the twice-postponed race in New Jersey, overlooking Manhattan, could also still make it onto the 2015 calendar, although there are still doubts over New Jersey's ability to raise the necessary money and build the required infrastructure.

**Baku's long, wide coastal road is suitable for F1, but other roads are single-file only**

## PASSNOTES

Your essential F1 briefing  
#1: Ron Dennis



**Name** Ron Dennis

**Age** 66

**Appearance**

Immaculate.

Unincreased. Optimised.

Disapproving.

**I recognise him. Didn't he used to run an F1 team?**

That's right. He took over McLaren at the end of 1980 and was team principal until 2009.

**What's he been doing since then?**

Building up the road car side of the business, officially. He's still the chairman of the McLaren Group and a major shareholder. On the side? A bit of cosying up to politicians. Last year he accompanied the British PM on a trade delegation to China where they tied up a deal to export pig semen.

**Yuck! I thought Ron was famous for taking a 'hands-on' approach to management...**

Objectively, perhaps not in the understandably specialised business sector pertaining to optimising the reproductive yield of the even-toed ungulate. However, he is currently fully engaged in leveraging his globally acknowledged entrepreneurial expertise with the purpose of implementing a thorough re-optimisation of his previous enterprise. Axiomatically, therefore, his objective is to remain fully invested in the structural readjustment that he has initiated.

**What?**

He won't be getting down and dirty with the pigs. He's got better things to do, having executed a boardroom coup at McLaren to land the title of Group CEO again.

**Couldn't you have said that the first time?**

Just my bit of fun. Ron's famous for his distinctively convoluted oratorical style, nicknamed 'Ronspeak'.

**Perhaps he should hire a speechwriter...**

Don't you think the McLaren comms team have sufficient lexical firepower to conjure a punchy peroration?

**Stop it. I'm getting dizzy.**

Imagine what the incumbent team principal felt like when he heard the news that Ron was coming back. Last season was McLaren's first without a podium since the Ronster joined in 1980. That, chum, is the very definition of sub-optimal.

**Do say** Onwards and upwards.

**Don't say** Anyone got Ross Brawn's phone number?

PHOTOS: ANDY HONE/LAT.XPBBCC







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SINGAPORE GRAND PRIX

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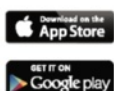
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**COLUMN**


# THE DRIVER'S WIFE

O.C.De Facto

**You know the shrink's** word association game where they say, like, 'beauty' and I say 'me'? Well, if they said 'racing driver', you'd say 'macho, virile, or fearless'... right?

I mean *Amor* is all those things and more, don't you doubt it, baby. It's just there's something that's sort of concerning me, and when your face is insured for double-figure millions, worry wrinkles aren't an option.

There were signs, but at first I thought it was just part of his seduction technique, you know: 'Look what a great guy I am, I wipe down the basin after use so it's drip-free for you' or 'I am straightening all the pictures on the walls so you don't think the building is subsiding.' Guys have done a whole bunch of crazy stuff to impress me in the past – this much beauty is intimidating.

*Amor's* so considerate too, you know. He pees sitting down as he said women can develop an irrational fear of urinal splashback, or maybe it was my shrink who said that, or maybe neither... anyway he does a lot for me, stuff that's not necessarily comfortable.

But now it's affecting my social life. 'You wanna watch a film, baby?' I said on one of our rare nights at home, pulling a stack of DVDs off the shelf to find a romcom. He said yes, then went all pale and twitchy and insisted on putting all the cases back in alphabetical order. He missed the first half of the film and the night was ruined, because it's just not funny when I laugh by myself.

I cornered him at breakfast, delaying the production of his juice as I cut the wheatgrass blade by blade to force his attention. 'Amor, you are so sweet to always think of me, but we have a housekeeper who's paid to tidy up, so feel free to be your reckless, wild and messy racing-driver self.'

'Thanks, baby,' he replied squatting down to restack the recently loaded dishwasher using his special system.

I needed some perspective; you know, one is not a great sample, so I invited some drivers and their partners over for dinner. Conversation down the boys' end was getting heated, so I strutted over to see if it was the recounting of high-octane manoeuvres or my Dior backless dress that had got them so excited. If only, but no. A world champion, two race winners and a rookie were locked in an intense discussion on the merits of the Dyson Digital Slim. So the high point of the evening, instead of the exclusive preview of my Rio Carnival Samba routine, was a demonstration of the bloody vacuum cleaner's suction power. It would have been funny if I hadn't been laughing by myself.

*God bless you and keep you alphabetised.*

**Beijos**

**NEWS**

# Lotus to divide team principal role

Temporary leadership plan implemented in aftermath of Boullier departure and testing woes

**Lotus have started** the new season without a permanent team principal, following upheaval in Enstone over the past few months. Chairman Gerard Lopez will temporarily fill the role, but on race weekends the team will effectively be run by trackside operations director Alan Permane, with occasional assistance from technical director Nick Chester.

In Australia, Lotus appointed Federico Gastaldi – formerly the head of business development – as their new deputy team principal. Lotus chief executive officer Matthew Carter will also be involved, but he has no experience of motor racing, so his focus will inevitably be on the business side.

It emerged over the winter that former Peugeot motorsport boss

Olivier Quesnel was considered as a replacement for Boullier, but that idea has since been dropped.

Lotus had a disastrous pre-season testing programme, putting in the fewest miles of any team. The car showed promise, but was restricted, as was the case with all Renault teams, by the French manufacturer's ongoing technical difficulties with their new power unit.

Ever since Lopez's Genii Capital group bought the team from Renault in late 2009, it has been dogged by rumours of impending financial collapse. The departure of several key staff members has done nothing to quell the gossip.

But Lopez insists the team are financially stable. Certainly in the wake of the new five-year engine partnership deal they have entered into with Renault, it seems as if rumours of their demise have been greatly exaggerated.

**Lotus head honchos include Gerard Lopez (below), Nick Chester and Matthew Carter (bottom left and right)**



PHOTOS: ANDREW FERRARO/LAT



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**NEWS**

## Dennis: McLaren must suffer "pain"

Returning CEO slams team for becoming "distracted" as he sets about implementing a radical restructure

**Ron Dennis has said** he believes McLaren's standards have slipped and that he will accept no compromises from the team as he sets about restoring them to the top of Formula 1. He claims McLaren had become "distracted" from their core responsibility of winning races and has made it clear that he will not accept anything other than total commitment.

"I believe we will win races this year," Dennis said. "I really believe that. How many races we will win? I don't know. When we will win? I don't know. But if everybody matches my own

commitment, passion and focus, then we will most definitely win."

Dennis also said that anyone who did not meet his exacting standards would be sacked.

"Right now the company is unfit, it needs to get fit, and there is pain to getting fit," he said. "So hopefully everyone has the right mindset to understand what we expect of each other and what I expect of them. It will take time to get to where we want to be, and we'll give people time to understand what is expected. If they don't get there, they won't be with the company."

Former Lotus team principal Eric Boullier has been brought in to run McLaren's racing operation. But Dennis admitted that Boullier was first approached by Martin Whitmarsh, whose future role at McLaren, if any, is still unknown. It remains to be seen how the division of responsibilities between Boullier and sporting director Sam Michael will work out.

Boullier and Michael both answer to the new role of chief executive officer of McLaren Racing, a position filled temporarily by chief operating officer Jonathan Neale. Dennis said Neale was a candidate for the permanent role – "effectively not only would he love to have the job, but he may well do the job" – but that he, Dennis, would "take my time" in making a final decision.

Dennis said he would attend races but that he had "no intention of running the team".

"I will guide them, give them the benefit of my knowledge and, if necessary, use my executive authority to change things," he said.

• See next month's issue of F1 Racing for an interview with Dennis about McLaren's future





The pressure is on Jenson Button: as a McLaren racer, Dennis expects him to win

## F1 STUFF



### DIECAST RACE MODELS REPLICA HELMETS

These weighty 1:2 scale diecast ornaments are based on helmets old and new, although some are available only in limited numbers. New arrivals include a replica of the lid worn by Gilles Villeneuve on his debut at the 1977 British GP (£120), and a model Fernando Alonso helmet (above) for £115. [www.diecastracemodels.com](http://www.diecastracemodels.com)

### 'AYRTON SENNA BY McLAREN' RANGE

This range pays tribute to the legendary racer, who won his three titles with McLaren. It includes this Senna cap (£27.95) with the colours of the Brazilian flag stitched onto its peak. [www.mclarenstore.com](http://www.mclarenstore.com)



### McLAREN '1974 COLLECTION'

It's 40 years since our new columnist Emerson Fittipaldi scored McLaren's first title double. The team have produced a commemorative range, which includes this T-shirt (£24.95), featuring Emmo and his M23. [www.mclarenstore.com](http://www.mclarenstore.com)

### TW STEEL CEO TECH DAVID COULTHARD SPECIAL EDITION WATCH

This stainless steel wristwatch is the latest collaboration between TW Steel and David Coulthard. It comes in two sizes: 44mm (£575) and 48mm (£595). [www.twsteeluk.com](http://www.twsteeluk.com)





# Extension to double-points plan rejected

Teams vote against unpopular scheme to award double points for the final three grands prix of the season

**To the relief of almost everyone**, bar Bernie Ecclestone and Christian Horner, Formula 1's rule-makers have decided against extending the controversial double-points scheme to the final three races of 2014.

The decision to award double points for the final race in Abu Dhabi had already been met with derision when it was passed last December, with Sebastian Vettel saying he thought it was "absurd". Yet despite the negative reaction, F1 boss Ecclestone set about trying to persuade teams to extend the scheme.

The issue was on the agenda for a meeting of F1's strategy group before the start of the season, but those involved took what one insider described as "a sensible pill" and decided not to press ahead with it.

The majority of the teams were against the idea, but there were concerns that Ecclestone

would be able to push it through with support from FIA president Jean Todt and also Red Bull, who, with problems at the start of the season and a talent for in-season development, would benefit from the championship being weighted to the end of the year.

Red Bull team principal Christian Horner had made it clear he thought three double-points races were a better idea than one, because it took away what he called the "element of lottery" of it applying only to the last race.

But Todt, who had supported Ecclestone in introducing the scheme for Abu Dhabi, got cold feet as a result of the overwhelmingly negative reaction, and refused to back the extension unless the teams were unanimously



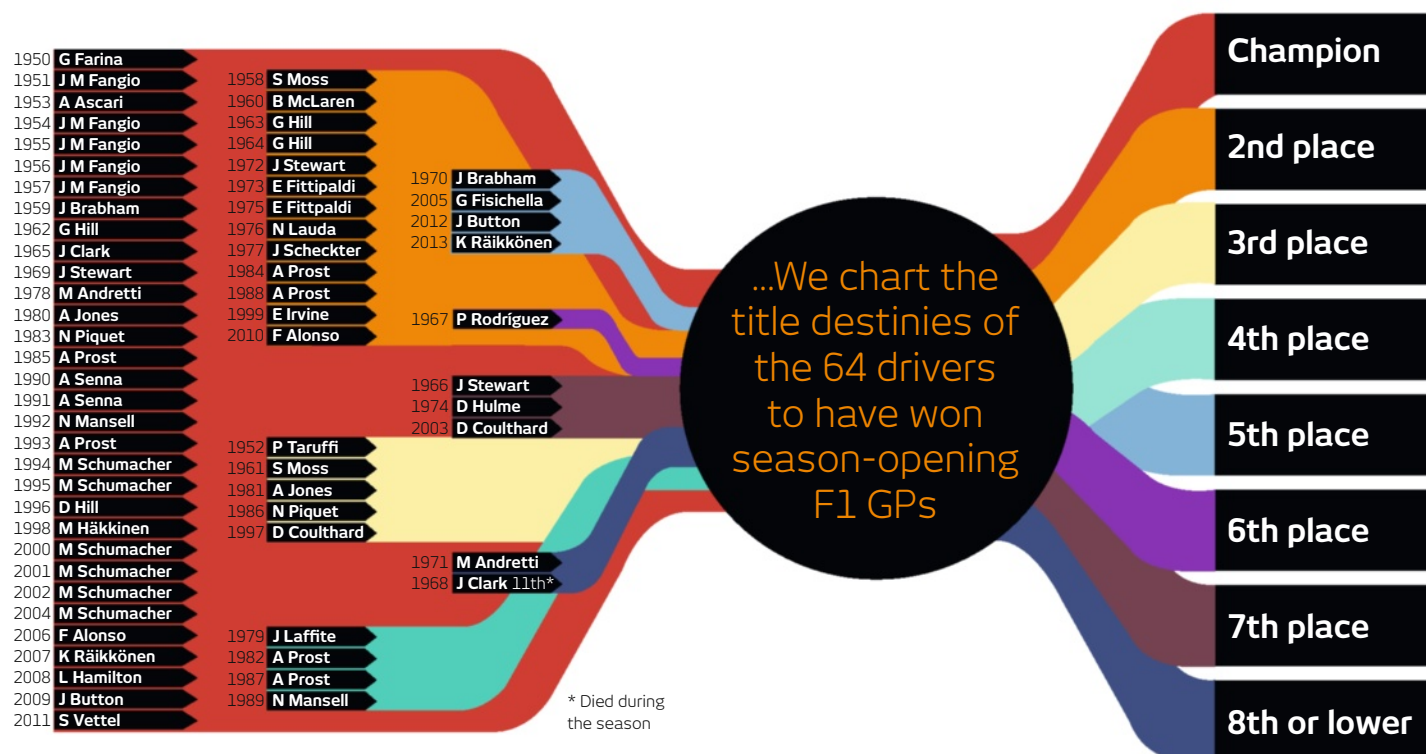
More double-points races at the end of season could work in Red Bull's favour. But Vettel dismisses the plan as "absurd"

in favour. With Todt wavering and the teams unenthusiastic, Ecclestone had to accept defeat.

The principle of having *any* double-points races is still wildly unpopular. As one senior figure put it: "Can you imagine the reality of this rule when we get there? Telling a driver he has lost the title because of an artificial construction? Let alone disenfranchising all his loyal fans."

**INFO**

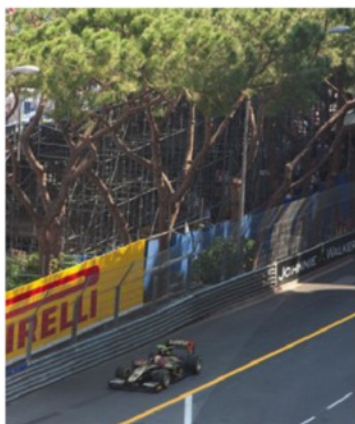
He who laughs first in F1, often laughs loudest...





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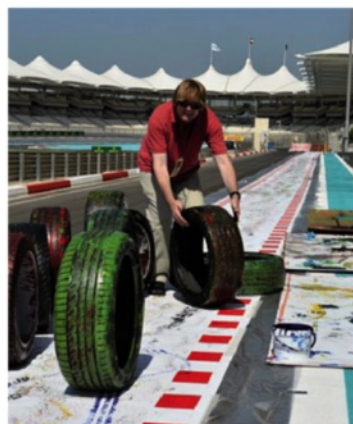
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NEWS

# Formula One Teams Association disbanded

Shorn of purpose and funding, the teams' collective bargaining tool has been forced to close

**Formula 1 teams' group power** has been weakened following the collapse of their umbrella organisation, FOTA.

It was disbanded, a statement said, "as a result of insufficient funds to continue and a lack of consensus among all the teams on a revised, non-contentious mandate".

In truth, FOTA's relevance and influence had been doubtful ever since Red Bull and Ferrari left in late 2011, following a row concerning the Resource Restriction Agreement (RRA). This legally binding document was created by FOTA to set out the means by which teams' abilities to pursue research and development would be limited, with the aim of cutting costs.

But Red Bull's rivals believed the world champions were flouting the agreement – Ferrari being particularly vocal. Disagreement rumbled on until both teams decided they could no longer continue in the organisation.

"FOTA has run its course," Ferrari said at the time. They were followed by Toro Rosso and Sauber shortly afterwards, but the seven remaining teams struggled on, thanks largely to the efforts of McLaren's then team principal, Martin Whitmarsh, FOTA chairman, and his deputy, Eric Boullier, then Lotus team principal.

But when Whitmarsh was sidelined at McLaren, with Boullier brought in to run the race team, FOTA lost their driving force. This was exacerbated by some teams failing to pay their 2013 subscriptions. General secretary Oliver Weingarten officially disbanded the organisation before the start of the 2014 season.

Its demise creates uncertainty. FOTA were responsible for organising the 2014 pre-season tests, but the three additional in-season tests in 2014 have not yet been sorted out. FOTA also administered teams' submissions under the RRA, which raises doubts about its enforcement.

F1 INSIDER

## NEWS IN BRIEF



### McLAREN CELEBRATE MOBIL 1 ANNIVERSARY

The team ran a one-off livery in Australia to mark the 20th anniversary of their partnership with ExxonMobil, with more prominent branding on the sidepods and rear wing.

### GASTALDI PROMOTED BY LOTUS

After a number of management changes over the winter, Lotus F1's director of business development, Federico Gastaldi, has become deputy team principal. Team owner Gerard Lopez continues to act as team principal.

### STANFORD LEAVES WILLIAMS ROLE

Williams stalwart Dickie Stanford has left his role as race team manager, a position that will now be filled by former McLaren technical co-ordinator Peter Vale. Stanford has been with Williams since joining in 1985.

### FIA APPROVES QUALIFYING TWEAKS

The FIA has approved plans to give drivers an extra set of tyres in Q3 as an incentive to participate in the session. At several GPs last year, some drivers sat out Q3 in order to save their tyres for the race.

### HAMILTON JOINS SAFETY CAMPAIGN

Lewis Hamilton will be one of the judges in an FIA-backed road safety campaign competition launched by the UK's Motor Sports Association. Entrants must create a short film with a road-safety theme.

### NÜRBURGRING SOLD TO INVESTORS

The Nürburgring has been sold, allegedly for "over €100million". New owners, the Capricorn Group, aim to develop the troubled facility into an "automotive technology cluster".



PHOTOS: ANDREW FERRARU/LAT; ALASTAIR STALEY/LAT





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Pat Symonds explains  
**THE SCIENCE BEHIND...**

# Damage repair

## F1 TECH

**A major concern in F1 must be damaging the car when spares are in short supply. What happens if the car is damaged in an accident?**

The first thing is to establish how it happened. Was it a simple case of the driver trying too hard and losing control, or was it caused by a faulty component or system on the car? Because of this doubt, we immediately treat the event as if it were a crime scene investigation and make a forensic study of the data and evidence available to us. This will include asking the driver what happened, but also includes careful examination of recorded data to understand the sequence of events that led to loss of control.

**What can you do if you are miles from base and you establish that a component has failed?**

The first rule is that you don't just fit a spare and carry on. The failure must be understood and the operational envelope adjusted accordingly. This often means that the car cannot be used while the investigation takes place. If a component has broken, it will be carefully examined for evidence of a material or manufacturing fault. If one cannot be found, the design itself must be called into question and measures taken to – for example – reduce the load on the component.

**It must be hard to establish the cause of failure in the field, without the sophisticated facilities you have back at base...**

It is, but we are in constant contact with the factory and can exchange close-up photographs of a damaged surface, for example, on which the experts may give an opinion. We also examine the gigabytes of data that we will have recorded, looking for any abnormalities or overloads that may have caused the problem. If we are at a test, obviously the car is stopped while this happens. If we are in a practice session at a race event, we face the difficult decision of whether or not there may be sufficient risk that we have to stop the other car running until we have established the cause of the problem. Sometimes examination of the second car can be a great help, since the fault may be present on that car but not yet at the point at which it becomes catastrophic.

**Are you able to repair most types of damage that a car might experience?**

The short answer is 'no'. In general, when at the track, we will replace a damaged component with a new one, particularly if that component has suffered collateral damage as the result of a simple accident or failure of another element. In pre-season testing, we often don't have the luxury of copious spares. We may have to use our ingenuity to make, in the field, a repair that we would normally only undertake using the sophisticated production machinery that we have back at our factory. In our test trucks we will have a small manual lathe and mill that a skilled mechanic can use to make

simple parts; and our composite technicians are capable of astounding repairs to carbon fibre components using simple field techniques. If a structural component needs repair, though, it is a different matter and if one is not available trackside it normally requires a call to the factory and someone bringing something out on the next flight. Not necessarily the easiest thing, depending on where you are.

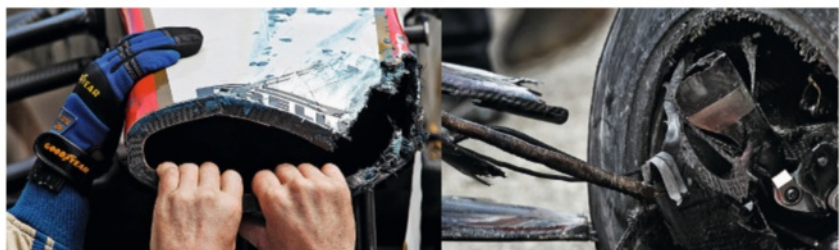
**Do you ever spot a failure when the car is out on track, and if so can you get the driver back to the pits before major damage is done?**

Yes, on occasion, the real-time telemetry, which is constantly streaming data back to the pits, enables the engineers who are monitoring it to spot something and call the driver both to warn him of the failure and to advise on appropriate action. A simple example of this would be detecting a puncture in a rear tyre via the tyre-pressure monitoring system. A call would immediately go out to the driver, warning him of the occurrence so that he can slow down. Then, in this particular case, he would be advised what switch settings to use to lock the differential, thereby ensuring he has drive to the intact wheel

and to limit the throttle opening he could apply. He is then able to 'limp home' in safety, without causing any further damage.

**Do you have a 'black box' recorder like aircraft, and does this help you ascertain damage?**

We actually have several 'black boxes'. One was specifically developed for accident data recording, although these days it is also used for other purposes. As well as recording accelerations and motions at high speed and with high fidelity, this box also activates what




is known as the 'medical warning light'. In the event of an accident, the box determines the severity of the incident and can automatically illuminate a light on the chassis if certain limits are exceeded. If this is the case the driver must then present himself for medical attention, even if he doesn't think he has suffered injury. After all, it's not just the cars that get damaged.

**This year we can also see lights on the top of the roll hoop. Are these associated with damage?**

In a way, yes. These lights monitor the status of the high-voltage system insulation that is part of the new hybrid power units. They are illuminated when the car is travelling at less than 25mph. Green means the system is safe and shut down; amber that the system is running with no faults; and red means the system is damaged and could present a danger to anyone who touches the car.

**Presumably any repair or replacement part on an F1 car is very expensive?**

Absolutely. There are no cheap parts on an F1 car and the annoying nose damage that results from a first-lap incident doesn't just ruin your afternoon, but may also come with a bill for around £35,000 



A failure is treated as a crime scene investigation. It isn't a case of fitting a spare and carrying on – the reason for the failure must be fully understood







PETER WINDSOR

## RACER'S EDGE

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

**L**ast year the glow was luxurious; this year it's painful. From pace-setters to passengers in one rainy winter. Either way, the light is intense. For 2013: what is their secret? For 2014: what will go wrong next?

So here's a little bit of Red Bull you might have missed in all the glare...

Despite the string of wins, despite the sponsors who flutter around the flame, despite the F1 fashion always to grow bigger and richer, particularly when you're winning, Red Bull decided last winter that too much was being spent on their hi-tech garage internals. Savings could be made; operations could be leaner.

And so they worked on the obvious – the flyaway races and the potential to send freight by (much cheaper) ship rather than air. Of course all the F1 teams do this whenever feasible. Feasibility, though, is complicated in an F1 world faced with crazy logistics and illogical calendars. It's one thing to send your six generators and starter-motor battery packs to Canada via the Atlantic; it's another to reorganise that kit for another sea trip to, say, Brazil. Or to Australia the following year. And, along the way, to maximise storage/depreciation factors – and the inevitable uncertainties of the F1 calendar.

# Red Bull go tripping the light fantastic!

Imagine, the complexity of designing and building a complete 'sea freight' garage – and of deciding how many of these should be replicated in kit form. A complete garage, for those unfamiliar with the concept, includes all the panelling, lighting systems, overhead pods, IT racks, power for all of the above, offices, mechanics' toolboxes, helmet holding space, spares, machining and fabrication areas, flooring where required... all the things we tend to take for granted, in other words, as we walk down the pitlane and compare one team's livery with another.



On top of that, you can cut your garage cake any one of about ten different ways. You can have more office space but less computer racking – or vice versa; you can divide (or not) the engine guys from the car guys; you can have a central control module in the front of the garage, or you can keep everything to the sides. You can have subliminally lit side-panelling that would



work in the Museum of Modern Art, or you can have simple boards that tell a simple story.

Hence the arrival, in modern F1 parlance, of the 'garage technician'. Back in the 1990s, when I was team manager at Williams, it was the truckies who did the bulk of the garage work, helped where possible by the mechanics. Guys like Steve Coates and Jimmy-Jock Walter would drive the trucks, set up the garage (with assistance from an advance party of mechanics) and, over the weekend, perform brilliantly either in the tyre or fuel departments.

The transition away from those days has been slow – partly because it can be hard, to

"The new, lean-mean Red Bull garage is  
a work of F1 design-efficiency art"





A lot of work goes into creating the environment of a race weekend. From the logistics of getting everything there to setting up the spaces in which teams operate



spend money in order to save it. It took me a long time back in the 1990s, for example, to persuade Frank Williams to spend £15,000 on a sticker machine that would ultimately prove more cost-effective than buying the logos from an outside supplier. Signing that cheque was not an easy thing for a guy who'd worked his way up from zero and was now being asked to take the longer-term view.

In 2014, though, and with EU regulations hustling us along, a garage technician's job can be full-time. Typically he may also be able to drive a truck and pressure a Pirelli, but ultimately he is responsible not only for

the construction and trouble-shooting of the garage, but also for its design and layout.

I'm sure Red Bull were not the only team to revamp over the winter of 2013, but this I know: the complete Red Bull flyaway garage – already a more straightforward version of their full-gloss European race garage – was redesigned, developed, then signed off to the amount of six complete sets, each identical, each to sail their way over the oceans to various circuits of the globe, reducing air-freight bills, improving organisation at the race meetings in question and therefore improving overall efficiency. The Red Bull Energy Station seen at


European races is another matter. In reality, it isn't a part of the race team; it's run and built by a separate Red Bull division and in itself is surprisingly functional.

As I say, you may not have noticed this new-style, lean-mean Red Bull garage amid the glare of the 'Ha ha; they're in trouble!' media spotlight that hit the team pre-Melbourne. Yet there it was – a work of F1 design-efficiency art, typical of the pitlane idiom.

And while we're on the subject of the world champions, and things you may have missed in all the hoopla, let's rewind to India last year to that Seb Vettel win you may have filed away as 'boring'. Long after the TV crews had left on Sunday evening – deep into the garage strip-down, in other words – the boys decided they should have a whip-round for the local kid assigned to the Red Bull garage for the weekend by the grand prix organisers. He'd kept that garage floor so clean from Thursday through to Sunday night that he'd become something of a legend, a team mascot to whom they'd already given an honorary cap and shirt. The whip-round, which involved everyone from Adrian and Christian to the boys in the garage, produced the healthy total of around £600.

Picture the scene, then: the boys gather round, our young friend is called forth and suddenly, into his hands is placed more money than his father earns in a year. He looks at the contents of the envelope with disbelief. He bursts into tears. He shakes with emotion – then explains, in his broken English, that he can't take the money because he'll never survive the journey home. He lives in a very dangerous area, he says. "This is a very enormous sum of money. It will be suicide for me..."

Whereupon Kenny Handkammer, Red Bull's chief mechanic, runs off to find a roll of tank tape. "Here," says Kenny, dashing back. "This'll sort it." He lifts up the kid's shirt, slaps the envelope up against his chest and tapes it there, using about half the roll of tape. Round and round and round. "There. Now no one will know what you're carrying."

We don't know what happened when his dad got to see the money but it's a fair bet the laughs met the tears in equal proportion. 

PHOTOS: CHARLES COATES/LAT; GLENN DUNBAR/LAT; STEVEN TEE/LAT



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EMERSON FITTIPALDI

# SPEED KING

The double world champion writes exclusively for *F1 Racing*

**I'm very excited** by all the changes in F1 this year. There's so much to look forward to: new cars, new sounds, new circuits, young drivers fighting to make their mark against established ones – and some dynamic new driver line-ups, such as Kimi Räikkönen joining Fernando Alonso at Ferrari. We've turned the page to a new chapter in the sport's history

From what we've seen so far, the teams that stepped away from the world title fight early last year in order to focus on these new rules are set to prosper. Now, since I am sitting down to write these words shortly before the teams arrive in Melbourne, and you will read them a few days after the chequered flag falls on the Australian Grand Prix, the competitive picture may have changed in the interim. Such is the pace of development in Formula 1, and that's another of the ingredients that make the sport so exciting.

The pre-season tests showed good performance from McLaren and Ferrari, who had disappointing seasons last year, and from Mercedes, who won races in 2013 but perhaps not so many as they would have liked. Renault-powered teams seemed to struggle, especially Red Bull, and I'm sure Sebastian Vettel would have wanted more mileage to prepare himself. With all the resources they have, though, I

think they will find reliability very quickly. It's made for a very interesting lead-in to the season, seeing these teams that hadn't done so well showing such marked improvement, and previously dominant teams being laid low by unexpected technical problems.

The current Lotus shares more than a name with the Lotus I drove for. Whenever rules changed, Colin Chapman would delight in finding the most creative solutions, to reach the limit within the new envelope. With the new Lotus E22, they are trying to achieve this, which is truly in the spirit of Colin. Even before my time at Lotus, when Jim Clark was racing, Colin was always exploring the rules to find an advantage. It's difficult to do these days, because the rules are mostly very precisely worded, but that is what the modern Lotus are attempting here.

Now more than ever, teams put resources into analysing each other, and the new rules have made this process ever more intensive. While the nose designs of the cars look very different at the moment, by summer they may become more similar. If one particular design is seen to be working well, other teams will start to evaluate their own versions of it in the windtunnel.

Already they will be looking closely at photos of their rivals in action. This used to happen when I was driving as well – Colin Chapman would walk down the grid, chatting to other teams' mechanics, while carefully measuring their cars' dimensions with his feet. He would check what ride height they were running by slipping his toes underneath! It's been part of grand prix racing for a long time, and it happened when I was driving in IndyCars as well. You always want to know what your competitors are doing, and at every race you would look around to see if anyone had anything new on their car. Would you call it espionage? Everyone

does it – and, at a race weekend, everybody's together in one place. I'm sure that at the Australian Grand Prix, all the designers will have been very busy as they walk down the grid...


Of course, F1 is more than a contest between machines. The human element is very important and this new season has set up some fascinating possibilities. Fernando Alonso has a very strong team-mate in Kimi Räikkönen, and I think this will have an effect on the competition inside the team itself; likewise at Williams, where they now have the experience of Felipe Massa combined with Valtteri Bottas, who is a very quick and aggressive racer. What's going to happen there? At McLaren there will be a similar situation with Jenson Button and Kevin Magnussen.



**If one nose brings better performance than the rest, by summer, all the other teams will be running their own versions of it**

Smoother drivers can make tyres last longer. This will make a big difference to the outcome of a race – more so than being fast over one lap in qualifying. Pirelli will learn from the experience of 2013 and create a new challenge for the teams and drivers; and those who understand the tyres best and can make them work all the way to the end of the race will be in much better shape.

It's very strategic: everyone now starts with 100kg of fuel, and the drivers who find the best setup compromise for the car's behaviour as this load runs down, and can relate this to the correct tyres to use, will be successful. But it's hard to get right because there are so many strategic components, and the most careful pre-race plans can be affected when circumstances change.

So for me, there are lots of reasons to be excited this year. Change is good, and the fresh demands of this new technical package will test the teams and drivers in a different way. I can't wait to see how the season unfolds. 

"This new technical package will test teams and drivers in a different way"



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DIETER RENCKEN

## POWER PLAY

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

**B**ack in 2005/6, Renault achieved a remarkable double – back-to-back title wins with engines of different configurations: V10 power for Fernando Alonso's first title; V8 for his second. With that legacy, and given Renault's domination of the past four years, hopes for a repeat featuring 2013 V8 to 2014 V6 hybrids were high.

So last January, when Renault introduced their engine to selected media by running the V6 on test rigs at their base in Viry-Châtillon outside Paris – becoming the first operation to do so publicly – the team, under technical head honcho Rob White, were bullish, if not overly so.

Yet in 2013, rumour had it that Renault's accountants were having difficulties justifying the numbers behind the F1 engine programme. Renault-Nissan Alliance chairman Carlos Ghosn, aka *Le Cost Cutter*, has long demanded that the F1 project wash its face, and continues to insist that red ink created by shortfalls between cost of engine development and income from customer teams be offset by marketing successes.

Figures break down like this: F1 costs Renault around £120m per annum, against which around half is recoverable from their teams (Red Bull, Lotus, Toro Rosso and Caterham). The deficit is intended to be made good by vehicle sales – although this is a serious challenge following

# Exit stage left for Renault?

the switch of F1 coverage to subscription channel Canal+ in France – Renault's home (and largest) market, where eyeball ratings subsequently plummeted by 60 per cent (20m viewers).

Factor in, too, that Renault's logo on the Red Bull cars is swamped by the branding of Infiniti; that Lotus have well-documented financial issues; that Toro Rosso are, by definition, Red Bull's nursery, and that the joint Caterham/Renault-Alpine sportscar project is under pressure. No wonder their performance is under scrutiny.

So much so, that sources are adamant Renault's main board voted last December to pull the plug on F1, the proviso being that the company exit elegantly from a sport in which it has experienced many highs and lows since its pioneering entry with turbo power back in 1977.

Insiders allege Alain Prost's F1 consultancy contract was not renewed as a result of that vote, although he continues as brand ambassador in addition to running a Formula E team. (The nascent series sources electronics integration expertise from Renault Sport F1/Renault Sport Technologies, with the parent holding co-naming rights to the Spark-Renault SRT01E car.)

These points were put to Renault, drawing predictably stern denials. Nevertheless during the pre-season tests in Bahrain, the word was

that Renault's F1 contracts contain one-year break clauses – competitor deals run for three years – while World Endurance Championship insiders are adamant Nissan has committed to Le Mans, where arch-rivals Toyota take on Audi.


To date, only one Japanese company has won at Le Mans: Mazda in 1991, while Nissan's appetite for 24-Hours glory was whetted by the success of the 2012 Deltawing, which relied on Nissan four-pot power. Indeed, Nissan returns to La Sarthe in June with a delta-shaped electric car run out of the experimental Garage 56. Sources state they were granted this entry only on condition Nissan would eventually enter LMP1

This is where things get interesting, since Renault's Energy F1 engine can be adapted to LMP1 relatively easily thanks to the FIA's insistence on compatibility, permitting the desired elegant exit while saving its alliance partner Nissan engine development costs.

What, though, of F1? Red Bull never do things by halves, and control their destiny through ownership. Why sponsor ice hockey or race teams? Own them. TV advertising? Purchase a channel, Servus TV. Print advertising? Publish *Red Bulletin*. Space exploration? Start Stratos...

Could Red Bull acquire F1 rights to Renault's engine – due to be 'frozen' in spec as seasons wear on – then supply both their teams? Red Bull want to run cost-neutral F1 teams; consider, then, that their annual engine supply totals around £40m at current rates – which could be offset by selling branding rights. Why restrict yourself to Infiniti when you own the engine?

Renault previously sold on their V10 to Supertec, and while performance of their current V6 hybrid is a worry, their talent is such that the issues are but a blip. Lotus and Caterham? Well, Lotus-Honda has a ring to it and Honda indicated they will seek a second customer team after a year of exclusivity with McLaren in 2015. Ferrari are also seeking another team to offset costs and Caterham could be the one, provided owner Tony Fernandes does not withdraw.

If Renault's exit comes to pass, remember the board (allegedly) sat in December, two months before Renault's current woes reared their head. Commercial considerations *not* technical issues will have been to blame should they disappear from the grid by the end of 2015. 

Renault are having to combat worries over their 2014 power unit, plus cost concerns from on high



"Could Red Bull acquire rights to Renault's engine and then supply both their teams?"



Startled by the 2014 noses? They've got nothing on the March 711...



**WORDS** STUART CODLING **PICTURES** JAMES MANN



**Some people spend years** building up a business, but March Engineering tried to go from nothing to servicing multiple championships within a year. They started in 1969 and by 1970 were spreading themselves very thinly as they sought to supply customer chassis and operate works teams in Formula 3, Formula 2 and F1.

The team name was created from the initials of founders Max Mosley, Alan Rees, Graham Coaker and Robin Herd, and each had their speciality. Mosley, a barrister, did the commercial deals; Rees managed the racing teams; Coaker supervised manufacture; and former McLaren designer Herd drew the cars. They had initially come together while trying to build a racing team around Jochen Rindt, with seed capital from Bernie Ecclestone. But Rindt grumbled about driving a car "made in Graham's shack" and chose to remain at Lotus, while Ecclestone set his sights on buying Brabham instead.

March's first F1 car, the 701, was designed and built quickly with mixed results: Jackie Stewart put it on pole at the 1970 season-opening South African GP, then won on the car's second outing in Spain. But he disliked the 701, and as other cars – particularly the Lotus 72 – came on song, it fell well off the pace.

Herd aimed for a bolder concept in 1971, engaging former Lotus draughtsman Geoff Ferris and engineer Frank Costin to conjure something lighter and tighter. Costin believed he could clothe the car

in a low-drag shape that could be worth the equivalent of 20bhp more power, and negotiated a performance-related deal along those lines.

With no budget for windtunnel testing, the concept had to be done by eye. Costin pushed for a slim, tube-like profile so as to create a low frontal area, with the distinctive single-pylon front wing mounted in clear air so it too could offer minimal profile. Herd and Ferris obliged with a slim monocoque, mounting the brake discs inboard to reduce unsprung weight and improve airflow to the side-mounted radiators.

But the 711 hit several snags: Costin had interpreted some rules too literally and fully enclosed the engine, with only a low-profile NACA duct on top to supply air to the inlet manifolds. Other teams ran large air scoops there, to better effect, so March soon reverted to the solution pictured on these pages. Packaging the radiators also proved tricky, and when the works team found the car was no slower without bodywork around the engine, that's how the 711 remained.

March teetered on the brink of bankruptcy throughout 1971, saved only by some canny Mosley deals – Alfa Romeo donated engines and paid in the region of £20,000, while GP debutant Niki Lauda stumped up £35,000 of personal money. And yet, on a shoestring, and without taking a single win, the 711 carried Ronnie Peterson to the runner-up spot in the championship: he was thwarted by mere inches in the famously close finish to the Italian GP that year. **F1**

## MARCH 711 TECH SPEC

<b>Chassis</b>	Aluminium monocoque
<b>Suspension</b>	Independent double-wishbone
<b>Engine</b>	V8
<b>Engine capacity</b>	2,993cc (Ford DFV), 2,998cc (Alfa Romeo)
<b>Power output</b>	450bhp (Ford DFV); 440bhp (Alfa Romeo)
<b>Rev limit</b>	9,800 (Alfa Romeo) 9,500 (Ford DFV)
<b>Gearbox</b>	5-speed manual
<b>Weight</b>	565kg (with Ford DFV); 580kg (with Alfa Romeo)
<b>Wheelbase</b>	2,438mm
<b>Tyres</b>	Firestone, Goodyear
<b>Notable drivers</b>	Ronnie Peterson, Niki Lauda, Carlos Pace









[illegible]





Kubica's accident in Canada 2007

## Senna's death was the catalyst for huge steps forward in driver safety in F1. Drivers now survive crashes from which their predecessors could not have walked away

Sometimes it seems as if he is the 23rd driver on the grid of every single grand prix: not just the champion who set the standard against which all aspirants must measure themselves in terms of basic virtuosity, inherent charisma and focused ambition, but the man whose terrible fate – captured in televised images of his last seconds at the wheel, of the medical helicopter wheeling away above the trees lining the circuit, of a track stained with his lifeblood – acts as a permanent evocation of Formula 1's death-or-glory appeal, long after that image has ceased to possess very much factual justification.

The glory is still there, despite rule-tinkering so extensive that a high proportion of old-school fans find it impossible to greet today's champions with the unrestrained admiration and enthusiasm of old. Death, however, appears to have removed itself from the equation. No activity in which men project themselves around a circuit at improbable velocities while cocooned in fallible technology can offer unconditional guarantees of security, but the irony of Senna's death is that it reminded us of the peril with which racing drivers flirt, while also serving to ensure that his successors would be more effectively insulated from risk.

Next to that of Enzo Ferrari, Senna's is now the most emotionally loaded name in motor racing. Many who had been only dimly aware of his existence, or who had seen him as nothing more than just another world champion, found their emotions more fully engaged in the aftermath of his fatal accident at Imola on 1 May 1994. And then, 16 years later, along came a film that drew hundreds of thousands to cinemas around the world, making converts of those who had cared little or not at all for the sport before they settled into their seats and found themselves falling under the spell of the mind behind those deceptively soft brown eyes.

In normal circumstances, a champion's fatal accident, taking place under the gaze of a global audience, might have been expected to inflict immediate and perhaps lasting damage on the sport in question. There must have been others who, feeling that the game had exacted too terrible a price, shared the reaction of the young woman in the art gallery. But rather than sink into a decline, Formula 1's worldwide audience registered immediate and sustained growth. Broadcasters saw a significant rise in viewing

figures. Countries new to the sport clamoured for the right to pour their wealth into building circuits and hosting their own grands prix. Major car manufacturers started to return to the grid. On the track, a new set of heroes emerged, to discover that they had benefitted in more than one respect from Senna's demise.

First and most obvious came the question of driver safety, which was suddenly promoted to the status of a major priority and given attention to a degree previously unparalleled in the sport. Throughout its first 75 years, mortal danger had been the drivers' constant companion; it was accepted that some of them would die, and that nothing much would be done about it. When Wolfgang von Trips and 15 spectators died at Monza in 1961, the world was shocked but little more was done than when Giuseppe Campari, Baconin Borzacchini and Count Czakowski perished at the same circuit in the course of a single day in 1933; and four years before that, Emilio Materassi's car had killed 20 spectators on Monza's main straight. Only the most minimal alterations to the Le Mans circuit followed the disaster in which Pierre Levegh and





**As a driver, Senna has become the gold standard to which any F1 driver considering their own legacy must be compared**

82 spectators were killed in 1955; calls to ban the sport outright were heeded nowhere but in Switzerland. It's true that the use of straw bales as crash barriers fell out of favour after Lorenzo Bandini was incinerated in the cockpit of his Ferrari on the Monte Carlo seafront in 1967, but not until an epidemic of fatalities in the early '70s prompted Jackie Stewart to lead a crusade was there any serious official acknowledgement of the need to reduce risk.

In the wake of Senna's death, however, no longer would it be enough to simply attend the funeral and then get back to business as usual. By themselves, Rubens Barrichello's near-catastrophic crash and the accident that had taken the life of Roland Ratzenberger earlier on in the race weekend – the first fatality at a Formula 1 meeting in 12 years – would have made very little difference. It took the death of the sport's most seductive figure to provoke change.

After the shock had been registered and the tears shed, the substantive reaction was twofold. In the short term, Imola underwent changes. When Formula 1 returned the following year, it found that Tamburello, the fast left-hander where the accident occurred, had been emasculated by the introduction of an artificial chicane intended to slow the cars and keep them away from the concrete wall, which had played a part in the crash, even though in an earlier era the consequences – a suspension part snapping and spearing through the driver's helmet – would have been dismissed as simply freakish. Other circuits, old and new, followed suit. Run-off areas became larger and more effective, and drivers increasingly found the track boundaries identified by a painted line rather than the walls, hedges and ditches familiar to their ancestors.

In the longer term, the technical regulations were rewritten to ensure that future generations of F1 cars would be designed according to much

more stringent safety criteria, including the toughening-up of crash-test requirements and the modification of cockpit design. Look at any film of F1 cars before 1994 and it is a shock to see how much of the driver was visible to the spectator: not just the helmeted head, but also the arms, shoulders and upper body, all more or less unprotected. Today it is only through in-car cameras that spectators can get a close-quarters view of the drivers at work, calmly tapping gearshift paddles and using the buttons and dials on their steering wheels to adjust settings according to instructions relayed from their engineers. Senna, by contrast, exists in grainy footage that displays a different level of dynamic activity: a constant battle for control. It's like the difference between a Spitfire and a Eurofighter. And, as with fighter pilots, the earlier image continues to provide the idealised template.

The special aura that surrounded his personality was enhanced by his passport, which gave him access to a nation of passionate sports fans. Two hundred million Brazilians had turned their eyes away from the football pitch to acclaim his race wins and his world championship. When he waved their national →





flag from the cockpit on his victory laps, they relished the pride and intimacy of the gesture.

Brazil's footballers are loved by a global audience not just because of their technical gifts and the joy with which they infuse a humble game, but also because they represent a nation of fans who prize those qualities above all others. It was the same with Senna. Although he came from a more privileged kind of Brazil to the one that produces the vast majority of the country's top footballers, his inherent *Brazilianness* – including that fluidity of movement and speech – was a powerful factor in his ability to win the allegiance of an international audience. The specific attributes associated with being Spanish, Finnish, British or German do not add much to how Fernando Alonso, Kimi Räikkönen, Lewis Hamilton, Jenson Button or Sebastian Vettel have been perceived.

So are we justified in thinking of Senna as unique? He wasn't the only Brazilian world champion. He wasn't the only triple world champion. He wasn't even the only Brazilian triple world champion. But if there was indeed only one of him, that turns out to have been enough. Although Manish Pandey and Asif Kapadia, the writer and director of the award-winning documentary, unearthed unseen and obscure footage and did a fantastic job of wringing the last drop of emotion from every frame, the biography of no other

post-war driver – not even Fangio, Hunt or Gilles Villeneuve – would have provided such extraordinary material. For none had a story that could be pursued into what can only be called the philosophical and spiritual dimension, or into the realm of ethical behaviour.

It is there that we encounter the darker side of Senna's nature, and of his legacy. For all his sentimental claim to have loved his days as an unknown kart racer because of the uncorrupted purity of the sport, it was he who introduced a new set of values to F1: a set of twisted priorities that culminated in his vengeful attack on Alain Prost at the first corner of the 1990 Japanese Grand Prix. His sense of entitlement had led him to the conviction that he deserved to win because of who he was, and that his rivals had no business getting in his way. His more attractive personal qualities made this alarming facet of his character seem less toxic than it was, but even a friend and admirer as committed as Jo Ramirez, at his side through the McLaren years as team co-ordinator, and a racing man to his fingertips, found the Suzuka incident too



PHOTO: MALCOM GRIFFITHS/LAT

## The win-at-all-costs ethics, so deeply rooted in Ayrton's psyche, have found echoes in Sebastian Vettel and Michael Schumacher, the two most successful world champions since Senna's era

much to take and was never able to feel quite the same degree of warmth towards him again.

Senna's desire to win at all costs was the characteristic that has impressed some younger drivers most of all, including the two Germans who succeeded him at the sport's pinnacle. Out on track, Michael Schumacher was a machine for winning honed to the ultimate degree, but he lacked the sort of aura that might have softened the edges of his personality and mitigated the outrage created by his more nefarious moments. At least Vettel's public image is lightened by his pronounced sense of humour. But both men's careers are marked by the sort of calculated ruthlessness that Senna took from karting – where it carried little or no personal risk – and introduced, virtually single-handedly, into F1.

That aspect of Senna's legacy, along with the scale of his talent, the potential that remains unexplored, and his future outside the cockpit, will be discussed for as long as F1 exists. The

inexplicable nature of his fatal accident – which became the subject of Italian inquiries and formal inquests lasting several years but reaching no definitive conclusion – and the ill feeling surrounding the absence from his funeral of Max Mosley and Bernie Ecclestone, the two men who, between them, ran the sport, added to the richness and complexity of the story.

Look at today's 22 drivers and you see a lot of talent, but not much in the way of mystery. And that, among other things, is Senna's continuing contribution to the sport. He reminds us that racing drivers can be multi-faceted characters, simultaneously attractive and disturbing. And until another figure with a similar combination of extreme talent and personal magnetism appears, giving us a hero and a villain in the same package, his memory is all we have. **F1**

Richard Williams is author of the acclaimed book *The Death of Ayrton Senna*





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# IMOLA 1994 THE INTER

Shortly before lunchtime on Sunday 1 May 1994, Williams commercial routine interview with Ayrton Senna for Paddock Club VIPs. It would be shares that interview and tells his personal story of the time he spent





# LAST VIEW

director **Richard West** conducted what he thought would be a the last time Senna spoke in public. Twenty years on, Richard with Senna leading up to that fateful Imola weekend







# A

n unmarked package arrived at my home in late 2001. Inside it was a VHS video cassette with a yellow Post-it note inscribed: "You should see this – memories of a great man." I was busy at the time rebuilding the British Touring Car Championship, and I put the Jiffy bag in a filing cabinet and immediately forgot about it. Some years later, while clearing out my office, I was about to discard the package when I remembered the video. I decided to watch it and was amazed at what I saw.

Shot two hours before Ayrton Senna sat in a racing car for the very last time, the footage was of my Paddock Club interview with Senna and Damon Hill on the morning of the 1994 San Marino Grand Prix. Many years passed before I contacted Bernie Ecclestone and sent him the tape. Kindly, he has granted permission for the content of that interview to be made public for the very first time, but to this day I still don't know who sent me the tape.

**The San Marino GP at Imola** was always my favourite race of the year. It was the beginning of the European season and the motorhomes had returned to that beautiful, cramped paddock. It was all very Italian, with the pizzeria down the road, lots of pretty girls and great wine. There were the church bells that woke you up on a Sunday morning, just audible above the barking dogs and the raised voices of women rousing their husbands in the distance.

In September 1993, I'd attended Frank Williams' house to witness the contract signing that brought Ayrton to Williams. I had worked with Ayrton when I was sponsorship co-ordinator at McLaren in the late 1980s, and we hadn't always seen eye-to-eye on promotional matters. I joined Williams in November 1992, briefed with developing a long-term commercial strategy for the team, which necessitated a title sponsor and, with the resultant funds, a star driver: Frank wanted Ayrton.

In 1993 there was mounting friction between Ayrton and McLaren so I began talking to his manager, Julian Jakobi, at Frank's behest. It was a protracted negotiation because Ayrton was earning substantially at McLaren and while Frank was prepared to invest in him, he wouldn't match the monies he was receiving at McLaren.

We finally signed Ayrton at Frank's house on Thursday 16 September, three months after Rothmans were announced as title sponsor. Frank is an amazing person, but he's a very tough businessman. Sometimes he can be very compassionate, but at other times he can be ruthless. He just wanted to get on with it and get the contract signed, but I wanted to ensure everyone was happy with the commercial terms.

Ayrton wasn't. He was very keen to ensure Rothmans didn't use his image in a way that would conflict with the Senna brand. He was always astute on matters such as these. Finally, we came to an accord and the deal was done.

Then, without prompting, Ayrton looked across at my diary. I passed it over and he wrote... 'Many thanks Richard, Ayrton Senna, I'm looking forward to a good future.' All the hard work we had done over the previous months had finally come together. It was a historic moment: we had signed both Rothmans and Ayrton Senna.

Fast forward to January 1994. Rothmans and Williams had organised a major sponsor launch in Estoril. Hundreds of journalists, photographers and film crews were present. We held a press conference in the Palácio Hotel the night before the trackside launch and I interviewed Ayrton, Damon and Frank on stage.

The following morning, we held a photoshoot with the car on the pit straight, and in the afternoon undertook filming with the cars lapping the circuit.

Anyone who was wearing a headset that day will never forget what happened next. Just two-thirds in to his first lap, Ayrton was saying the following things back to his engineer David Brown: "I don't like the turn-in of this car. It feels heavy at the front end. My seat needs to go down a little..." It offered an extraordinary insight. Immediately he was just on it – never before had I experienced such instant commitment to the task.

In the weeks that followed, everything was a bit of a whirlwind. We went to Brazil and Japan for the first two championship rounds. After his first-corner crash in Aida, he spent a bit of time watching trackside and returned to the Williams hospitality area in a very serious frame of mind.

He was unhappy about the Benetton and said he felt the car had some sort of advantage, such as traction control. Christian Contzen, who was head of Renault Sport at the time, was there and – while not intending it as a slur – said to him: "Yes, but they *also* have Michael Schumacher."

Ayrton was extremely unhappy with the comment and while Williams had a preferential

engine agreement with Renault, he'd heard a rumour that Benetton were also going to get the same power units as us.

I remember him saying: "I came here on less money to do a very specific job and I've come here because of my relationship with Frank, as I've always wanted to drive a Williams. If we get to the stage where I'm racing against a competitor with the same engine as us – then I'll tear my contract up, I'll walk away." I remember getting rather twitchy at this point and was quite shocked by the conversation. Ayrton was clearly pissed off. He was very unhappy and so when we got to Imola, this was weighing on our minds.

We arrived at the circuit at 5pm on Thursday. It was a beautiful day. Ayrton had been at a mountain bike factory where he'd met the people making the carbon-fibre bike he'd endorsed. I think he'd also been to the Ducati factory. I remember when he arrived at the Imola track, he appeared relaxed and looked great as he always did. In shirt, chinos, jacket and blue cap. He asked me what we had planned that weekend in terms of promotional work. I ran him through the schedule, since we had a group of journalists from the Middle East who were guests of Rothmans; a new sponsor, Ray-Ban; and representatives from Segafredo. I added that I would introduce him to 'Bertie' Gaertner (one of the top men at Rothmans) and asked him to extend his renowned charm to him.

Friday dawned bright and I took Bertie, along with another colleague, to the grandstand to watch practice. That's when Rubens Barrichello had his colossal accident. I could see there was blood around Rubens's nose as the medical team attended him, and while Bertie was shaken up I tried to reassure him by saying we did have the occasional big shunt in F1.

Come Saturday, we witnessed Roland Ratzenberger's awful accident. Ayrton was watching and he knew straight away it was very bad. And as is well known, he went out onto the circuit to the accident site and spoke with Professor Sid Watkins. When Ayrton returned to his hotel that afternoon, he encountered a newly wed couple. They had no idea there had been an accident; they just saw Ayrton Senna. He patiently posed for this man and his new wife, before politely nodding and then walking away.

A lot of thinking and talking went on that night. I believe he spoke with Frank, although Frank has never shared that conversation with →







me. I stayed behind at the circuit and hosted a Rothmans dinner for journalists, but it was very subdued. Damon came along and we were at a loss as to what to talk about. We all felt awful.

**When I first worked with** Ayrton at McLaren in 1988, one weekend that stood out was Monaco. If you recall, he simply demolished Alain Prost in qualifying. After the session, I had a big sponsor event and located Ayrton to ask him if he was ready to come and speak on the VIP boat in the harbour.

He said: "I'm not doing it. I've done what I need to do today and I'm not getting in a boat to talk to a bunch of people when I don't need to. Take Alain instead." Of course when Alain learned Ayrton wasn't going, he didn't want to go either. I asked Ron Dennis to intervene, and his response was: "I can't make them do it."

Suddenly, I was aware we had a new force in our midst, and from that point on I had to treat Ayrton in a different way. It didn't put a rift between us, but it shocked me a bit. This guy knew exactly what he wanted and what he was prepared to do, and he didn't go one step beyond



it. Once you understood that, dealing with him became much easier.

With that past experience in mind, we had a sponsor event planned for the Sunday morning at Imola, and, given everything that had already happened, I doubted he would attend. I made a point of asking him early that Sunday morning. He asked who would be there, how many people were going and whether he was really needed. I said yes, and in return he asked me to keep the appearance short and to the point.

When he arrived at the Paddock Club marquee behind the pits, he was wearing his race overalls tied casually around his waist, his Senninha T-shirt and his obligatory blue cap, of course. Damon was wearing white chinos and a white polo shirt and his blue Rothmans cap.

One of my roles in the team was to inform the guests about the weekend's event and I had been doing this for the 40 or so guests present for ten minutes when Ayrton and Damon arrived at the Paddock Club. As Ayrton ushers Damon towards me, you see on the video that he squeezes his shoulder as if to say, 'We'll get through this, it won't take long.' It's a short interview, but incredibly poignant, and it was lost until now...

INSETS: LAT ARCHIVE

## 1 May 1994

Rothmans/Williams Paddock Club, Imola

**Richard West (to guests):** The race starts in just over two hours' time. I'm sure you all saw the warm-up times this morning. Very encouraging. The only thing that is not encouraging, of course, is that we don't know what the other teams are doing but Schumacher is back in 11th place.

The plan now this morning is that the drivers have had their mandatory briefing at 11 o'clock. They have to go in front of the stewards, the clerk of the course, the safety officer, the doctor. It's a closed meeting, where the drivers sit for maybe ten, 15 minutes and are talked through safety aspects on the track, which is particularly relevant in view of the unfortunate incident that occurred yesterday.

But on a more positive note, we had a good warm-up this morning. It's very difficult to know when Ayrton is completely happy, but Damon says

he's happy with the car. Ayrton is still talking to the engineers now and will probably continue to do so until about a minute before the start. [Senna and Hill enter the room to the applause of the guests.]

Ayrton, you are the pole man yet again in your illustrious career. What I would like to ask you to do, is to explain to the guests here today the type of conditions and speeds you experience and some of the areas on the circuit that perhaps would be of interest. [A large map of the circuit is provided for the drivers to annotate.]

**Ayrton Senna (looking at his watch; it is just before midday):**

Okay... it's still 'good morning.' Imola is for us drivers a very fast circuit, very demanding because the speeds we do around here are pretty high and it takes a lot of concentration to maintain, most of the time, control of the machine.

However, it's a place where we can achieve maximum speed here [He marks an X on the map just before the Villeneuve right-hander] where I think we reach 325-330 kilometres per hour. We have a number of big



*"I hope that today's race is exciting for the public and it is good for myself and Damon and for the Williams team" Senna in his final interview*

braking points and it's a circuit where you have high speed at most of these places, so you have to stop the car a lot, requiring a lot of braking force.

It's also a circuit where the G-forces in our body and neck are pretty high, as we are doing this corner [Tamburello] at 290kph and it's a long corner and your neck goes, goes, goes. Same thing around here [Piratella], same thing, but a bit lower G-force.

Being a high-speed circuit, the average speed is high and therefore the race distance in terms of time is rather shorter than most circuits. So the total race doesn't last as long as most circuits.

It is a circuit that I enjoy driving – I have done well here in the past. I won here a few races and the crowd here is special in Italy, with the atmosphere with Ferrari and for all of Formula 1 it is special.

And I hope that today's race is exciting for the public and it is good for our team, for myself and Damon and for the Williams team, because so far this year it has been out of our hands for all of us. So really I think the team need a good result to basically get this year's championship going, both for Damon and myself.

**From left to right:**

**Richard West, Damon Hill and Ayrton Senna at the Imola Paddock Club, hours before the race. This was the last time Senna spoke in public before his death**

So now I will hand over to Damon, who will complete the lap, but in better English [The guests laugh and applaud and Damon picks up and continues to describe a lap of Imola.]

**West:** Before you go, Ayrton, if I could pose you one more question? With refuelling this year, we've seen a great deal of excitement in the races. From your perspective, you are in regular communication before and during the race – what

information do you receive from the team over your radio prior to coming in for your fuel and tyre stops?

**Senna [smiling]:** Well, we haven't had that many chances to go through this exercise this year. So all I can go on is Brazil and there was the usual panic of 'I'm coming in, coming in, coming in' and they just acknowledge and say 'okay'. There wasn't any particular problem, it was just confirming. I'm on the way in, they say I can come in and that's it.

But we planned everything beforehand so we know when the time to come in is. And the team is ready, there, standing in the pits ready to expect us. So it's been good so far and I think the main circuit that will be more difficult for safety reasons will be Monte Carlo – it's a very tight pitlane with too many people in it. That race is coming next and it will be very, very dangerous. So we just talked today about it and we are thinking about asking the FIA officials to introduce a speed limit for the pitlane in Monte Carlo only to try and perhaps minimise the risk.

**West:** Well I think we ought to let you go. Could you both sign the circuit map if you would, please. A warm round of applause, please, for Ayrton Senna and Damon Hill. [They both sign the map and leave the Paddock Club.]

**T**he signature he made just next to the Tamburello corner on the circuit map is most likely his last one ever. And it was the last time he spoke in public.

A few minutes later, I went to get my briefcase from Frank's motorhome. The light was off, I walked in and Ayrton was sitting there in silence. As I apologised he said, "Don't worry, I'm just gathering my thoughts." Then he added: "How are *you*?" Which was unusual for him so close to a race start, and he then said: "How old are you?" When I replied "37" he said: "Shit, man, you look old!" And I joked that I looked old because I had to go chasing around the world finding money to pay his salary. We both laughed, then after a pause I made an excuse to leave.

"Don't you want to talk to me, then?" he said. Which, again, was an unusual thing for him to say. But it was nearly one o'clock and would soon be time to get into the car. So I simply smiled and went on my way.

The last time I saw him, he was sitting in his car just before the grid was cleared of people. After the start-line accident I was expecting the race to be red-flagged, but the Safety Car was out on track.

The Safety Car came in, and on lap 7, there was a huge cloud of dust at Tamburello. I remember thinking, "Shit, that's a big accident," and then seeing the yellow helmet.

There was a stunned silence in the garage and then we started watching it unfold on the monitor. We saw Ayrton's head move slightly and I thought, for a split second, maybe he's just been knocked out... then the marshals came up and then they stepped back. →







Wir sehen dich nicht, aber  
wir fühlen Dich um so  
intensiver. Die Magie  
und Faszination  
bleibt uns, Du  
siegst in unseren  
Träumen weiter, bis  
wir uns wiedersehen...

Siege für die Ewigkeit

O amor de deus  
protege nos todos



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AYRTON SENNA DA SILVA  
★ 21.03.1960 † 01.05.1994

NADA PODE ME SEPARAR  
DO AMOR DE DEUS.





PHOTO: ANDREW FERRARO/LAT

*"Prof Sid Watkins said Ayrton was breathing but there was no brain activity. There was no coming back"*

From that moment on, you knew that it was going to be bad. At that point I said to Frank that I needed to go and find out what was going on. The medical centre was pandemonium – I couldn't ask any questions. By that point he was laid on the trackside. And then I remember the helicopter lifting off and hearing the race restart.

I went to see Bernie. I buzzed the door to his bus and went in and sat down. I was upset. He told me to take a few minutes and he didn't speak. Then he said, "Are you okay? Go back to your garage, remain calm, and do what you need to do." The few experiences I've had with Bernie at times of pressure – he was very calm. He just gave me that breathing space. About 15 minutes from the end of the restarted race, Prof Sid Watkins rang me. He told me that Ayrton was breathing, but tests showed there was no brain activity. There was no coming back.

The next couple of hours were a blur, but I remember leaving the circuit by helicopter with Bertie, Patrick Head and Adrian Newey. As we took off over the Rivazza, the crowds had scraped up all the litter and had written 'Senna' in big letters on the hill.

I didn't sleep that night and went to the factory at six the next morning. Already there was a lot of media there and fans who had laid flowers at the factory gates, including one couple who had driven up from Devon through the night. There wasn't a single person who wasn't devastated. It was such a shock, but everyone within the team acted extremely professionally. Those situations change your view of what's important in life. It's unbelievable to think that no matter how good or strong or talented you are, it can all be taken away from you just like that. You can lose everything in a split second.

I flew to São Paulo overnight on the Tuesday for his funeral. What stuck in my mind was the quantity of people on the streets. It took us hours to get from the airport to the hotel. Ayrton's body had arrived that morning and was laid in state for people to pay their last respects.

The next morning was the funeral cortège. By this time, the number of people I'd seen on the streets the previous day was nothing compared with what I saw on the Thursday. It was very respectful, very emotional. But it was millions – I'm not exaggerating – millions of people, and Frank, his nurse and I were in the cortège heading for the cemetery.

Twenty years on, Ayrton is still greatly missed. And although I left Williams a couple of years later, I know there's still a great deal of reverence for him at the team. He's a part of that company's history and legacy. Those who were lucky enough to work with him in that short period of time experienced something very special, and I have to reiterate what former Williams team manager Ian Harrison said: the team never really got to know him well enough. Which was a shame, because not only was he the most amazing driver, he was an amazing human being as well. So to whoever sent me that video tape all those years ago: thank you. 

*Richard West was talking to James Roberts.*





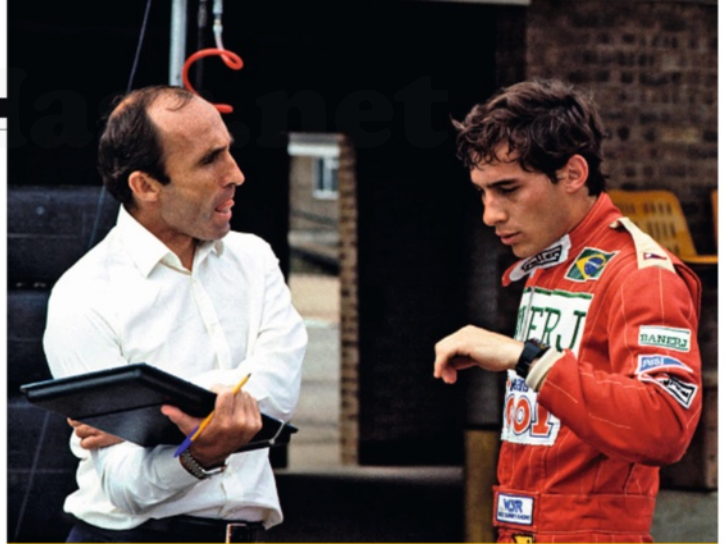
# Senna's 20 greatest moments

Sheer speed marked out Ayrton Senna as one of the greats, but it was his complex and driven personality that both fascinated and stamped his authority on the sport. We've selected the career highlights that helped create the legend

WORDS PAUL FEARNEY







**Formula 1 test**  
Donington Park  
19 July 1983

This was *the* day. He said so himself as he prowled about the world champion's car. He even patted it before boarding.

He didn't fit the car: Senna was tall and thin, whereas Keke Rosberg was broad and short. The physical, however, would pale against the metaphysical.

He shed a tear as mechanics strapped him in as best they could. He read the cautionary note taped to the wheel. And, like a veteran,

he blended clutch with throttle to fulfill his destiny.

After a few laps, he matched the previous best. By the test's end, having found Williams' FW08C had six not five gears, he sliced off 1.6secs, despite a fuel load intended to make him look merely promising.

He pitted – he'd felt the engine tighten – and said thank you.

Now it was *a* day. The first of many.



**Race of Champions**  
Nürburgring  
12 May 1984

A bit of fun he took oh-so-seriously. As a no-mark replacement in a stellar field gathered to celebrate the opening of the 'new' grand prix circuit, this was Senna's chance to shine in equal if mundane machinery: a Merc saloon.

He charmed Alain Prost on the way from the airport, amused him by ceasing communication after losing their battle for pole, and irked him royally by elbowing him from the lead. Thereafter, the youngest man in Formula 1 put in an absolutely immaculate drive in horrendous conditions.

It felt great to beat Niki Lauda, Keke Rosberg, Denny Hulme, Jody Scheckter, Sir Jack Brabham, John Surtees and Phil Hill – world champions all – but, more importantly, he'd got under Prost's skin.

Mischief was his fun.



**Monaco GP**  
Monte Carlo  
3 June 1984

Oh, the injustice. Prost was error-free, despite a brake problem in his McLaren, whereas Senna had damaged his Toleman's suspension on a kerb. No matter: their roles were cast. The former, gesticulating for a stoppage, was devious Machiavelli; the latter was Galahad, pure and complicated.

On year-old Michelin slicks – McLaren had the final say on allocation – Senna qualified 13th.

On new-spec wets – the only option available – for the race, he picked off Jacques Laffite, Manfred Winkelhock, Keke Rosberg, René Arnoux and Niki Lauda before passing Prost on the line as the red flags flew.

Outwardly calm, he fumed until realising that: "I probably got more publicity than if I had won."

Half-points were awarded. But that was only the half of it. →







## Portuguese GP

Estoril

21 April 1985



Elio de Angelis, in his sixth season at Lotus, outqualified Senna first time out. In Brazil. But Senna put that right in Portugal by a margin – and with an ease that swung his new team behind him.

De Angelis defended superbly from rain-master Prost until the latter's McLaren looped on a flooded straight. At which point the Italian wavered, was passed by a Ferrari and suffered a flat when he left the road.

Senna left the road, too, but regained it, still leading, later gesturing for a stoppage. The irony was lost on him. And by the time the race was over, everyone was blind to it. Opaque spray. Transparent talent.

First pole, first win and second fastest lap – yet it was far greater than the sum of its parts.



## US GP

Detroit

22 June 1986



Pole; an early lead; a puncture that relegated him to eighth; the speed and accuracy of his driving and Lotus's pit work in recovery... this was hardly a run-of-the-mill win. Yet it's remarkable for what happened *after* the chequered flag.

Senna paused on the slowing-down lap to receive a *Bandeiro do Brasil*. Tiny, as if plucked from an Ipanema sandcastle, it fluttered

with a comical ferocity – but the gesture was sweeping. The world was his stage, Europe his base, but his heart and soul lay in Brazil.

With its 'sky of purest blue', 'peerless green of these forests' and 'splendour of the Southern Cross', his nation's symbol paints a dreamscape. Senna, though aware of its harsher realities, was proud to be its brightest star.

## San Marino GP

Imola

1 May 1988



Beating new team-mate Prost was his focus; victory was a by-product.

Senna had been on pole in Brazil, only to be disqualified for starting a delayed – not halted – race in the spare car and from the pits. This time, he made a brilliant getaway from another brilliant pole, nearly eight-tenths faster than his team-mate, and built a big lead as Prost recovered from a hesitating engine.

Prost was more cautious in traffic, and Senna, despite a half-

spin, controlled the gap. 'The Frenchman', as Senna called him, though far from beaten, was on the back foot and contemplating adaptations. Senna, faster, more ruthless, had imposed his will.

That their cars were so superior, by three seconds in qualifying and by a lap in the race – meant a two-horse title race. Precisely what Senna wanted.

His first world championship would be another by-product.

## German GP

Hockenheim

27 July 1987



The promise shown by a front-row start and an early lead faded as Mansell (Williams), Prost (McLaren) and Piquet (Williams) overtook. By mid-distance, Senna was battling Thierry Boutsen's Benetton for fourth.

At which point Senna heard a 'pop'. A bolt had fallen from a turbo-housing and the leak stymied his boost control. Matters got worse as a sudden loss of front-end grip sent him scurrying to the pits. A few laps later he returned for a new nose. His active suspension had spat its fluid and turned passive – in name only – and sagged onto 'helper' springs designed for limps into retirement. Still he pressed on.

His only comment after finishing third was that the brake pedal had gone soft – it was actually dangling through a hole worn in the floor.



## Monaco GP

Monte Carlo

15 May 1988



The racer with deep-seated beliefs was having a religious experience. Was that God at Portier?

Even ardent agnostics could see that Senna was operating on a higher plane. Prost, no doubt feeling vulnerably human, rode it out with a wide-eyed "Fantastic!"

Prost looked fast, yet Senna had supernatural rhythm some two seconds better. Even he had not experienced its like before. The work of something beyond talent, he was stepping through a previously locked door.

When advised to desist because nobody could better his time, he replied that *he* could. And he did.

He was still dealing with these sensations when he crashed from a commanding lead. Was that Senna at Portier?

He giveth and he taketh away. Beliefs and demons. ➔





**Japanese GP**  
Suzuka  
30 October 1988



But for the slope, it would have ended at the beginning. Senna stalled, threw up his arms, and bump-started his Honda turbo twice before it caught. Fourteenth at Turn 1, he was eighth by the end of the first lap.

Prost rushed into the lead. Any thought of his Christmas having come early, however, was erased by a baulking transmission caused by a worn clutch. One missed shift allowed Ivan Capelli's March to lead for a few yards.

Senna, meantime, was rushing through the field with a terrifying decisiveness, which Prost admitted he could not match. On lap 28, they swapped places when a backmarker muddled the mix.

Though a squall in the closing laps caused Senna disquiet – and more gesticulation – he continued to pull away.

The title was his.



**Japanese GP**  
Suzuka  
22 October 1989

Prost had warned he wouldn't give way. But still, this wasn't his scene. Though his car was undamaged, he wanted out. Senna, high on adrenaline, urged the marshals to push. He wanted back in.

Their help was legal; the McLarens were dangerously tangled in the middle of the track. Senna's bypassing of the chicane, however, was deemed worthy of disqualification.

Prost's low-downforce setting had given him the edge for most

of the race. He'd been unusually dynamic in traffic, too. Yet still Senna hunted him down. The lunge, when it came, inevitably demanded compliance. Prost was trudging beside the pit entry when his apparently irresistible foe darted past in search of a new nose.

There had been whiffs of controversy about their relationship, and the parts played by McLaren, Honda and FISA in generating rancour, but now the whole thing stank.



**Spanish GP**  
Jerez  
28 September 1990

He had to see for himself and rushed to the scene. There was Martin Donnelly, contorted like a discarded puppet, his Lotus reduced to drivetrain, tank and fragments by its 140mph impact.

Senna, shocked by the fragility of man and machine set the fastest qualifying time by a second – and in tribute. Not everyone saw it that way. And perhaps there was an element of selfishness: he wanted to learn from Donnelly's plight.



But there was selflessness there as well. He went to visit his comatose colleague and then tracked his tortuous recovery via his friend, Professor Sid Watkins.

His charisma had dark corners, but on this occasion they were illuminated by dignity and honour.



**Japanese GP**  
Suzuka  
21 October 1990

Even Prost agreed that pole should have been on the rubbered side, not the inside.

Senna felt betrayed by circumstance. Having insisted that the matter of Suzuka 1989 was in the past and that he and Prost were now friends – they'd shaken hands, after all – residual anger bubbled to the surface. He made an early exit from the drivers' briefing. His face: like thunder. His mood: regardless of consequence.

Turn 1 was another let-me-through-or-we-crash move, more dramatic and unequivocal this time, at 150mph. As they departed their respective cockpits, the political consequences were only just beginning.

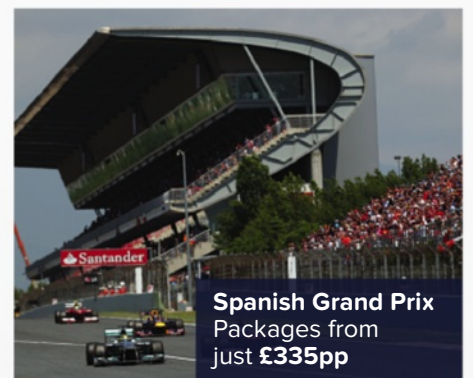
World champion for a second time, Senna insisted it was just a racing accident. He insisted, too, that he was at peace. →





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## Australian GP interview

Adelaide

1 November 1990

The man who fought to make the sport safer met the man who used that to his advantage in a fight. Just five world titles between them, they were poles apart.

Jackie Stewart, for Australian TV's Channel 9, used trigger words, such as "mature" and "prudent", in reference to the recent Suzuka controversy. Senna, hackles rising, called him "Stewart" and "Jack", his words rushed as he shifted forward on his seat and jabbed a finger.

Stewart was calm and persistent. He'd earned the clout to ask questions no one else would. But Senna landed the more noteworthy blows: "If you no longer go for a gap... you are no longer a racing driver" and "I am not designed to come third, fourth or fifth."



## Japanese GP press conference

Suzuka

20 October 1991

He didn't swear often in public – but, boy, did he blast Jean-Marie Balestre on this day.

Senna's post-race monologues were a Suzuka tradition (this was his third in as many years) and though they seemed petulant, they contained the truth as he saw it.

The outgoing FISA President had "robbed" him in 1989 and "fucked" him in 1990. Referring to the latter occasion, Senna retrospectively

revealed his reaction: "If tomorrow Prost beats me off the line, at the first corner I will go for it, and he better not turn in because he is not going to make it."

Four days later, backtracking only slightly, he put his signature to an insipid conciliatory press release dotted with Ronspeak and suffused with Honda politesse.

There could be no papering over these cracks, though.



## Brazilian GP

Interlagos

24 March 1991

Seven times, this most cherished win had eluded him: dodgy turbo, dicky electrics, detonated engine, a disqualification and three collisions.

On this occasion, fourth gear had gone missing and third and fifth gears were proving to be fair-weather friends. With seven laps still to go, and a storm cloud looming, Senna's sixth-sense tingled and he stuck it in top gear.

Clearly he was hampered, but by what and by how much? His

camouflage was seamless – an envious Piquet questioned the veracity of Senna's story given the track's elevation changes – and Riccardo Patrese, his Williams' semi-auto leading him a dance, closed but decided against risking second place, on slicks, in the wet.

Senna, who had reached new heights – and even found the strength to wave on the last lap – was lifted from the cockpit. There could be no neutrals that day.



## Monaco GP

Monte Carlo

31 May 1992

A chink of light: runaway leader Mansell emerged from the tunnel convinced he had a puncture, and promptly stopped for fresh rubber.

Senna, having survived the season on scraps left as Williams gorged, had never been hungrier. Though his tyres were fried, he wasn't about to give up a lead he'd only just inherited.

As Mansell, himself a fan of theatrics, laid down thick black lines and fastest laps as he reeled the McLaren back in, and thereafter jinked this way and that and darted for nonexistent gaps, Senna kept resolutely to a defensive line.

Anywhere else and Mansell would have won; anyone but Senna and he would have won. Instead, Senna scored a record-equalling fifth win (in six years) at F1's most prestigious GP. →



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**Belgian GP Free Practice**  
Spa-Francorchamps  
28 August 1992

Erik Comas was unconscious and his Ligier without wheels after hitting the barrier at 180mph Blanchimont. Senna weaved through the debris and drew to a halt. He knew what to do.

Prof Watkins was on his way, but by the time he arrived, his friend, always keen to learn,

had done exactly as Watkins had advised him he should.

Having bravely sprinted through the

dust cloud against unsighted traffic, Senna immediately quelled a screaming Renault V10 commanded by the dead weight of its inert driver's foot. Given the flammable liquids spilling out of the wreckage, Comas is adamant that this prompt action saved his life.

And he regrets that he was powerless to return the gesture on 1 May 1994, when his out-of-sequence Larrousse was signalled to stop beside the devastation.



**European GP**  
Donington Park  
11 April 1993

Michael Schumacher's Benetton muscled him wide approaching Redgate, and Karl Wendlinger, another of Merc's pushy young pups, nipped through the gap in his Sauber. So it began.

Schumacher was dispatched exiting Redgate, and Wendlinger on the plunge – literally, given the downpour – through Craner Curves. Damon Hill was amenable at McLeans, and his Williams teammate Prost was given no choice at the Melbourne Hairpin. Four pitstops later, Senna had completed his masterclass.

Feigning sleep – Portugal in 1985 had been much more testing – he 'awoke' to ask Prost, his press conference litany at an end, if he would like to swap cars. Nervous laughter faded to silence, for all assembled knew that such a switch would not have changed the result.



**Australian GP**  
Adelaide  
7 November 1993

Senna's final race with McLaren was his last against Prost. After winning in Japan in October, he had ignored Prost's hand, extended by way of reconciliation on the podium, and instead sunk a few schnapps, formed a fist and punched disrespectful newcomer Eddie Irvine.

It had been an uneasy campaign of race-by-race contracts (until midseason), blazing rows with Ron Dennis, and a besotted, extended courtship by Williams. Senna had played fast and loose, yet was able to tie it up neatly.

His last win was McLaren's record 104th. Dennis, who is not designed to finish third, fourth or fifth, was delighted. As for Prost, Senna hugged him on the podium and said there would be "emptiness" without him. And you sensed he meant it.



**San Marino GP**  
Imola  
1 May 1994

Unusually, he sat bareheaded in the car on the grid and, minus the famous hi-vis helmet, international shorthand for 'Move over!' Suddenly he looked mortal.

He'd promised his girlfriend he wouldn't race after Roland Ratzenberger's fatal crash. And he'd told Prof Watkins, who asked him to walk away and come fishing with him, that he had to race; it was what he was born to do.

It cost him his life.

He'd warned, via Gerhard Berger, the man who taught him how to live, about slow Safety Cars and cold tyres. He was concerned about his Williams' handling imbalance. And he was deeply suspicious that the rival giving chase was doing so in a car so swift as to be illegal.

He'd never felt more compelled. He'd never been more compelling. 

PHOTOS: LAT ARCHIVE



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Park in April 1993, hailed as one of his finest races. In abysmal conditions, he lapped all but one of his competitors, taking his McLaren Ford MP4/8 over the line more than a minute ahead of second-placed Damon Hill. At 130mm tall, this is a practical and accurate replica which is officially endorsed by Team McLaren.

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**Q:** Where did Senna clinch the 1988 Formula One World Championship?  
**A)** Brazil **B)** Australia **C)** Japan







## STUCK IN THE MIDDLE

Nico Hülkenberg is the mid-grid superstar most obviously crying out for a top-team drive. Will Force India be a springboard to greatness? Or will he remain on the fringes?

WORDS ANTHONY ROWLINSON

**If you're of a certain age**, or if you've ever seen *Reservoir Dogs* you'll be familiar with a cult classic by Stealer's Wheel that charmed the US charts in the early '70s: *Stuck in the Middle With You*.

"Clowns to the left of me, jokers to the right," warbles Gerry Rafferty, "here I am, stuck in the middle with you."

Now, it would be idiotic to suggest that any highly rated driver of a well-drilled mid-grid F1 team is "stuck", but in the case of Nico Hülkenberg, returned this year to his Force India alma mater after a single-season sojourn with Sauber, it's not hard to imagine him having a few dark thoughts of this nature as he settles into another year of podium-chasing and occasional headline-grabbing drives. Someone of his talent, many observers believe, should already be established in a top-team groove.

Among his champions has been Eric Boullier, late of Lotus and now getting used to his view of the McLaren Technology Centre lake afforded by his position as the team's racing director. At the tail-end of last year he

was courting Hulk for a seat alongside Romain Grosjean, in a team that, for all its financial woes, is one of only five to have won races consistently over the past decade (whether as Lotus or Renault). "If we secure the necessary finance," Boullier told *F1R*, "I will take Hülkenberg. If we don't have it, then we take Maldonado [and his \$30million PDVSA backing]. It's that simple."

Money spoke loudest, so that off-season transfer never came to pass, Hulk taking the counsel of his manager Werner Heinz and opting for a familiar home. But Lotus weren't the only team to have come knocking. Ferrari had shown strong interest before ultimately settling on possibly the most expensive pairing ever twinned in F1: Räikkönen and Alonso.

Perhaps it's a decision The Reds will regret, for already Hulk has done enough in each of his three racing seasons (2011 was spent as third driver for Force India) to catch the eye in the way that those destined for the very top tend to do. There was the memorable Brazil 2010 pole for Williams; jousting for the lead there with Hamilton two years later; and last year →

PHOTOS: GLENN DUNBAR/LAT; ROBERT CIANFLORE/GETTY IMAGES; ANDY HONE/GETTY IMAGES; MARK THOMPSON/GETTY IMAGES





Nico in the Force India VJM07 at the second 2014 test in Bahrain. "I made a good choice here. We are trying to achieve something special"





From top: taking pole position for Williams in Brazil 2010; fighting Hamilton for the lead in Brazil 2012; and fending off Alonso to finish fourth in Korea 2013



**"In Korea 2013, I was driving fast, but saving the tyres where I could. It's about using what you have in the right way"**

Prompted to think back to Korea 2013, Nico is matter-of-fact: "Well the car was performing pretty well that day. The key to our race was good top speed and very good traction. And if you look at the Korea circuit layout, the first sector is straights and hard-braking hairpins. The rest of it in sectors two and three is technical and narrow, and it's hard to overtake, so it's almost impossible to pass if the guy in front doesn't make a mistake. So once I had track position I focused on using my car where it was strong, with top speed and traction out of T1. I was still driving fast, but saving tyres where I could. It's about using what you have the right way."

There is no better mantra for the challenge facing F1 personnel in 2014: in this era of efficiency, making the most of what you've got (100kg →

that epic aggressive-defensive drive to P4 in Korea, fending off Alonso, Hamilton and Rosberg along the way. It had the hallmarks of Gilles Villeneuve's fabled Jarama '81 win ahead of Jacques Laffite, John Watson, Carlos Reutemann and Elio de Angelis, Hülkenberg using traction and top speed to fend off faster machinery behind.

## Ones that got away (and then came back)



### Nigel Mansell to Williams (1991)

After losing the Honda engine contract for 1988, Williams endured an *annus horribilis* that prompted 'Our Nige' to jump ship to Ferrari. By mid-1990, fed up with reliability troubles and his fractious relationship with Alain Prost, Mansell had announced his plans to retire from the sport. He signed a new deal with Williams on the Monday after the Portuguese Grand Prix, three races from the season's end.



### Gerhard Berger to Ferrari (1993)

Berger nearly met his maker in a Ferrari at Imola in 1989. Moving to McLaren for 1990, he enjoyed a good relationship with team-mate Senna, but the summer of '92 – with Senna and Prost scrapping for a Williams drive, and McLaren courting Michael Andretti – drove him back to Ferrari. "I was tired of having to follow the politics of the driver market," he said. "I hated that. So I made my move first."



### Fernando Alonso to Renault (2008)

In 2005, Fernando Alonso took the old maxim about quitting while you're ahead to a bizarre extreme: having won his first title, he announced he was dispensing with Renault boss Flavio Briatore's management services and had tied up his own deal to race for McLaren – in 2007. He won a second title in '06, moved to McLaren, fell out spectacularly with Ron Dennis and hurried back to Renault's bosom.



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\* date to be confirmed



Force India have high hopes of their new pairing, Nico Hülkenberg and Sergio Pérez (below); and the VJM07 makes its first appearance at the Jerez test (right)



PHOTOS: ANDREW FERRARO/LAT; CHARLES COATES/LAT; GLENN DUNBAR/LAT



Germany's most recent star is Seb Vettel: is Nico Hülkenberg next in line?

of fuel, optimised hybrid power, tyre life) is the key to success. And if a driver is confident in his ability to do so, he's likely to prosper.

So, too, with the team for whom Hülkenberg drives. Force India have launched into 2014 with quiet aplomb. They have quick drivers, an enhanced marketing department that has lured in the likes of Mexican lubrication titan Roshfrans (helped by the presence of Sergio Pérez) and 2014's power unit of choice in the back end: the Mercedes PU106A. On this day, Hulk has topped the Bahrain time sheets, with 78 solid laps.

He reckons that in terms of getting a true picture of 2014 form it's still "very early days" and that "we're like kids learning to walk again, with these new cars". But there's confidence in what he's found on returning to Force India: "I left on good terms and coming back has felt good. I know the people – I still have the same race engineer [Brad Joyce] and the same chief mechanic, and if you come back to a team you worked for before, you know the structures and process. It's a great team, with a great atmosphere."

Force India deputy team principal Bob Fernley veritably clucks when he talks about how happy he is to have re-recruited Nico. "He ticked all the boxes coming through," says Fernley, "winning titles at every level before F1 and that's what caught our attention when we recruited him from Williams in 2011. What's exciting now is that he's the complete package. He can understand and work with engineering side of things, and he's good

**"It would be interesting for me to see in the right car what I can deliver. I'm sure I can challenge for wins... and titles"**

with the media and marketing teams. He conducts himself in a measured, careful way and doesn't get too excited. He's the consummate professional at a young age."


Spend any time chatting to 'those in the know' and you'll hear opinions like this voiced readily about Nico. For all his approachability, he's a megastar in waiting and you

sense that – without any intrusion of ego – he knows it.

Consider his response to questions about the Ferrari-drive-that-wasn't: "Well that's a bit longer ago, now," he observes. "At that time... when you are able to smell that opportunity and it doesn't happen, then of course there is some frustration. But [here's the closure], it's signed off and I've moved on. Even with Lotus it was never definitely going to happen. I made a good choice to come here. We are trying to achieve something special."

Still though, there's a nagging conviction, that in a 'German generation' that's produced a quadruple champ and now, at Mercedes, could spawn another, Hülkenberg should be battling with them on level terms, as his racing record demands. Isn't it *obvious* he's a potential champion himself? He gives the faintest "hmm" of agreement, but won't be drawn into comparisons with the likes of Vettel or Rosberg. He does, however, offer this: "Of course Seb gets the attention, because he's the four-time champion. But it would be interesting for me to see in the right car what I can deliver. I'm sure I can challenge for wins and titles as well."

There it is: as simple and straight a manifesto as a driver can make without reverting to bombast or ludicrous self-aggrandisement. The essential bedrock upon which a successful competitive career must be founded – unshakeable self-belief – seems all present and correct.

Stuck in the middle? Not a bit of it. Just ready. And waiting... 



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# AHEAD

## BY A

# NOSE

Anteater? Aardvark? The pundits are still scrambling for a universally acceptable word to describe the 2014 cars' wild and weird noses. But how, technically, did it come to this? **Craig Scarborough** investigates...

**With all the massive changes** going on beneath the bodywork, it's almost disappointing that so much talk about Formula 1 in 2014 has focused on the small but immediately obvious section at the front – the tip of the iceberg, as it were. What started out as a simple measure to improve safety in the event of a nose-to-rear-tyre accident – the aim being to avoid the kind of flip-over we saw at Valencia in 2012 when Mark Webber ran into the back of Heikki Kovalainen – has unleashed a wave of creativity as teams try to exploit the new rules.

What we've got are some of the strangest front-end treatments since the likes of the 'walrus tusk' Williams FW26 of 2004 and the 'tea-tray nose' 1971 March 711 (see p42). In detail, the rules demand that the area 5cm behind the very end of the nose is at least 9,000mm<sup>2</sup>; this results in a square of about 9.5cm, although any shape can be used. This nose tip must then be centred at 18.5cm above the floor of the car. By contrast, last year's noses were about 52.5cm high. Most teams have created a tip as a thin extension to the nose, leaving a wedge shape above and behind the extension to act as both the bulk of the crash structure and to form the main aerodynamic shape of the nosecone.





## RED BULL RB10

Unsurprisingly, Adrian Newey's team have crafted one of the most complex noses on the grid, which Newey calls the 'keel' nose. Here, the nose tip is formed not by a finger shape, but by a square-fronted keel that tapers rapidly to form a short pod. Keeping the pod so small means its obstruction to the airflow is reduced, even when the car is at a yawed angle to the airflow. To offset the obstruction of the pod even further, the team have created what they call a 'driver-cooling slot' in the pod's front face. Air building up on the pod at speed feeds into this U-shaped orifice, and is then routed into the footwell of the car.

The upper part of the nose is very long and shallow. Where the nose passes over the top of the front wing, a chin is formed on its underside – this trick was used by many teams last year to create a little bit of extra downforce under the nose. To ease the path of the flow passing over and under the nose, Red Bull have retained the S-shaped duct inside the nose seen on last year's car; the inlet is under the nosecone, with a backwards-facing exit on top by the Total logo.



## MERCEDES W05

For the W05, Mercedes have, like Ferrari, gone for a low nose – although this differs in its interpretation of what shape forms the nose tip. Rather than having a wide, rectangular shape, the W05 nose tip is an inverted 'U'. The legs of the 'U' are formed by the front wing mounts, which, as you can see, are far larger than they need to be. In doing this, the minimum surface area is centred at the correct 185mm height because the legs are lower than the horizontal part of the nose.

This allows the wider part of the nose to be higher, which permits more air to pass through to the rear of the car. It's a clever piece of design that shows how many resources have been put into researching new concepts. Beneath the oversized wing mounts are the actual wing mounts and these are of the usual slim shape that is seen on other cars.

Also like Ferrari, Mercedes have made use of the new higher position of the camera pods to act as an aerodynamic aid to the air flow passing over the front of the car. →





## FERRARI F14 T

Ferrari have a unique take on the new rules. Instead of a finger extension to a conventional profile, they have lowered the entire nose. In doing so, they have arrived at a wide, flat tip that curves upwards to meet the chassis; some have christened this treatment the 'Hoover', while others liken it to the Airbus A300-600ST Beluga transport aircraft.

The F14 T's design uses the nose's underside like a diffuser – aided by a pair of curved turning vanes – to create low pressure beneath it, thereby adding downforce to the front axle. However, flow going over the nose is not forgotten, and the pronounced change in curvature halfway up the nose – where the camera pods are also mounted for aerodynamic effect – diverts air around the nose and towards the sidepods. One of the trade-offs for having a low nose, though, is that Ferrari are forced to have short front-wing mounting pylons, so they miss out on the turning-vane effect these items can offer. But, with two vanes further aft, this may not prove to be such a weakness.



## LOTUS E22

Not since the 'walrus-tusk' Williams FW26 have we seen such an aggressive nose. With its twin-tusk front end, Lotus have found a new way of addressing the nose regulations and the aerodynamics around the front of the car.

Rather than having one nose tip on the car's centre line, Lotus have made the right-hand tusk the nose tip, with the left-hand tusk forming part of the crash structure and the front wing mount. Since the rules are vaguely worded, there was no need for a central nose tip, merely one of the right size and position.

To be legal, the left tusk is 50mm shorter than the other so as not to count as a second nose tip. While Lotus won't gain or lose much from this small asymmetry and there won't be a different nose for anticlockwise tracks, they free up airflow along the centre line of the car. Each tusk forms a turning vane, diverting turbulent air away from the body while keeping the flow clean along the car's middle. The main challenge with this design is to meet the crash regulations without adding weight at the front.







## McLAREN MP4-29

McLaren were the first to unveil a finger nose, where the mandatory tip is formed by a slim extension from the main part of the nosecone. Thus the tip of this finger meets the regulations, but presents a smaller cross-section, improving airflow to the diffuser. On the tip is the driver-cooling slot which, like Red Bull's, will reduce the blockage the nose tip presents to the airflow.

Most other teams have followed this 'anteater nose' design approach (with the exception, perhaps significantly, of Red Bull, Mercedes, Ferrari and Lotus), but McLaren have kept the main nose structure much higher and wider. The wide-legged shape of the front-wing mounting pylons is intended to push air down towards the front of the floor for more downforce at the diffuser, though the elegant and unbroken curve of the bodywork from cockpit to nose tip is probably more for aesthetic reasons than anything else.

It's also interesting that McLaren have, downstream of the nose, changed the front suspension geometry to make the wishbones flatter, and reverted to pushrod actuation.

## FORCE INDIA VJM07



As odd as the 2014 'finger' noses look, the VJM07 is about as conventional as they come. Force India have followed the direction of most teams and formed the nose tip with a long extension to the nosecone, mercifully painted black to disguise its shape. This finger extends well ahead of the front wing to create more space for the nose to act as an impact structure.

The main nosecone shape starts as far back as possible, which means the front-wing mounting pylons start further back and are more like turning vanes, improving downstream airflow.

## SAUBER C33



Sauber's finger nose includes some subtle design twists that warrant examination. The finger extension itself is quite rounded and leads all the way to the back of the nosecone. From the side you can see how the underside of the nose slopes down to meet the chassis, funnelling more air down under the car.

There's also a more streamlined shape, with the finger blending in with the leading edge of the nose. This creates an even shorter upper nose that requires the mounting pylons to reach forwards to meet the front wing. ➔



## TORO ROSSO STR9



Toro Rosso have also gone the conventional finger route, but the STR9's nose has a very sleek design, because the entire front edge of the car is lower than that of most other teams. Its finger extension is very rounded at its tip, but if you could cut through the finger horizontally, you'd see it forms a teardrop shape to smooth its obstruction to the airflow. In order to funnel more air under the raised nose, the finger meets the main nosecone with a slightly arched shape.

## WILLIAMS FW36



This design is an amalgam of other ideas we've seen. Rather than an overt finger extension, Williams use an elegant nosecone that extends beyond the front wing, then slims into the mandatory low, narrow tip. This flat-bottomed shape doesn't encourage as much airflow under the car as other finger designs, but should pass the crash test without extra strengthening, so it's probably lighter. One neat feature is the wing mounts, which are twisted in a complex shape to act as turning vanes.


## MARUSSIA MR03



Marussia have come up with a very neat interpretation of the nose rules. The MR03 follows a very similar philosophy to that of Red Bull, whereby the nose tip is a square shape that tapers rapidly to a short pod. The main nose form is more conventional, in that it is longer and flat-bottomed – as is the case with the Williams. This is, no doubt, purely pragmatic – having less budget to invest in a complex nose design that can also pass the crash test means Marussia have identified a solution that's simpler and lighter.

## CATERHAM CT05



The CT05's front end appears to be a variant of the standard finger shape, but it's structurally very different. To save weight, much of the nose shape is a lightweight vanity panel. The real nose, which forms the crash structure, is the finger extension that passes inside the awkward upper nose shape. This lets the structural segment have a very simple shape, which gives a weight benefit and makes it easier to get past crash tests. Since the wedge-shaped upper nose is purely aerodynamic, the front wing must mount to the end of the finger extension. 



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# NUMBER

A new rule for 2014 gives drivers the opportunity to pick a race number they'll keep for the duration of their careers. So who chose what... and why?



5<sup>(1)</sup>

**Sebastian Vettel**

"Michael Schumacher and Nigel Mansell were champions with #5, but I chose it because I carried it successfully in karts and when I won my first F1 title in 2010." [As reigning champion, Vettel will retain #1 for 2014]

6 **Nico Rosberg**

"My father won the title with number six, and it's also my wife-to-be's lucky number."

8 **Romain Grosjean**

"My wife was born on 8 December, we started dating in 2008 and my son is the eighth wonder of the world."



14

**Fernando Alonso**

"It has been my lucky number since 1996: I was 14 on 14 July, driving kart number 14 – and I won the world championship."



13 **Pastor Maldonado**

"I like number 13. Everybody was surprised by that, because nobody used it before. In Venezuela it's not an unlucky number."



44

**Lewis Hamilton**

"When I started racing, my first kart had '44' on the plate. I won my first British championship with it. Fingers crossed it will bring as much luck now as it did back then."



7 **Kimi Räikkönen**

"There's no particular story linked to it. It's the number I already had last year and I saw no reason to change it. I like it, which is good enough, isn't it?"



22

**Jenson Button**

"It was the number I raced with at Brawn when I won the 2009 world championship."





## 20 Kevin Magnussen

"It was the same number I had last year when I won the World Series by Renault title. I also had it when I won in karting, too."

## 21 Esteban Gutiérrez

"It has always been my favourite number. It's also the age I was when I started in F1."



## 25 Jean-Eric Vergne

"I was born on 25 April..."



## 17 Jules Bianchi

"I previously applied for 7, 27, 77 and didn't get any of them. So was left with 17."

# 27

## Nico Hülkenberg

"So many asking 'why 27?' Pretty simple – it's my birthday dates: 19 + 8." [19 August]



## 26 Daniil Kvyat

"...and I was born on 26 April."

## 4 Max Chilton

"M4X"



## 10 Kamui Kobayashi

"My first choice was 4, but 10 was the number I had when I made my F1 debut with Toyota."

## 11 Sergio Pérez

"Ever since I was a kid, I always wore the 11 in karting. Actually, my email has 11 in it as well. A lot of things have to do with 11, so I identified myself with that number."



## 19 Felipe Massa

"It was my number in karting, and my uncle also used '19' when he raced."



## 9 Marcus Ericsson

"It's simple. I like this number." F1



## 99 Adrian Sutil

"The highest number you could pick is 99, and in my life I always go for the maximum."

# 77

## Valtteri Bottas

"I like the Twitter hashtag #BO77AS"





2014



# The Iceman's artist

Uffe Tägtström, the man behind the evolving look of Kimi Räikkönen's helmet design, tells *F1 Facing* about the painstaking process of transforming ideas into reality

WORDS PAUL FEARNLEY

PORTRAITS VESA KOIVUNEN

HELMETS LAT



2001



2002



2003









2004



2005



2006

**It's a racing driver's fingerprint** – and his raised digit. Jutting into the prevailing breeze, poking above the cockpit's parapet, it's the visual link between man and machine, art and science. In an increasingly regulated sport, it's the boldest statement of individuality.

Roguish René Arnoux of 1980s Renault and Ferrari fame was once asked why he shunned a paint scheme; he wore a plain white crash helmet instead. His reply – because it wouldn't make him faster – was undoubtedly logical but indubitably lonely. For just about every other driver since skid-lids became mandatory in 1952 has made a conscious effort to stand out from the crowd: from Alberto Ascari's sky-blue shellac to Sebastian Vettel's ever-changing hues, via Jackie Stewart's tartan bandana and Ayrton Senna's acidic *bandeira*. From Graham Hill's fond nod to London Rowing Club to Michael Schumacher's star-spangled, because-you're-worth-it bonce, via François Cevert's stylish stripes and the vivid raindrops of Nelson Piquet's headgear.

The simplicity of 1970s helmet designs – Henri Pescarolo's plain pea green, Niki Lauda's jaffa orange, James Hunt's school colours – gradually gave way to a mélange of whorls and loops, and some identity was lost.

"I kinda brought that in," says helmet painter Uffe Tägtström. "Because of my background in motocross, where helmets were more colourful and complicated, I tried to incorporate that busy

style into motor racing; I was thinking these helmets are so dull, so simple. Then I started to realise they had to look good from a distance also. It was trial and error."

This Tampere-based Finn with a Swedish surname has been designing and painting Kimi Räikkönen's crash helmets since the Iceman's karting days. He is also McLaren's official helmet supplier and numbers Fernando Alonso among his past clients.

"I'm self-taught," he says. "I had no education with regards to art. I raced motocross in my younger days. At that time, around 1985-'86, everybody had a fancy crash helmet, so I painted my own. Suddenly, all of my race buddies wanted one and my house was full of their helmets. I was so busy that I had to stop racing."

"You want the lacquer smooth and glossy but as thin as possible. Hard to do, easy to mess up"

After a year spent honing his craft in Florida, an approach by countryman JJ Lehto, then at Sauber, drew Tägtström into Formula 1 in 1993: "Do you remember his crash helmet with the feathers on top? That was mine. That's what started it all."

Tägtström's 2013 design for Räikkönen was arguably the season's sparest and was immediately recognisable as a result. The same was true of the one-off they concocted for the 2012 Monaco Grand Prix. Their respectful tribute to James Hunt, Kimi's racing hero, was more striking than previous diamond-encrusted and gold-flaked offerings, some of which Tägtström created, at Formula 1's bling-and-buy.

"We'd wanted to do a Hunt helmet for years, but [oh, the irony] it wasn't possible at McLaren, or at Ferrari, because they had so many sponsors' logos. Only last year did I realise we could do it because Lotus had fewer sponsors. The main idea was Kimi's. It was he who called Hunt's son, Tommy, to ask for approval.

"We are so busy during a season that it's not usually me who suggests, 'Hey, let's do something totally different.' The average amount is for 15 helmets per driver per season. But McLaren and Ferrari need huge amounts of replicas for display and marketing purposes. That's as big a business for us as the race helmets. When you design for an F1 driver, you could do a job as nice as you could ever want it



2007



2008



2009



and spend too much time on it. But that would come back to haunt you when you have to do 50 of them. It's a balancing act."

Tägtström uses design software because so many different parties have to approve his designs, but he circulates fluid sketches rather than fixed patterns. Clients know his finished product will be more detailed. There are architectural issues – the 'canvas' is neither blank nor flat and measurements and logo positions cannot be changed – but this process is Savile Row art, not row-upon-row science.

"The shape of a helmet creates problems and provides opportunities," Tägtström explains. "If a helmet had a totally round shape, like they had 20-30 years ago, it would be more difficult to make it look good. Nowadays, they have all kinds of scoops, at the front, on the top, at the back, and these are good to incorporate."

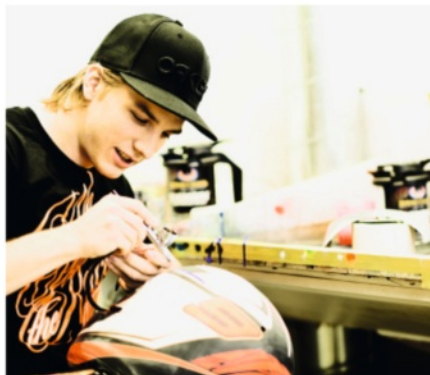
"Also, we are strictly within the limits of what the teams require. Sometimes that's frustrating, but also it means there is less to puzzle about; I try to match colours to logos. I'd say that it helps me to have these requirements."

From bare shell to polished gem can take three days; two minimum. Pin striping – the laying out of the lines – is the most time-consuming process, particularly because the application of paint upon paint is frowned upon by a sport that is profligate in all things except weight. So Tägtström's touch must be light as well as deft.

"There are two techniques," he says. "You could mask everything and use a pinstripe pencil after the paint is laid. But 95 per cent of F1 helmets don't use that method – except for names and some characters. Instead, we use fine line-tape, which is removed after you've shot the colours. That's tricky because of the curves."

It's almost as tricky as the final lacquering. Three clear coats are applied and left to dry overnight before being rubbed back down to a single layer; the barest essential once more.

Tägtström: "It's a double-sided story: you want it smooth and glossy, but as thin as possible without being able to feel the edges of the paint."



From bare shell to finished item, each hand-painted helmet takes three days to produce

It's difficult to tell when it's right. Hard to do, easy to mess up, it's something you must learn."

Air brushes, small air guns, a flame-retardant base gel coat – sometimes applied at the factory, sometimes at Tägtström's studio, but always rubbed down for a better key and more precise edges – and (usually) water-based car-industry paints: the only magic ingredient is supplied by a creative mind and applied by a steady hand. No wonder it's preferable to produce them in batches. And no surprise, given the demanding nature of the clients, that this is often impossible.

"The driver has the most say," says Tägtström. "The personal preferences come from him: it's his design and he chooses who does it. There are some guys who don't take it that importantly: they just call me or drop me an email once a year with a few suggested changes. But some are really into it. Fernando sketches and is really picky: let's change this; let's try that."

"Kimi has known me for so long that he knows what to expect. He mentions a colour he prefers for the season and usually I draw him ten sketches and he chooses one. He's very good to work with. We have changed his design quite a bit since the McLaren days. We wanted to have something different for 2014, too, and have talked for many seasons about going back to blue – but it doesn't fit with many teams."

"Sometimes the teams don't want us to change a design. That makes sense because of

the sponsors' photographs in advertising and marketing. The helmet needs to be the same at least for one season."

But get this – it was McLaren boss Ron Dennis who came up with the 'Iceman' idea and logo. Who would have thought it?

Tägtström says: "Of course, I have changed it many times over the years now. I do logos for each and every driver. Jenson Button's has stayed the same. I appreciate that. I have become a fan of the guys who keep their helmets so that they can be recognised by everyone. With Kimi's, it's the top section. I don't know what you would call that design – it was something I drew 15 years ago – but it's still there. It has evolved and changed its colour, but basically it's the same."

"Pedro de la Rosa is a long-time customer of mine. Sometimes he calls to ask if we should do something new with his helmet. When he did those races for McLaren in 2006, I drew a lot of different designs for him – and still we chose to use the old livery. I always tell him that I like the fact that he has kept the same design, that he should be proud of it."

From the too-simplistic – although the stubborn Arnoux undoubtedly stuck out – to the overly complicated, a striking balance is being struck these days.

"If you can keep your head when all about you are losing theirs..." – Kipling would have liked Kimi and Uffe. 🇫🇮



2012



James Hunt tribute (2012)



2013







In conversation with

# James Allison

Ferrari's technical director on the challenges involved in restoring the Scuderia to top form

**INTERVIEW** JAMES ROBERTS **PORTRAIT** SUTTON IMAGES

**What would you say is the biggest lesson that you have learnt so far with the new car?**  
That it's no less difficult than we thought it would be...

**And what is the main difference between the F14 T and last year's car – the F138?**

This car houses the new 1.6-litre turbocharged power unit, which means everyone now has the same amount of fuel. Whoever can make their engine most efficient and have the most power will succeed. So the engine guys have been working very hard on that. At the same time they have been aggressive and bent over backwards for us on the chassis side to make sure we produce an engine that is packable, manageable and allows itself to be cooled. This car has a neat cooling package and the bodywork is small.

If you ever get to see an engine when they are not completely covered in heat shields, you will notice that they look incredibly busy compared with the units we've had over the past few years. And this car has been rather exquisitely packaged by the team, who started working on it more than two years ago and have brought it to this point. It's very neat, very small. And when you have so much mechanical complexity going on beneath the surface, making it fit is a real challenge.

**Tell us more about the nose...**

On the aerodynamic side we're doing what we've always done, which is minimising drag, making gains on downforce, and making sure that downforce is deliverable to the track in a way that is drivable. If you look around the pitlane, you will see there is a different nose on every car and that there is not too much similarity between any of the cars. And the reason for that is the nose rules allow quite a lot of geometrical freedom. So if you go off exploring that freedom there isn't a single solution – it makes you believe that it isn't that sensitive an area. So there are lots and lots of different solutions that work.

## FACTFILE

**Name** James Allison

**Date of birth** 22 February 1968

**Place of birth** Louth, UK

**Team** Ferrari

**Role** Technical director

**2013** Ferrari technical director

**2009** Lotus technical director

**2005** Renault deputy technical director

**2000** Aerodynamicist responsible for track operations at Ferrari

**1994-98** Senior aerodynamic designer, then head of aerodynamics at Benetton

**1992** Head of aerodynamics at Larrousse

**1990** Junior aerodynamic designer at Benetton

**1989** Graduates from Cambridge University with a degree in Aerospace Engineering

I came over to Ferrari from Lotus. They have a very aggressive solution, and I worked with the team on that. But in reality I only think they are good things to talk about because they are right up at the front of the car.

**Are you going to explore any other solutions?**

We've looked at dozens and dozens of other noses of all different shapes and sizes. Like any other part of the car, that part is free for us to develop, so we keep looking at it – as you would expect.


**What do you think about the sound produced by the new turbo engines?**

As far as the engines are concerned, it is a very different sound, but I imagine that it will very quickly become the sound everyone comes to associate with Formula 1. It was quite different when we went from V10s to V8s. This is different again, but I think we'll all get used to it very soon.

**How satisfied are you with the progress you have made with the new car?**

Well I'm reasonably happy with what we've seen so far. I don't think there have been any disasters that we've uncovered. Then again, running a new car is never straightforward.

**With the reduction in downforce, how much time do you think you have lost?**

If you look at the size of the rear wings compared with last year, you'll see how much smaller they are. We have wings that are more or less a Canada-type rear wing, so that's a good guide, roughly speaking, to where the downforce is. And we don't have the blowing floor there was last year either. However, the new rules offer up new opportunities, so the rate of finding downforce is quite steep. And you never know where it will slacken off, but it doesn't show any sign of doing so just yet. 



# Kamui Kobayashi

Fans' favourite 'Bash' makes his comeback with Caterham and, in typically freewheeling form, talks paintballing, Ferrari... and why Alfred the dog won't be joining him at races

WORDS JAMES ROBERTS PORTRAITS DREW GIBSON

**The top floor** of Caterham's motorhome can be a noisy place during a grand prix weekend, but it's eerily quiet this morning. Despite the green flag, there are no cars out on track. Instead, the action is all going on in the garages as the teams work through the various issues thrown up during the morning's early runs.

While this year's three pre-season tests have provided thin gruel for the ranks of reporters hoping to 'liveblog' every thrilling moment of on-track action, they've been even more challenging for Formula 1's designers, mechanics and drivers. The long periods of quiet are testament to the difficult birth of the new 1.6-litre V6 turbocharged powertrains.

Still, there are benefits. While Marcus Ericsson waits patiently for Caterham's bolters to prep the CT05 for action, his team-mate Kamui Kobayashi is all ours. This season, feisty Kobayashi has been given a second chance to prove his worth in Formula 1. We have a stack of question cards positioned in front of him – the

last time we did this was in the spring of 2011, also at a pre-season test. Back then, Kamui was dressed in Sauber colours.

Fast forward three years and he's dressed in green, eyeing up the latest batch of questions you've sent. He shuffles the pack, smiles, and in the hushed surroundings, reads the first card...

**How does it feel to be back in Formula 1 again, and what are your hopes for the coming year?**

*Andrew Creed, UK*

I would say that we 'hope' to see the chequered flag. I think this is the most important thing. The key thing for us is to finish the race and to be reliable. If no cars finish at all, then for the fans it looks stupid. I hope it doesn't happen like that.

To be back in Formula 1 is a great motivation for me and this is what I wished for. The feeling is good, and I am motivated and I have to thank all my fans who supported me to get me back into Formula 1 again.

**Excluding yourself, who do you think has been the best Japanese F1 driver?**

*Barry Hitchings, UK*

Well at the moment I can't say anybody, unfortunately. There are no Japanese drivers with success. That's my feeling anyway. I wish there were young, fast drivers coming up as I would want to support them, but unfortunately it doesn't look like there are.

**F1R:** What about drivers like Satoru Nakajima or Taki Inoue?

**KK:** Taki is always mentioning me on Twitter. For whatever reason. And only me. I don't know why. He loves me.

**Why could you not convince Ferrari management that you should be a replacement for Felipe Massa? Any feedback from Stefano Domenicali?**

*Shinji Sugiyama, Japan*

I think that maybe I don't have enough experience. That's possible. But of course it's →







not my decision: it comes from the Ferrari side. There were a couple of times when we talked with Ferrari but nothing happened. In the end it was difficult to get a seat at Ferrari because Kimi Räikkönen is going there and they now have two world champions. So I don't think there is any room for me.

**F1R:** Maybe you'll replace Fernando in a couple of years?

**KK:** No, no. I hope they are successful. These are my wishes.

**On American television, they call you 'Mr Excitement'. What are your thoughts on this nickname?**

*Thomas Donohue, USA*

I like it. And I like the US as well. It's been quite a long time since I was last there. And each time I go back to the US I'm pretty happy. I'm glad the people love my driving style – so hopefully that will mean more fans for myself.

**Would you consider a move to Honda if they called?**

*Carl Barton, UK*

One of Honda's drivers is coming into GP2 this year and so they are definitely looking at him. His name is Takuya Izawa and he'll be driving for ART as part of a McLaren junior team. I'm pretty happy at Caterham, and while I'm doing a good job here I will stay. This is the most important thing at the moment, so I'm not looking at Honda. It's too early.

**What were you feeling when you crashed your Ferrari during that promotional event in Moscow?**

*Olga Bialczak, Poland*

I thought: 'Oh, that's not good.' I've tried to forget about it. It was very wet and very bumpy but definitely I will not go back there again – for any reason.



Despite negotiations with Ferrari, Kamui (front) is adamant that he doesn't want to replace Alonso (back)

**Are you concerned by Tony Fernandes' remarks that he may quit Formula 1?**

*Brad Purvis, USA*

Of course it is a worry. There are more than 300 people working in the company. We need success in 2014 to ensure that everyone is happy and this is my job. It's difficult to say where we will be, but I'm confident we can do well. There is no excuse: we have all the tools. We need to work together the whole time, even at weekends. The mood here is great. We don't think Tony will

quit for no reason and if we're successful he'll be happy and will help us keep our jobs.

**What are your favourite hobbies (if you have the time for hobbies)?**

*Paulo Felix, Portugal*

Many things. It's not a hobby, but fitness is part of my job now and my life. If I don't train, then I feel uncomfortable with myself. For the rest of the time I like music and now I am producing my own music too, particularly in the free time I get when I'm flying and I cannot sleep. With my computer I make a little music and that's something I enjoy.

**F1R:** Electronic music?

**KK:** Yeah, but it's not really professional: it's mainly to relax.

**F1R:** We notice that you put a lot of photos on Instagram...

**KK:** Yes, I like taking photos. I like a lot of things. Do you know the survival game? With toy guns, with magnums, shotguns... where you can go into the mountains or the fields and you go and shoot each other? This is also quite fun.

**F1R:** What do you shoot?

**KK:** It's with coloured balls.

**F1R:** Ah, you mean paintballing!

**KK:** Yes! →



"The mood here is great. We don't think Tony Fernandes will quit for no reason and if we're successful he'll be happy and help us keep our jobs"



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## What Formula 1 car from any era would you most like to have driven and why?

Alun Jones, UK

I don't know, but maybe when Michael Schumacher was winning with Ferrari in 2004. Something like that. I want to drive that car.



The car Kamui would most like to try: Michael Schumacher's Ferrari F2004

## What do you think about the look of the new 2014 cars?

Artur Matoga, Poland

Amazing. An amazing job by all the teams. I'm not a fashion designer but I think it's cool. In the beginning, everybody was shocked, but we soon got used to their look. I hope we don't lose any fans because of it – this is the most important thing.

**F1R:** A racing car needs to be beautiful.

**KK:** Exactly. Cool. Very cool.

## I heard that you will be driving for free this year. Is that true?

Magdalena Nowak, Poland

Okay, if I get some money then I'll be happy. But if I wanted money then I couldn't have got this job. So I'm happier driving than getting money.

**F1R:** Will your travel expenses be paid?

**KK:** Of course. If I had to pay all that then I would have had to go to the bank and borrow some money. Like Niki Lauda. In those times it was possible, but to go now and ask for some money – I don't think so.

## Do you think there will ever be a Japanese world champion?

Matthew Mills, Australia

Of course. Of course.

**F1R:** How soon?

**KK:** Well I would hope in Formula 1 within the next 1,000 years. At the moment there is still a

money issue in the sport – it's getting so difficult for everybody. It's only maybe Ferrari, McLaren, Mercedes, Red Bull who can win.

**F1R:** But you could be world champion given the chance?

**KK:** Yes, of course. This is my dream. I don't want to say stupid things, but I'm working towards that.

## Considering Toyota's huge budget, why were they a back-of-the-grid team?

David Thomas, UK

Ah, well. Why? There are a lot of things to say about that. But it was a new company, a new factory, so they had to build a lot of things. And at that time there were a lot of politics as well. But it wasn't just the money. Unfortunately the Japanese mentality isn't good for the political scene. I think that was really the weakest point. Finally, they improved a lot and they looked in good shape – but they ran out of time. If they started again now, I think that they would be stronger. All the Formula 1 teams now are using the old Toyota windtunnel, which just proves how good it is.

## Lewis Hamilton occasionally brings his dog Roscoe along with him to race weekends. Are you going to bring Alfred?

Mark Taylor, Canada

No, definitely not. I want to focus on my job – not think about dogs at the racetrack.

## It's great to see you back in F1, but is there anything you're going to miss about sportscars?

Ewa Kaluzny, Poland

Definitely, yes: racing at Le Mans. I really enjoyed doing that. And one day I want to go back and do it again. I was hugely excited about doing that. It was such a great experience. It didn't matter so much about the result – but to reach the chequered flag, we could say to ourselves, 'Yes, we've made it.' To finish that race is a good target. In Formula 1 it's not like that. You have to get a result.

## It's great to see you back in F1. When you score Caterham's first points will you dye your hair green?

Carl Oakes, UK

No. Tony Fernandes, yes. Or Marcus Ericsson.

## Is it true that Stefano Domenicali was not happy with your decision to leave Ferrari?

Rob McAlees, UK

Of course he's not very happy, but they made me a great offer last year and there could have been another offer for the year ahead. I have to thank them for the job opportunity they gave me, but I'm just 27 and my dream is to have more success in Formula 1. So I was just very honest with Stefano. I still want to drive in Formula 1, and although Caterham is not the strongest team on the grid, I still want to have the chance to show what I can do and this is my decision. He's not happy, but I still appreciate the support that they showed me.

## When was the last time you were really furious?

Carina Grusevska, Latvia

[Long pause] When I lost my Hublot watch... 

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# LUNCHES WITH LEGENDS

by Maurice Hamilton

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# HE'S GOT A VILLENEUVE

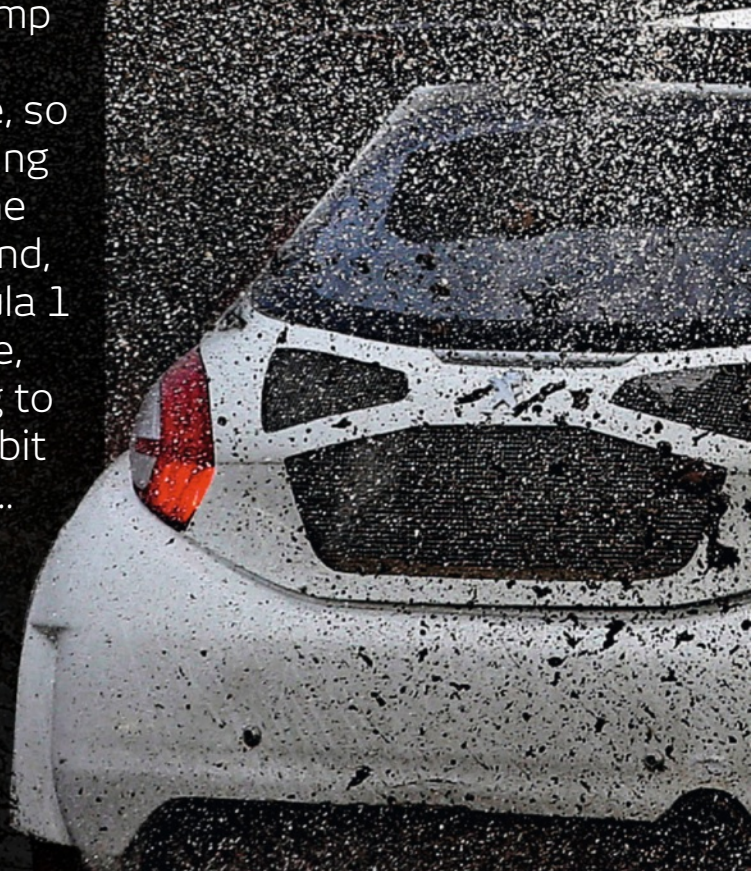
Talking shop as a TV pundit doesn't quite cut it for 1997 world champ Jacques Villeneuve, so he's heading back to the cockpit. And, like Formula 1 2014-style, he's going to be a little bit sideways...

**WORDS**

STUART  
CODLING

**PICTURES**

GLENN  
DUNBAR/LAT







**The west of Scotland in winter.** Heading south of Glasgow, battered by driving rain and howling winds. As motorway becomes dual carriageway becomes single-track road, we thread our way through a craggy hinterland of bloated

watercourses, muddy fields, rocky ridges crowned by sparse lines of trees, and villages with neat lines of pebbledashed semis. A sign at a T-junction points in two directions to Dumfries; one five miles, one five-and-a-half. Is this a riddle →





or a trick question? You take the high road and I'll take the low road...

Minutes later, the thoroughfare leads to an unassuming concrete building that could easily be a cattle shed, identified only by a pair of Albatec Racing flags, stretching and flapping in the gale. This is not quite the kind of sun-kissed, champagne-drenched Monte Carlo venue you'd expect for the 'grand reveal' of one of racing's worst-kept secrets: that an Indy 500 winner and a champion of both IndyCar and F1 will be racing in Rallycross, the FIA's newest world championship. Step into the workshop, though, and you notice that while it may not be fancy inside or out, it's clean enough to pass inspection



Tearing along a potholed muddy track, with 600bhp at your disposal. As Jacques himself says: "What's not to like?"



**"When you're actually racing, maybe sideways isn't always the quickest way... but it's fun finding the limits"**

by Ron Dennis were he ever to visit; it's actually brand new, the team having based themselves temporarily in France throughout 2013.

When younger and enveloped in the glitter of F1, Jacques Villeneuve set the benchmark for modern driver engagement in promotional work – in other words, no more than the minimum contractually obliged – and he quickly gained a reputation for being a bit, er... prickly ("petulant little arse" is how one of the sport's top photographers put it). Yet here he is, seemingly carefree, laughing and chatting casually with press and mechanics alike, with his manager and one-time BAR luminary Rick Gorne alongside – wearing a pair of sturdy green Wellington boots.

Rallycross has undergone a revolution and a rebrand over the past couple of years, gaining FIA World Championship status, and sponsorship from Monster Energy. The cars in the top 'supercar' category have turbocharged two-litre engines and four-wheel drive, and it's claimed they can do 0-60mph in around two seconds. In 2013, WRC champion Petter Solberg became the first big-name driver to join; ex-F1 pilot Mika Salo has also tested Albatec's Peugeot 208; and Villeneuve arrives courtesy of a deal brokered by series boss Martin Anayi, who placed him at Albatec because "we felt like Andy [Scott, Albatec boss] was going places".

"Jacques took... some persuading," says Scott. "He wants to win. But from day one he enjoyed himself. He just loved the feel of the car."

"It's got more than 600bhp," says Jacques with a broad grin. "What's not to like?"

Jacques has dabbled in sportscars, NASCAR and ice racing ("I also did some V8 races, but it wasn't a good experience...") since his abrupt departure from the F1 cockpit, 12 grands prix into the 2006 season. Recently he's returned to the F1 paddock as a TV pundit. And, while it's well known that he's never been short of an opinion or three, Jacques makes it pretty clear that talking about other people driving doesn't leave him entirely fulfilled.

## RALLYCROSS... WHAT'S THAT THEN?

Now an official FIA championship, it's an unruly hybrid of circuit racing and rallying that's been around for nearly 40 years. Readers of a certain age may recall our own Murray Walker commentating on it for the BBC (search for "John Button rallycross" on YouTube for footage of Muzza in trousers-on-fire mode as Jenson's dad nerfs a rival into an end-over-end shunt). Race weekends consist of a series of heats, leading to a final where the winner is crowned.

"TV commentary isn't as fun as racing," he admits. "I just love a challenge. Having raced on the ice gave me an idea of how much fun racing off-road could be. But I don't want to have the responsibility of a passenger. If a passenger is telling me how to drive, that's fine, but if it's me pushing to the limit, and something goes wrong and we crash, and I'm responsible... that crosses a line for me. That's what's kept me away from rallying."

"To race a powerful four-wheel drive car sideways in a tight pack is an exciting challenge. With FIA status, world-class sponsors are coming in, so it's very appealing. And also, Andy was very enthusiastic, very keen to work with me, which sort of flattered my ego in the right direction – I know that may sound stupid, but when you have a strong group behind you, determined to work together to be successful, you know it's a good idea."

"This is where I want to put my energy right now." He taps the table emphatically with one finger. "I still have my television work, and right now I have to juggle both. But ultimately I don't want to juggle."

So far so un-prickly. *F1 Racing* decides to test Jacques' bonhomie by asking – lightheartedly – if he'll need a translator to cope with the Dumfries accent.

"No," he laughs. "I've known DC [David Coulthard, who hails from just down the A75 in Twynholm] for many years. We're very close friends, and I've spent time with Allan [McNish, a Dumfries native] as well, so I've kind of got used to the accent. I'll be fine! Though there are a few words sometimes where I wonder... but when you've spent your life travelling, you get used to different ways of talking."

A short while later, we reconvene on a flat expanse of asphalt opposite the Dumfries & Galloway Aviation Museum – closed for winter, a patina of green mould spreading across the shells of the moribund jets scattered around

Rallycross supercars have 2-litre turbos and can do 0-60mph in two seconds. It's not F1, but it's still fast





the lot. Dog walkers emerge from the woods nearby, stare at the Peugeot 208 supercar that's ticking over beneath an awning (a firmly tied-down awning), and hurry on their way. Jacques, dressed in plain Alpinestars overalls, emerges from the Albatec race truck and strides purposefully towards the car. His hair may be a little greyer and there's a little less of it, and his demeanour is certainly less intense and more all-embracing, but some things never change – the overalls are deliberately a couple of sizes too big. He always preferred them baggy.

*F1 Racing* straps in to the passenger seat – not a standard fitting in a rallycross car but here just for the day – and off we go. Jacques hooks a gear and applies foot to throttle circumspectly, turning the car away from the trucks, bumping and burbling through rain-filled potholes. You wonder, given the state of the asphalt, whether at some point on our run we will re-enact Doctor Foster's famous puddle-related imbroglio on the road to Gloucester. Ahead, a large expanse of flat-ish former airstrip with just a pair of large barrels spaced at a wide interval.

"They reckon this is almost as fast as an F1 car to 60mph, Jacques. What do you think?"

By way of reply he stands on the accelerator and the car shoots forwards in a bladder-tightening burst of acceleration, turbo whistle competing with the engine's roar, stray stones clattering against the bare floor. It is, as promised, very quick. The end of the strip, bordered by trees, looms in our vision with undue haste. Jacques stands on the brake, bangs down a couple of gears, turns sharp right and plants his foot on the throttle again. Like an old-style WRC car on full chat, the Peugeot describes a perfect arc around one of the barrels while pawing at the surface with all four wheels, throwing up gallons of spray.

Back towards the race truck. Now we're done turning corners – he throws it into a Vettel-style donut, looping on the spot, the horizon gently scrolling from right to left on a constant loop, turbo now alternately screaming and chirruping. Is it supposed to sound like this?

Turns out, it isn't. Back to the truck, slower now. Smoke curls from beneath the bonnet.

"Better get out," he advises. "It might set on fire."

As it transpires, a clip has fallen off and the turbo is overboosting. A search party is despatched to locate the errant part, not so much to replace it but to ensure that the car doesn't run over it later. The 208, now filthy and splattered with mud, is pushed into bonnet-up repose beneath the awning once more. But in spite of the early termination of his fun, Jacques is still smiling.

"Okay, so when you're actually racing, maybe sideways isn't always the quickest way... but it's fun finding the limits."

Could be that the slightly lo-fi nature of Rallycross will suit him – as a championship it promises racing that's rough around the edges, slightly elbows-out, but with less commercial pressure and media scrutiny than has attended his post-IndyCar career. Comparisons with his father used to infuriate him; now he's old enough to be his own man. But he's still a big name – which could make him a target on track.

"Great! That happened in NASCAR and the same thing happened when I got on the ice. But

I'm not the only name in there. Why gang up on me? They can gang up on each other..."

Another glimpse of feisty mid-90s Jacques, the man who overtook Michael Schumacher round the outside of the final corner at Estoril in a move everyone said couldn't be done. He may have mellowed a little off-track, but you feel that the competitive urge, the devil-may-care attitude, and (most importantly) the pedal-to-the-metal style are the same as ever. And then – rocked by a sudden blast of wind – he chuckles, pulls on his woolly hat, casts a rueful glance at the sullen sky, excuses himself and slopes off to the warmth of the truck. **F1**





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# The Lion King

The grandest of Formula 1's grandees, Luca Di Montezemolo rarely grants a media audience. So when he does, you listen...

WORDS ANTHONY ROWLINSON

**One by one** the Grand Old Beasts have gone. Mosley, Briatore, most recently Brawn. Todt went to the FIA, Dennis was kicked upstairs (though what a comeback!), Richards, Stoddart, Sauber... paddock grandees all, moved from the sporting jungle in which they once thrived.

But not all of them left the field. One of their number – greyer now, though still leonine in grandeur, vulpine in ruthless intent – stayed the course. He was there as the sport emerged from the 'killer years', becoming Ferrari team manager in 1974; and he was a key architect of both its great periods of success: the mid- to late-70s and the late-90s-early-00s Schumi-superteam era.

Luca Cordero Di Montezemolo, 66, is that man and, today, as Ferrari chairman, he retains the

scalpel-sharp insights that made him one of Enzo Ferrari's most astute hires, back in 1972.

"This is the 23rd year of my presence as a chairman," he notes, "and sometimes I look back – I prefer to look ahead – and I cannot believe that since I've been chairman we have won 118 races and six drivers' championships. Five with Michael and one with Kimi."

He doesn't mention the titles with Lauda and Scheckter. He leaves unspoken the link back to the Old Man. Di Montezemolo is not a Ferrari, but in word and deed, he is Ferrari, so more influential a man in F1 spheres than anyone save Bernie Ecclestone. When he speaks, he commands attention – all the more so when he starts on this year's Ferrari driver pairing...

"Our decision to hire Kimi was [based on] one reason: we prefer to have a young, quick driver with a lot of experience. With the new rules we need a driver with a lot of speed. And how drivers will handle the races in 2014 will be extremely complicated, so we need a cold, experienced approach."

"The second reason is that since [Stefano] Domenicali started to talk with Kimi, he told me how motivated, how concentrated he was to come back to Maranello."

Di Montezemolo is addressing *F1R* within a small media huddle, so circumstances don't allow mention of the acrimony that surrounded Räikkönen's departure at the end of 2009. Or Kimi's inability to follow express Ferrari →





orders always to carry a phone – never to be switched off – kept for the sole purpose of taking calls from the chairman.

That was then. This is 2014 – a season that promises challenges on every front, thus demanding strength in every facet of operation, including drivers, even if it means internal friction as ego sparks ego.

“In Formula 1, two guys equally together is potentially dangerous,” says Di Montezemolo, “and Domenicali has spoken clearly to both of them. They have the honour and the responsibility to drive for Ferrari. Each driver knows that he doesn’t drive for himself, but for the team. I think Fernando drives not for himself, but for Ferrari. If any driver wants to drive for himself, there are possibilities to do so. But in Ferrari, these are the rules and it is very clear, without any problems.”

Quite how ‘clear’ and ‘free of problems’, we will see. For now, Di Montezemolo is content simply to relish the prospect of having secured two top guns: “The presence of Kimi will be important and useful to not leave Fernando



“Kimi and Fernando have the honour to drive for Ferrari. Each knows he doesn’t drive for himself, but for the team”

alone at the front from the first lap,” he says. “He has experience, responsibility and particularly in the races, Kimi is very strong. He’ll be able to get points off others – even Fernando – to get points for the team. And he’s a very correct guy. Since he has been with us there has not been even one moment of problems. I am pleased to have two drivers who are in the right condition to win. I want two drivers who will respect each other.”

Could their pairing *really* be “dangerous”, he ponders, or will Kimi vs Fernando add “pepper to the food”? “Danger”, as Di Montezemolo recalls it, has an altogether darker shade...

“When I read articles about things, maybe they [the journalists] haven’t seen what I’ve seen...

Many drivers killed, maimed, by fire or the guardrail, by technical failures – I understand how old I am in Formula 1.”

It’s a chastening perspective for modern F1 media hounds, so keen to create drama and crisis, where once real news, painful human tragedies, ran through the sport. And, keen to dampen any last embers of controversy from the much-publicised 2013

spat between him and Alonso, after Fernando’s barb that he’d like “someone else’s car” for his birthday, Di Montezemolo offers this: “In Fernando I have a driver I have huge respect for,” he says, “and I need to thank him for what he’s done in these past years for Ferrari. Pushing and doing well. He did another strong season in 2013 and his main merit was to finish with not the strongest car in the second half of the season. He has sometimes been frustrated by not having a car to win and I understand that, so now it’s the right time to work together. It’s easier to do that when we win. Remember, even with Michael, the first four seasons we didn’t win the title. Only once in Jerez were we close.” →

PHOTOS: GLENN DUNBAR/LAT; ANDREW FERRARO/LAT; CLIVE MASON/GETTY IMAGES



# Di Montezemolo: Enzo's heir



A young Di Montezemolo (left) as Ferrari team manager at a Goodyear press conference with Enzo Ferrari (far right)

## Italian journalist **Pino Allievi** traces the rise and rise of a consummate political animal

**Forty-one years.** That's the period of time Luca Di Montezemolo has spent at the heart of Ferrari – albeit with a few interruptions – becoming, in the process, one of the most enduring top managers within a very exclusive club, whose resonance is felt worldwide.

Di Montezemolo started off as Enzo Ferrari's assistant, then became sporting director, remaining as a special consultant even when engaged with other activities. He was finally made chairman in 1991, a post he seems likely to hold for the considerable future.

From the glory years of Lauda to the extended reign of Michael Schumacher (plus Räikkönen's title, too), Di Montezemolo's Ferrari has brought joy to Italy during its booming economic years in the same way that it consoled the country when Italy felt the first signs of financial meltdown.

Di Montezemolo and Ferrari both managed to nurture each other's myth. It's no coincidence that *Brand Finance* has judged Ferrari to be the world's strongest brand for a number of years – and this year it has given the Italian constructors the top spot once more, in front of names like Google and Coca-Cola. Equally, the credibility that Di Montezemolo has forged for himself

in the world of business and finance is also down to the success of Ferrari on the world's race circuits.

While president of Ferrari, Di Montezemolo has been appointed to other senior executive positions at various points. Such as his chairmanship of Fiat, or Confindustria (the association of Italian industries), Maserati, the LUISS University in Rome, NTV (a private train line in Italy), The Bologna Exhibition Centre, as well as the vice chairmanship of Unicredit. Previously, he was president of Cinzano, RCS Video, the Italian federation of newspaper editors, and famously Italia '90 – Italy's turn at hosting the FIFA World Cup.

He creates synergies around him and has proved to be a sharp political mover, having founded a think-tank called Italia Futura, which profited from the collapse of Berlusconi to produce ministers and influential opinions at a time when Italy faced an uncertain future.

The relationship with Ferrari began in 1972, when Enzo Ferrari decided he wanted to get to know the young law graduate who had appeared in a motorsport radio commentary. Di Montezemolo was already well connected, having taken part in rallies with Cristiano Rattazzi, the son of Susanna Agnelli,

who was Fiat supremo Gianni Agnelli's sister. Di Montezemolo's introduction to the Agnelli dynasty developed into a close relationship over the years, with Luca treated almost as a son. So when Agnelli died, it was the family themselves who chose Luca as his heir.

Enzo Ferrari, who kept a very close eye on everything going on with the movers and shakers in Turin, gave his new employee particular attention straight away. It was the beginning of the 1970s. Montezemolo built the remainder of his reputation himself, thanks to his brilliant negotiation skills, uncanny ability to second-guess the psychology of his interlocutors and deep understanding of the mechanisms of communications.

None of the big bosses in F1 can communicate as well as him, hence nobody can enhance a brand image in the same way. This ability has helped establish Ferrari as a global product of excellence; something that is truly distinct. Di Montezemolo is an able and determined man, who has skilfully dodged the bullets of those who have tried to replace him over the years – not just at Ferrari.

His inner strength stems from the battles he has won both on and off the track. And this strength lets him press on with serenity, ready to break the record for managerial longevity of another phenomenon with whom he has not always enjoyed a loving and peaceful relationship: Bernie Ecclestone.



Enzo Ferrari overseeing testing of a new Ferrari at Monza in 1966 (left) and heir, Di Montezemolo, at qualifying for the Italian GP at Monza in 2013 (right)



PHOTOS: MARK THOMPSON/GETTY IMAGES; GETTY IMAGES; SUTTON IMAGES





## OFF TO A FLYING START

8:12

**▶ What a start to the season! New faces, new sounds, new engines, new rules, reliability issues, no points for Red Bull, and a rookie on the podium – the Australian GP lived up to the hype.**

*The Racer's Edge* brought you all the news from Melbourne, including an exclusive interview with Lewis Hamilton, in which he revealed how his new fitness regime has left him hungry for success. News hounds Stuart Codling and Edd Straw reported

from the paddock, while host Peter Windsor and special guest Rob Wilson dissected each driver's performance.

There are multiple episodes each week, so stay tuned to *The Racer's Edge* for analysis of all the key issues in this fascinating new era for F1.

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With in-season testing restricted, testing at Ferrari's own Fiorano track (right and below) is a thing of the past, with the focus, much to Di Montezemolo's chagrin, now on the windtunnel (below right)



A bit *too* close, some might argue, but let's not linger on that infamous Schumi-Villeneuve scuffle. Let's dig deeper into the world-view of a man powerful enough to shape F1, not just observe it. Let's get him talking about a known Ferrari bugbear, namely the sport's increasing inclination towards non-track development: windtunnels, CFD, simulators and the like.

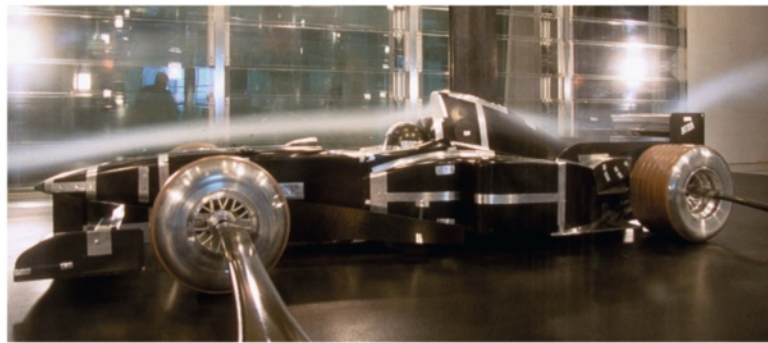
"Kimi," he declares, with a shudder of distaste, "has been busy since the beginning of January in this... strange machine that I don't like at all – the simulator."

The brow has furrowed, his lips tightened, and for a moment he offers a glimpse of how unpleasant it must be to incur his wrath, or even displeasure.

"It's a joke," he continues.

"We've been told to invest a huge amount of money in this terrible machine. It's artificial. Instead of being able to test here [at Ferrari's test track, Fiorano] and at Mugello. If someone has money to test – it's better to go and race in GP2."

Ferrari's cultural heritage is infused with track testing and only a fool (or one of ten rival teams not blessed with their own private test track) would try to deny The Scuderia's proud beliefs on this topic. Because not so much has changed since Enzo's day, when flat-12-engined scarlet racers would roll softly past the front door of the converted farmhouse the Old Man made his office, headed straight for Fiorano.



"We are forced to invest money into our windtunnel and simulator, which is artificial. I like asphalt"

Built in 1972, Fiorano pre-dates, just, Di Montezemolo's era and it's as storied a place as it is useful – were testing to be de-restricted.

"Being frank," Di Montezemolo admits, "our know-how as a car manufacturer, as a team and an Italian company, is not in the aerodynamics but in the mechanics. Ferrari culture is in gearboxes and suspension. We came with a low experience and know-how from the simulator because our culture, our attitude, our history, as with our road cars, is about asphalt."

Di Montezemolo denies romanticism clouds his view, insisting that track testing is closer to the sport's essence than development by data.

"Don't think I'm conservative and old in an inactive way," he asserts. "We are forced to invest money into our windtunnel and simulator, which is artificial and not good for the young driver, or the public. It is... a cold place. I like asphalt. It's ridiculous we're not allowed to test. And we spend millions on aerodynamics, which we cannot transfer in any way to my road cars."

"I want to test to first of all give new drivers the possibility to drive our cars and to get that experience. And to give more experience to the public and a good opportunity to the sponsors. I don't want Formula 1 to become something equalised at a low level. This is competition."

Competition, but cost, too. And even for a team whose

road car division turns record profits, in these straitened times sluicing money into hybrid engine technology *hurts*.

"With the new engines there is unbelievable investment," Di Montezemolo avers, "and cost in F1 is a major problem. In the last years we have been in too many directions. Starting with the budget cap where you're not allowed to spend any more – it's difficult to adjust to the same level for everybody. For example, we have to produce engines, so we can't have the same cost cap as Red Bull or Williams. So when we say we have to save costs, we also have to build our own windtunnel and fund time in it. →



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"We had great racing in the 1990s without high costs, so we need to be realistic and think of things that do not favour one team over another, for example: less windtunnel time; or a smaller number of pieces that we have to build or develop; or not being allowed to make modifications of the car throughout the season."

"Something credible" is needed, he says, such as a cap of €200m per team, per season. "Then, if I want to test twice a day at Fiorano, that is my problem, maybe I have less money to spend on something else. We have to achieve a goal."

Speaking, as we are, to a man of influence within and beyond his sport, it's inevitable that talk broadens into questions about its future direction. Is F1 well led, we ask, with Bernie Ecclestone still legally ensnared? And where is it headed?

Mention of Bernie amuses Di Montezemolo, his sharp features softening as he thinks of a peer whose story is so closely entwined with his own.

"Bernie is Bernie," he says, "with a lot of pluses and minuses, as all of us have. I hope for him that he can stay for a long time, but this is not a 'today' problem. After Bernie it is going to be unique and it will be necessary to approach a different governance."

So many questions, in Di Montezemolo's view, will have to be addressed differently: "Commercial problems, TV rights, racing in the right places

– racing with no public is a problem. Indeed what kind of a relationship do we have with the public? What decision do we take with new technology? What do we do to improve the show and to encourage young people to watch? They enjoy cars less and F1 less than they used to."

His answer is both precise and cautious; wide-ranging but calculated. And on one point he is specific: "I will never say that instead of Bernie we will have Luca Di Montezemolo. We need a group of governance. A CEO and one person in the group who is in charge of motor racing. Then we can work with the rules, the teams, the FIA and all the different voices. Every sport can



**Di Montezemolo with Bernie Ecclestone (left). Despite being tipped as a potential Bernie successor, Di Montezemolo does not see this as a viable solution and has already brushed off Bernie's own suggestion that Christian Horner (below) could fulfill that role as "a joke"**



**"I will never say that instead of Bernie we will have Luca Di Montezemolo. We need a group of governance"**

survive with a good balance between audience figures and television viewers."

His comments on succession are all the more apposite given the 'events' surrounding Ecclestone. Yet, perhaps out of respect for a fellow 'big beast', he declines the opportunity to inflict a blow of his own.



**Di Montezemolo confirms that Robert Kubica ("a real fighter") was in line for a 2012 Ferrari drive**

"For many reasons Bernie is not in the best moment of his life," he notes, with arch diplomacy. "And when a person is less strong, it's easy to attack. CVC is an investment company. And they will sooner or later give up the money and sell. Bernie is the only one inside that group who has credibility, knowledge and know-how about Formula 1. The other people try

to maximise their best, but they will one day sell the business. I have nothing against Mr... er, the guy at Red Bull...? Horner. But this is not just about managers, we need someone who knows about money, television, commercial aspects, marketing. We might need not one person, but a group of experts who know their different fields."

With that, our time is up, save a final, what-might-have-been about Robert Kubica and the rumour that for 2012 he'd have raced in rosso.

"I like him, he's a real fighter," Di Montezemolo reflects, with clear regret. "He's still fighting at the top. Unfortunately these things happen. But we were *very* close to signing an agreement..."



"I'm a lot more outspoken now because I have nothing to lose. I live well with that because I did a decent job. The people whose respect means something to me, they respect me"

Since losing his job as F1 medical delegate in 2012, the vocal **Dr Gary Hartstein** is still pushing for safety reform in the sport, as he tells Maurice Hamilton over lunch

PORTRAITS ANDREW FERRARO/LAT

**A**ppropriately, Dr Gary Hartstein and I have arranged to meet in Murray's at Northamptonshire's Whittlebury Hall – a restaurant that pays homage to commentator Murray Walker. Gary may be the clinical professor of anaesthesia and emergency medicine at Liege University Hospital, but he can also talk with massive enthusiasm about motorsport.

Having worked alongside the late Professor Sid Watkins, Hartstein became F1 medical delegate when the legendary 'Prof' retired in 2005. Hartstein, a New Yorker fizzing with energy, played a key role in developing many of the FIA's medical and safety policies before his contract was terminated unexpectedly at the end of 2012.

He's joined me from nearby Silverstone, where he's been delivering a lecture on chest injury as part of an Advanced Trauma Life Support course. As Murray Walker might say: "My goodness! This should be absolutely fascinating!"

**Maurice Hamilton:** Since Michael Schumacher's accident, your media presence has been quite high. People don't understand a lot about head injury even though, in your world, it's common.



**Dr Gary Hartstein:** It is. I want people to understand a lot of what's going on because it's a real roller-coaster ride for everybody; the more you understand, the more you appreciate that.

**MH:** With head injury, is it fair to assume that no two injuries are the same: they can be vastly different, but you can't tell initially?

**GH:** Absolutely. You take the thought experiment of '100 Michaels' – same velocity, same angle, same accident – and you won't have 100 reproducible outcomes. As time moves on, the future becomes clearer.

**MH:** Have head injuries and concussions become something motorsport should be thinking about more than before?

**GH:** Professor Sid Watkins was a neurosurgeon and when I came on board, we started talking about concussion early on. One of the things Sid did was establish contact with the guys in the States; Dr Terry Trammell, Dr Steve Olvey and Dr Hank Bock. Steve, as a neurointensivist, was already on this and he opened our eyes. We'd been doing pre-season testing of drivers' neuro-cognitive function with a computerised base...

**MH:** What does that mean?

**GH:** You test reaction time, perseverance, verbal memory and spatial memory – parameters that are known to suffer in a concussed patient. You're establishing a baseline. It's in the regs that if any of these guys get a knock on the head, or any time the medical folk feel it's appropriate, they have to take another test. When Robert Kubica didn't drive the week after his crash in Montréal 2007, that was because one of those parameters was off. Otherwise, clinically, he was remarkably good – and he wanted to drive.

**MH:** I'm always amazed by a driver's ability to multitask at 180mph.

**GH:** It's astonishing. When people ask what makes a great racer, they talk about reaction time. I don't think their reaction times, excellent →









Robert Kubica's 180mph crash at Canada 2007 (top). Although unhurt, he was medically required to sit out the next race in the US (above)

though they may be, are better than those of other athletes. But on a physical level, they have tremendous ability to change focus with their eyes rapidly. I think their ocular muscles are incredibly strong. There's the concentration, too. Did you ever go in the two-seater F1 car?

**MH:** I did; with Martin Brundle and, on another memorable occasion, Jean Alesi, both around Yas Marina in Abu Dhabi.

**GH:** Could you do it for an hour and 45 minutes?

**MH:** No way. I did about six laps each time and what struck me was how exhausted I was just sitting there, bracing myself. I'd get out of the car, drained. Alright, they're fit and I wasn't, but...

**GH:** That's a huge factor. You've hit the nail on the head, but I don't have parameters for that. Their information-processing is phenomenal but I think that, say, a Eurofighter pilot is the

same. He's tracking three-dimensional targets, controlling the aeroplane, selecting weapons and pulling 6G. So I don't think drivers are demi-gods, but their information-processing sets them apart. Then you get into the more human factors. The great champions have been extremely intelligent men; they're not just racers.

**MH:** Every world champion? Would you include, say, Michael Schumacher?

**GH:** Yes, I would. He's not a guy with book knowledge but he'd immediately understand the essence of an argument and ask the right question. Phenomenally intelligent. He's an extraordinary leader, which has nothing to do with his driving. I saw incidents where people at Ferrari would take a bullet for that guy. They were like soldiers; it was extraordinary.

**MH:** Let's return to Michael's accident. From a professional standpoint, when you heard the news, what were you thinking at various stages?

**GH:** I thought: 'Something very bad's happening here, the way news is dribbling out.' Then I heard he was at Grenoble Hospital and I knew it was bad. He was in a coma, but they were talking about a medically induced coma. It's a question that revolves around terms that ought not be used because they don't indicate the situation. That's why I've not used the term 'medically-induced coma'. Any seriously head-injured patient will be anaesthetised.

**MH:** Which is your field.

**GH:** It is. It's figurative; when you're asleep, I can wake you up. When you're anaesthetised, I can't wake you up. There are big differences between sleep and anaesthesia. Using conventional language, you have to put him to sleep to control ventilation, control the airways and get him into the scan to see what's going on in his head.

What happens in subsequent stages is that the depth of that anaesthetic can be dramatically increased if necessary to calm the patient down so he's consuming as little oxygen as possible and keeping as much as possible for the brain. But you can deepen that significantly if ICP

[inter-cranial pressure] becomes a problem, to the point where all the brain is doing is just maintaining. You let the cells do nothing; they don't have to bother with sending impulses and so on. That way, everything can be used for cellular maintenance and ICP tends to come down when that happens.

**MH:** Is the brain so complex that it's hard to predict what will happen as there's so much going on up there? Excuse my broad terminology.

**GH:** That's fine, but you will excuse my standard answer to that question. Take a Coke machine; drop it on that rock from an equivalent height and if I put in my quarter – I'm showing my age – I wouldn't bet on a Coke popping out.

The brain has as many connections as there are stars in the universe; it's trillion and trillions. So you want to hope that this thing will put itself back together. It's like the sat-nav in your car. You start your engine and say I'm going here; the sat-nav says you'll get there at three o'clock. That's ballpark because it's making some statistical assumptions: on this road you'll go this fast, then on that road you'll be doing that speed. But as you get closer, the prediction gets more accurate. In those intermediate stages, we're funnelling down to an outcome. But that outcome won't be clear for quite some time.

**MH:** That's a very good analogy.

**GH:** I didn't think of that until now... I talk to myself. Some people sing in the shower – I talk!

**MH:** I remember Prof telling me that the brain is such an extraordinary piece of equipment. Was he one of the best brain surgeons you've met?

**GH:** That man was properly in awe of the human brain. I've heard lots of very good neurosurgeons speak very highly of Sid's technical ability, but I never operated with him.

**MH:** I suppose you could tell a lot from the many conversations the pair of you had over the years. When you talk to somebody about motorsport, you can quickly tell whether or not they truly understand and love it. Is it the same when medical people sit down and chat?

"After Michael's accident I thought: 'Something very bad's happening here, the way news is dribbling out'"







Support from Ferrari and fans (including Lewis Hamilton, above) for Michael Schumacher in the aftermath of his December 2013 skiing accident

**GH:** Well, yes. But the club you're talking about depends on how you're looking at the picture. For example, I've always noticed the way Martin Brundle talks to Seb Vettel. There's a way drivers speak to each other that no one else can replicate, even if they're not talking about driving.

I've always noticed that about surgeons. Even when they're not talking about medicine, they are members of a club. The fraternity Sid and I belonged to is the fraternity of motorsport doctors. We talked about medicine and, from the beginning, from 1990, I thought: 'Damn, this guy's alright.' He was just on it, and he also knew what was going on in a wider sense.

**MH:** Your reference to Martin is interesting. I've always assumed it's not that he knows what to say to the drivers, it's that they accept it's alright for *him* to talk to them because he knows what he's on about. He's not some journalist who's never had his bum in a racing car.

**GH:** Absolutely.

**MH:** You're an anaesthetist. I hadn't realised how tricky it is to apply your trade; I remember you telling me once how the body is as close to death as it's ever going to be when under anaesthetic. I was quite startled by that.

**GH:** The goal of most anaesthetics is to prevent the brain from perceiving something unpleasant. Usually that's surgery, and one of the ways we do that is by suppressing consciousness and awareness to the point where the patient is



unrousable. But this requires manipulating drugs that are phenomenally powerful.

**MH:** That's a hell of a responsibility.

**GH:** Yes, but most happy anaesthetists I know don't walk around with that weight on their shoulders. Those who do, they're stressed and they're less happy in their lives. What we've seen for ten years or so now – and it's something we never saw before – is that in each year of new trainees, one or two stop because of stress.

**MH:** How come, as a trainee, you ended up in a medical school in Liege?

**GH:** Well I partied my way through university in the States. I went to University of Rochester, upstate New York, then moved to Belgium.

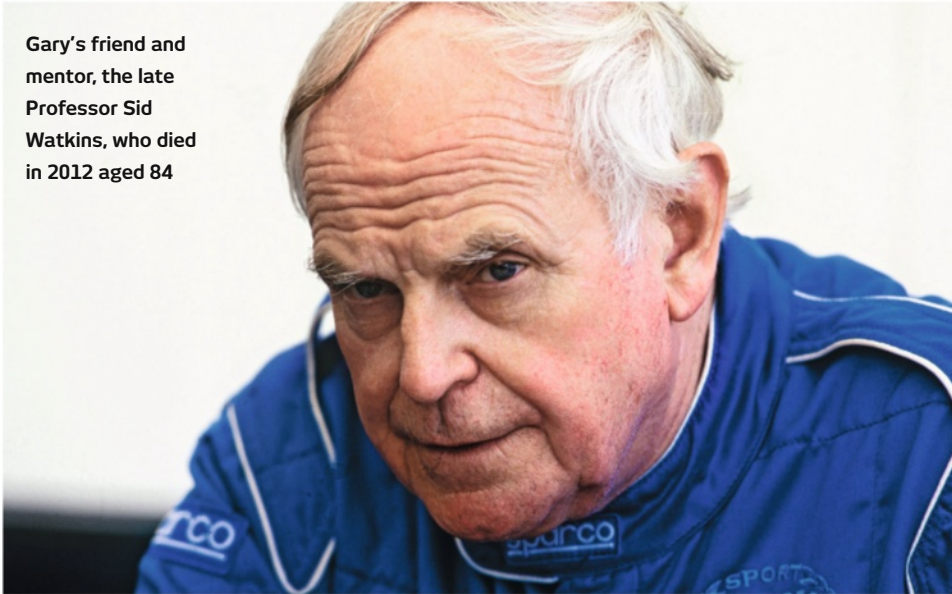
**MH:** To get closer to F1? Where did the love for motorsport come from?

**GH:** When I was a kid, we had network TV and every Saturday was ABC's *Wide World of Sports*. I was the most un-athletic human. I couldn't swing a bat. I certainly couldn't hit a ball. ABC had tons of motorsport. We're talking about the golden days of NASCAR and Indy. I remember watching the Monaco GP and Le Mans, too. →

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Gary's friend and  
mentor, the late  
Professor Sid  
Watkins, who died  
in 2012 aged 84



INSET: LAT ARCHIVE



"Sid knew about everything  
– not just medicine, but life.  
An extraordinary person"

**MH:** I watched on YouTube the interview you did with Mario Muth, and you talk about being in Liege and realising, with Spa just down the road, that there had to be doctors there. Were you drawn by a mixture of doctoring and the sport?

**GH:** I wasn't drawn by the idea of rendering great care at the circuit, because that would imply that people had been injured. I was going there because they would open the gates of the circuit for me and sit me in a car from where I would watch the race. I was fully ready to deal with anything, but, to be honest, I wasn't going there to roll up my sleeves.

**MH:** This eventually got you into F1. You couldn't have had a better teacher than Sid. I was touched by the fact that, on the video, you said you would often turn to him for advice rather than, say, your father – which is quite an admission.

**GH:** It was an immense privilege to have been so close to Sid. He knew about everything – not just medicine, but life. An extraordinary person.

**MH:** So you had your motorsport internship with Sid, learning the trade. Then he retires and you assume his role. But you knew what was involved because you'd seen it and done it.

**GH:** I didn't get involved unless Sid wanted me involved. It was very delicate being Sid's assistant because his job was so coveted by everyone who was a doctor and a motorsport fan. I never wanted Sid to think that our friendship had to do with my interest in that. So I really never thought about it. But, yes, it's a huge job.

**MH:** How much responsibility did you have for the medical guys at the track and their competency? Whose concern was that?

**GH:** In terms of ultimate responsibility, medical care at the circuit is based on the local team. It's problematic when you come to new circuits in countries without a long motorsport history, and they don't do pre-hospital medicine. Remember, a doctor goes out on the streets to fetch accident victims on the helicopter or on rescue units. Motor racing is the same thing. The course I've been teaching here at Silverstone starts when the patient comes into the emergency department. So there's a whole phase between the accident and the emergency department that the course doesn't specifically teach.

**MH:** You're talking about stabilisation at the scene of the shunt?

**GH:** Yes, trackside. How much do you do? What do you do? Kubica's 2007 accident happened at the opposite end of the circuit to where the Medical Car was stationed. The accident was 50 yards from a rescue unit, but in Canada they're competent guys; they got on with it. When I got there, all I did was get the ambulance ready for Robert because the guys were doing everything needed. The medical car driver, former racer Alan van der Merwe, put the car in the right place because he does that; he's a smart guy.

**MH:** What would 'the right place' be on an occasion like that?

**GH:** It depends on the configuration of the circuit and where the Safety Car is going to lead the F1 cars through the scene. We want to be out of the way, ideally part of the barrage of vehicles protecting the accident from anybody who moves, because the F1 cars will be weaving like

crazy. If one of them loses it, you want them to hit one of the cars – not the intervention people.

**MH:** Following the field off the grid in the medical car, how hard was it to assess what was going on at a crash scene on, say, the first corner? You've got to be quick deciding whether to stop, because if you hang on and there's no Safety Car, the leaders are on you in no time.


**GH:** Exactly. Charlie Whiting tells the drivers regularly: "If you're going to talk to your team saying 'I've spun; that bastard hit me,' whatever you're doing, just put your thumb up for the medical car." If I saw a thumb go up or the steering wheel come out, I'd know it was nothing significant. The driver could have a broken wrist, or a broken ankle. I wouldn't stop for that.

But drivers forget the idea of the thumbs up in the heat of the moment. We're waiting: 'Is it okay? Is it okay?' If there's no detectable or appropriate activity, then it's like: 'Goddammit, I have to get out.' I don't like getting out of the car, because the longer we're out there, the more likely it is a Safety Car will have to come out, just for us. I don't mind being part of the circus – but I don't want to be part of the race. ➔





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**MH:** When you took over from Sid, all the structures were in place through his good work. You set about refining and improving them and produced an incredibly impressive manual.

**GH:** It's a good book with a lot of good authors. I put the idea to Max Mosley and he said: 'Do it.'

**MH:** You got all the right people to contribute to it and talk about their various roles. But then nothing came of it. How far had you got?

**GH:** All the photos, the figures and diagrams; all the text was done – and nothing happened for a long time. I don't know what was going on. Every time I brought it up, I didn't get answers.

**MH:** Is it too blunt to say that, when you finally were eased out at the end of 2012, your face didn't fit? You are quite outspoken, aren't you?

**GH:** Yes, for sure. And I'm a lot more outspoken now because I have nothing to lose. I can live well with that because I did a decent job. The

people whose respect means something to me, they respect me. So I'm fine with that. What concerns me more is that it doesn't look as if things will move ahead the way they moved ahead in the past. Pulling the driver's feet behind the front axle cost nothing and saved careers. And fire... that doesn't happen any more. But huge advances like that are not happening now.

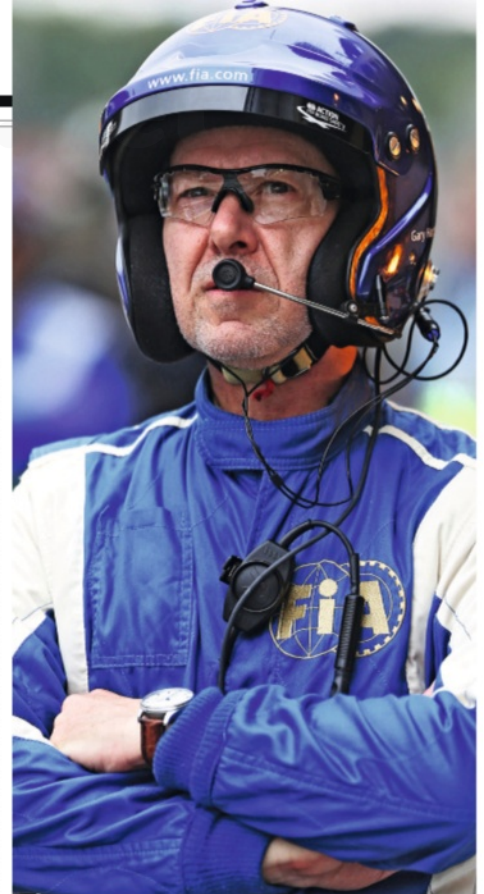
**MH:** If you were there today, what piece of legislation would you bring in on the medical and safety side of things?

**GH:** The goal would be to know the safest closed cockpit and the safest open cockpit. What are the dimensions, what are the materials, what is the best way to build things to avoid all the bad stuff that happens? So, you arrive at these ideal cockpits. You say to every series in racing: 'This is the cockpit you're building into your car. Now go design the car around that.'

"At Suzuka, you realise if this goes pear-shaped, you're dead. I'm sure that's why the drivers like it more"



Medics arrive at the scene of the first-corner pile-up at Spa 2012. Says Hartstein: "I don't like getting out of the car because the longer we're out there, the more likely it is a Safety Car has to come out"




Dr Gary Hartstein on call at his final race as F1 medical delegate: the 2012 Brazilian Grand Prix

**MH:** Despite improvements with crash helmets, the HANS device and all the rest of it, is the main worry trying to protect the head? There are so many pros and cons about an enclosed cockpit. Access to the driver has got to be vital, surely?

**GH:** Absolutely. But then there is the question of an open-wheel car with an open cockpit and an open-wheel car with a closed cockpit. How does it look? Is it F1? Does that question even matter?

**MH:** It's a fine line between ultimate protection and the sport itself and what it should look like. Is that what we're saying in very simple terms?

**GH:** Yes, and I am not one to say it's more exciting because it's more dangerous. But go round a circuit like Turkey. It's a thrilling track. Then go round Suzuka and it's: 'Grab hold and don't breathe for three minutes.' Turkey is great fun. But, at Suzuka, you realise if this goes pear-shaped, you're dead. I'm sure that's why the drivers like it more. It's a hairy place; terrible in some respects, but more thrilling than any other.

**MH:** We're getting to the question of why a driver does this. It's because he wants the buzz you don't get from walking the street and driving a road car. It's something special, but it needs to be kept within reason. It's been fascinating hearing about your work in trying to keep motorsport safety within that area of reason. Thank you. 

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## Nico wins at a canter

The pre-season hype surrounding Mercedes turns out to be spot-on, as Rosberg takes a comfortable win in Melbourne. The other teams have their work cut out...

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# RACE DEBRIEF

by Stuart Codling

## Australian Grand Prix

16.03.2014 / Albert Park



# Brave new world

A new season ushers in a new era of Formula 1. And the results are far from predictable...

**For the opening race** of a new regime, the Australian Grand Prix felt strangely like stepping back into a bygone age. The 2007 season, in fact: an exciting new rookie announcing himself with an assured podium finish; McLaren's classified second and third in the first race; Ron Dennis never far from the narrative; a post-race tussle over a fuel issue; and simmering rancour between a leading team and the governing body.

On the podium, for the finishing order that was beamed live worldwide, winner Nico Rosberg and second-placed Daniel Ricciardo finished neck-and-neck in a smile-off, with the usually impassive Kevin Magnussen cantering home a beaming third. Each had compelling reasons to smile. But in the paddock, recently returned McLaren supremo Dennis was more... nuanced in his take on proceedings.

"The team was very structured, very focused," he told reporters packed into the tight confines of McLaren's hospitality cabin, his face not exactly

aligned in a rictus of unbridled joy. "But we're not here to come third, we're here to win."

Magnussen saw it slightly differently: "It's not a win, but it feels like a win." Perception, they say, is everything in Formula 1.

No one knew quite what to expect from Melbourne, for the new rules – downsized hybrid power units, 100kg fuel limit and hook-nosed aero – had swept away established form in favour of a Rumsfeldian tangle of known unknowns and unknown unknowns.

So on Sunday – relief. A race took place. And, while it was not particularly rich in tactical variety or incident, it didn't validate any of the pre-season fears that fans would not be able to make sense of what was happening, or that fuel-saving would harm the spectacle and promote what Ferrari president Luca Di Montezemolo called "taxi-cab racing". F1 had not disgraced itself. Then came the news that Ricciardo's Red Bull was under investigation for a fuel flow

irregularity, followed by an unedifyingly long wait – shades of Brazil 2007 – for a final result.

The race finally got under way after a technical glitch on Jules Bianchi's Marussia caused the first start to be aborted. Pipped by both Lewis Hamilton and Ricciardo in qualifying, Rosberg shot from third to seize the lead at the first corner and was never headed thereafter. Polesitter Hamilton was slower off the mark, but so was Ricciardo – having reported to the team that his RB10 was bogging down from a standing start.

Ricciardo laid down a marker, firmly closing Hamilton out at Turn 1 to run second. By the end of the lap Hamilton was fourth, demoted by Magnussen, who had already made his one error of the race by applying too much throttle at the start, sending his McLaren into a violent twitch.

That was the order at the front set for the entire race. Hamilton would play no further part, his engine already running on just five of its six cylinders. After receiving some mixed signals



from the pitwall, he retired on the third lap. And Sebastian Vettel? Also cruising into the garage in a flurry of confused radio messages – “This is ridiculous, guys” – having started 12th and gone back. A software update had been applied to his Renault power unit on Friday evening and, as smartphone owners the world over have often found, software updates can be a mixed blessing.

New rules, new world order. Up front, we had Rosberg exerting his mental faculties in combination with a dominant technical package to manage the race perfectly: “We’d like minus 0.5 on the delta time. We need to pull a gap to Ricciardo and then we’ll be happy,” said race engineer Tony Ross on the radio, with the ease of a man ordering a cappuccino – no need to shout over the muted blare of a 2014 V6 – and Rosberg obliged. Ricciardo is a newcomer to the sharp end of proceedings and this was Magnussen’s first grand prix, and while neither seemed intimidated by running in such company, neither could they mount a challenge to the Mercedes.

Further down the road, another combination of a brand new face and a familiar one in an unfamiliar place: 19-year-old Daniil Kvyat and Jean-Eric Vergne, having qualified their Toro Rossos strongly and approaching the race with assurance, finishing inside the top ten on merit.

And fuel saving seemed absent from the agenda of Valtteri Bottas, starting his Martini-gilded Williams out of position in 15th place after a gearbox change. The FW36 is hard on its rear tyres, but on a more overcast day Bottas charged through to run sixth by lap 8. He then tapped the wall and popped his right-rear tyre off the rim, setting off a Safety Car deployment that fast-reacting Jenson Button exploited to gain three places, ultimately collecting what history will record as a podium finish. Four laps behind the Safety Car meant few drivers had to fuel-save.

For the first time in what seemed like an age, too, there was barely a complaint about tyres. Degradation is just so 2013...

The old world order hadn’t quite been swept away. Nico Hülkenberg snatched fourth place and held onto it until the second round of pitstops in spite of the best efforts of Fernando Alonso, who once again maximised a Ferrari package that isn’t quite there yet.

So, yes, much that was new and commendable. Ricciardo’s post-race disqualification, though, seemed tiresomely old school – and, whatever the finishing order, little doubt remains that Mercedes have the strongest car. Everyone else, including McLaren, the current leaders in the constructors’ championship, have plenty of catching up to do.

“We are pleased but not ecstatic,” said Dennis. “We save ‘ecstatic’ for wins.”

Perception, it seems, is still everything. **F1**

## The story of the race

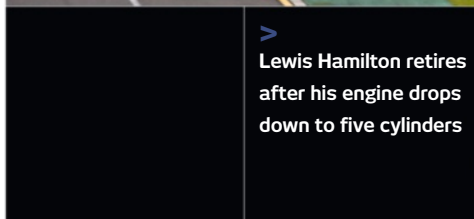
**V** Rosberg grabs the lead from Hamilton, while Kobayashi suffers a brake failure and takes out Massa



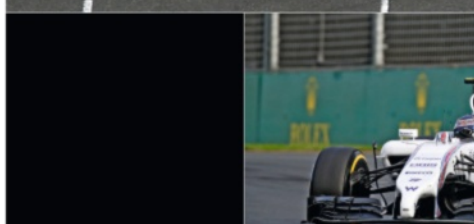
### ALBERT PARK



**>** Lewis Hamilton retires after his engine drops down to five cylinders



**<** Sebastian Vettel drops to 16th place due to a software problem and retires



**<** Bottas clips the wall while challenging Alonso for fifth place, bringing out the Safety Car on lap 12



**>** The race restarts, with fuel saving now less of a concern thanks to four laps behind the Safety Car

**>** Button makes his final pitstop, and a series of personal best laps afterwards elevates him to fourth place



**^** Bottas secures sixth place after a storming comeback drive

**>** Rosberg wins, with Ricciardo second. But Ricciardo is later disqualified over a fuel-flow irregularity



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# Australian Grand Prix stats

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



**1. HAMILTON**  
MERCEDES  
1min 44.231secs Q3



**3. ROSBERG**  
MERCEDES  
1min 44.595secs Q3



**5. ALONSO**  
FERRARI  
1min 45.819secs Q3



**7. HÜLKENBERG**  
FORCE INDIA  
1min 46.030secs Q3



**9. MASSA**  
WILLIAMS  
1min 48.079secs Q3



**11. RÄIKKÖNEN**  
FERRARI  
1min 44.494secs Q2



**13. SUTIL**  
SAUBER  
1min 45.655secs Q1



**15. BOTTAS\***  
WILLIAMS  
1min 48.147secs Q3



**17. CHILTON‡**  
MARUSSIA  
1min 34.293secs Q1



**19. ERICSSON**  
CATERHAM  
1min 35.157secs Q1



**21. MALDONADO\*\*‡**  
LOTUS  
NO TIME IN Q1

## THE GRID



**2. RICCIARDO**  
RED BULL  
1min 44.548secs Q3



**4. MAGNUSSEN**  
McLAREN  
1min 45.745secs Q3



**6. VERGNE**  
TORO ROSSO  
1min 45.864secs Q3



**8. KVIAT**  
TORO ROSSO  
1min 47.368secs Q3



**10. BUTTON**  
McLAREN  
1min 44.437secs Q2



**12. VETTEL**  
RED BULL  
1min 44.668secs Q2



**14. KOBAYASHI**  
CATERHAM  
1min 45.867secs Q2



**16. PÉREZ**  
SAUBER  
1min 47.293secs Q2



**18. BIANCHI**  
MARUSSIA  
1min 34.794secs Q1



**20. GUTIÉRREZ\***  
SAUBER  
1min 35.117secs Q1



**22. GROSJEAN\*\*\*‡**  
LOTUS  
1min 36.993secs Q1

## THE RACE



### THE RESULTS (57 LAPS)

1st	Nico Rosberg Mercedes	1h32m 58.710s
EXC	Daniel Ricciardo Red Bull	+24.525s*
2nd	Kevin Magnussen McLaren	+26.777s
3rd	Jenson Button McLaren	+30.027s
4th	Fernando Alonso Ferrari	+35.284s
5th	Valtteri Bottas Williams	+47.639s
6th	Nico Hülkenberg Force India	+50.718s
7th	Kimi Räikkönen Ferrari	+57.675s
8th	Jean-Éric Vergne Toro Rosso	+60.441s
9th	Daniil Kvyat Toro Rosso	+63.585s
10th	Sergio Pérez Force India	+85.916s
11th	Adrian Sutil Sauber	+1 lap
12th	Esteban Gutiérrez Sauber	+1 lap
13th	Max Chilton Marussia	+2 laps
NC	Jules Bianchi Marussia	+8 laps

\*Excluded for failing post-race scrutineering – subject to appeal by Red Bull

### Retirements

Romain Grosjean Lotus	43 laps – MGU-K failure
Pastor Maldonado Lotus	29 laps – MGU-K failure
Marcus Ericsson Caterham	27 laps – oil pressure
Sebastian Vettel Red Bull	3 laps – engine software
Lewis Hamilton Mercedes	2 laps – engine
Felipe Massa Williams	0 laps – accident
Kamui Kobayashi Caterham	0 laps – accident

### THROUGH SPEED TRAP



**Fastest:** Kevin Magnussen, 196.95mph



**Slowest:** Felipe Massa, 135.48mph

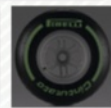
### TYRE COMPOUNDS USED



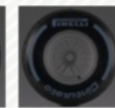
Soft



Medium



Intermediate



Wet

### CLIMATE

Sunny 20°C

### TRACK TEMP

27°C



### FASTEST LAP

Nico Rosberg, lap 19, 1min 32.478secs



### FASTEST PITSTOP

Kimi Räikkönen, 21.825secs (entry to exit)

### DRIVERS' STANDINGS

1st	Nico Rosberg Mercedes	25pts
2nd	Kevin Magnussen McLaren	18pts
3rd	Jenson Button McLaren	15pts
4th	Fernando Alonso Ferrari	12pts
5th	Valtteri Bottas Williams	10pts
6th	Nico Hülkenberg Force India	8pts
7th	Kimi Räikkönen Ferrari	6pts
8th	Jean-Éric Vergne Toro Rosso	4pts
9th	Daniil Kvyat Toro Rosso	2pts
10th	Sergio Pérez Force India	1pts
11th	Adrian Sutil Sauber	0pts
12th	Esteban Gutiérrez Sauber	0pts
13th	Max Chilton Marussia	0pts
14th	Jules Bianchi Marussia	0pts
15th	Romain Grosjean Lotus	0pts
16th	Pastor Maldonado Lotus	0pts
17th	Marcus Ericsson Caterham	0pts
18th	Sebastian Vettel Red Bull	0pts
19th	Lewis Hamilton Mercedes	0pts
20th	Felipe Massa Williams	0pts
21st	Kamui Kobayashi Caterham	0pts
22nd	Daniel Ricciardo Red Bull	0pts

### CONSTRUCTORS' STANDINGS

1st	McLaren	33pts	9th	Lotus	0pts
2nd	Mercedes	25pts	10th	Caterham	0pts
3rd	Ferrari	18pts	11th	Red Bull	0pts
4th	Williams	10pts			
5th	Force India	9pts			
6th	Toro Rosso	6pts			
7th	Sauber	0pts			
8th	Marussia	0pts			



For comprehensive F1 statistics visit [www.forix.com](http://www.forix.com)

\*Five-place penalty for replacement gearbox \*\*Allowed to start by stewards  
\*\*\*Modified under parc fermé conditions ‡ started from pitlane





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Brands Hatch Oulton Park Snetterton Cadwell Park

## 2014 SEASON HIGHLIGHTS

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29/30 March	Brands Hatch	British Touring Car Championship	12/13 July	Brands Hatch GP	Historic Superprix
12/13 April	Brands Hatch	British Truck Racing Championship	18-20 July	Brands Hatch GP	MCE British Superbike Championship
18-21 April	Brands Hatch	MCE British Superbike Championship	2/3 August	Snetterton 300	British Touring Car Championship
19/21 April	Oulton Park	British GT Championship	8-10 August	Oulton Park	MCE British Superbike Championship
3-5 May	Oulton Park	MCE British Superbike Championship	16/17 August	Brands Hatch GP	Lotus Festival
11 May	Brands Hatch	Mini Festival	23-25 August	Cadwell Park	MCE British Superbike Championship
17/18 May	Brands Hatch GP	Blancpain GT Series	23-25 August	Oulton Park	Historic Gold Cup
24-25 May	Brands Hatch GP	Masters Historic Festival	30/31 August	Brands Hatch GP	British F3 and GT Championships
7/8 June	Oulton Park	British Touring Car Championship	13/14 Sept	Brands Hatch GP	Dutch Supercars
8 June	Brands Hatch	American SpeedFest II	20/21 Sept	Brands Hatch	Festival of Porsche
13-15 June	Snetterton 300	MCE British Superbike Championship	13/14 Sept	Snetterton 300	British Truck Racing Championship
21/22 June	Snetterton 300	British F3 and GT Championships	11/12 Oct	Brands Hatch GP	British Touring Car Championship
12 July	Oulton Park	Mini Festival	17-19 Oct	Brands Hatch GP	MCE British Superbike Championship
			1/2 Nov	Brands Hatch	British Truck Racing and Fireworks

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# The Malaysian GP preview



Round 2 / 28-30 March 2014 / Sepang, Kuala Lumpur

It's only the second race of the year – but what a change of pace from Melbourne



## THE ENGINEER'S VIEW

**Pat Symonds,**

Williams' chief technical officer

**The Malaysian Grand Prix** tends to produce a different winner to the season-opener at Melbourne. One of the key reasons is the different type of challenge this circuit offers. At Melbourne, the closeness of the barriers and the lack of any real straight define the circuit, whereas Malaysia is defined by its two long straights and an abundance of run-off areas.

Sepang is forgiving when drivers run off track, but it is more punishing in other ways. Some of the highest temperatures of the year are

experienced here, making it a real challenge for drivers to stay hydrated throughout the race.

A significant part of the lap is spent at full throttle; high top speeds are reached and combined with the temperatures this will make it a very testing race for the new 1.6-litre V6 engines – typically teams will open up cooling vents in the bodywork and use their most effective cooling solutions here.

The high temperatures and abrasiveness of the track will also place bigger demands on the tyres this year. Even though Pirelli have opted for a stiffer compound, this might mean that with lower wear the remaining rubber could overheat, leading to a kind of degradation that was rarely seen in 2013 – thermal degradation.

Thermal degradation typically appears towards the end of a stint, with lap times falling away quickly as the rubber in the tyre chemically

(and irreversibly) changes due to the sustained heat input. Drivers can back off a little to bring the tyres back to life somewhat, but the damage done is irreversible and tyres will not present the same kind of grip as they did before.

Any traction issues need to have been resolved before the two long straights, since these are the natural overtaking spots. The rest of the track has high-speed corners that put severe lateral loads on the tyres, and these are where the main balance issues present themselves, namely dialling out the understeer in higher speed turns.

There are a few lower-speed corners as well, and Turns 1 and 2 are particularly notable due to the high level of warp, which is why cars are often seen three-wheeling through these sections.

Finally, to make the race weekend even more unpredictable, it takes place in monsoon season, which can mean heavy afternoon downpours.





## MALAYSIAN GP RACE DATA

**Circuit Name** Sepang

**International Circuit**

**First GP** 1999

**F1 races held** 15

**Laps** 56

**Circuit length** 3.444 miles

**Race distance** 192.878 miles

**Direction** Clockwise

**Winners from pole** 8

**Tyre compounds**

Medium/hard

## TV TIMETABLE

(UK TIME)

**Friday 28 March**

**Practice 1** 02:00-03:30

**Practice 2** 06:00-07:30

**Saturday 29 March**

**Practice 3** 05:00-06:00

**Qualifying** 08:00

**Sunday 30 March**

**Race** 09:00

**Live coverage** BBC One  
& Sky Sports F1



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

**Winner** Sebastian Vettel

**Margin of victory** 4.298s

**Fastest lap** 1m 39.199s, S Pérez

**Race leaders** 4

**Pitstops** 73

**Overtakes** 37



Sepang produced probably the most controversial moment of the season last year. Mark Webber led his Red Bull team-mate after the final pitstop and the order 'Multi-map-2-1' was given. But Vettel ignored the veiled team orders to steal the victory from Webber.

## SEPANG TELEMETRY

2014 ■ 2013 ■

HOW A SIMULATED LAP HERE IN A 2014 CAR COMPARES WITH LAST YEAR

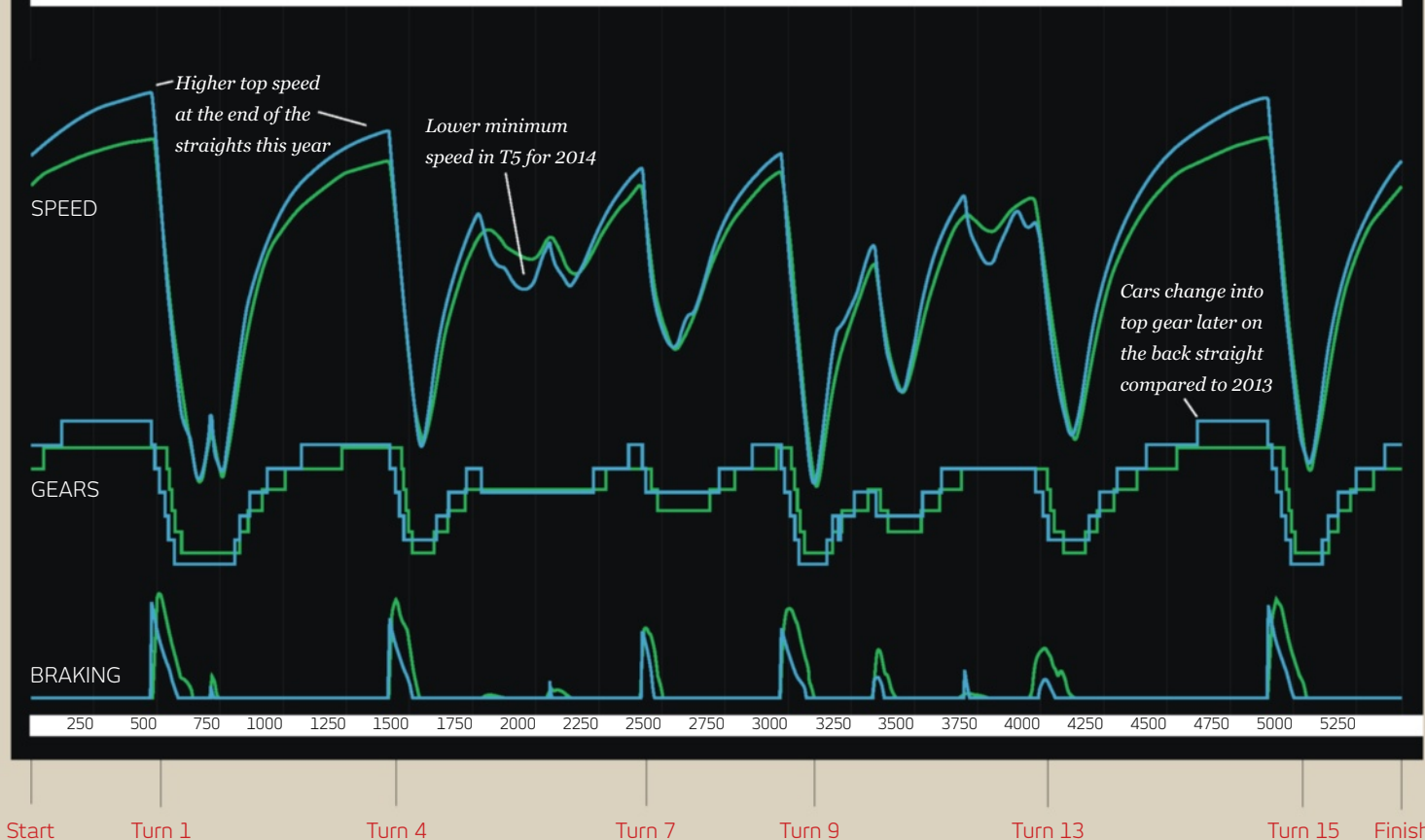


ILLUSTRATION: ALAN ELDREDGE. PHOTOS: ALASTAIR STALEY/LAT; CHARLES COATES/LAT; ANDY HONE/LAT



# The Bahrain GP preview



Round 3 / 4-6 April 2014 / Bahrain International Circuit, Sakhir

Sand and gusty winds can create havoc at this stop/start desert track



## THE ENGINEER'S VIEW

**Pat Symonds,**  
Williams' chief technical officer

**This race can be very challenging** for drivers and teams, not least because the circuit is located in the desert, which means it's usually very sandy on the track at the start of each session, especially off the racing line.

This is often down to the strong winds, which can also affect car behaviour on the higher-speed sections of the circuit. In addition, the weather tends to be very hot and dry. Together, these conditions put drivers and engines through their paces, especially on the four long straights.

The key to setting a quick lap around here is having the appropriate gear ratios. This is a new challenge for 2014, since ratios are now fixed for the entire year. It's also something that is completely out of the hands of the teams, since they will already have made their nominations long before arriving in Bahrain.

It's not only a case of having a good top gear to achieve better top speeds on the straights, where winds can undo any advantage. Historically, it's been important to set a shorter-than-normal first gear here, to ensure a good launch for the start of the race on the grippy surface.

The asphalt here is produced from granite imported from Wales, and it presents a unique demand on the tyres due to its abrasiveness. The layout is very stop/start, which places more longitudinal stress on the tyres than it does lateral stress, which means having a good car

under traction is key, not only for preserving the tyres, but also for getting up to speed on each of the straights.

The stop/start nature of the circuit also puts a lot of energy into the brakes over the course of a lap. This can lead to higher-than-average brake wear, and since a few individual braking events on the lap are quite severe, this means the brakes will often experience high peak temperatures. Teams will spend a large part of Friday practice making sure that they are in a good position to manage both brake wear and cooling during the race.

While the circuit places great demands on drivers, engines and cars (the sand can create havoc with mechanical elements and the filtering of air unless due care and attention is taken), it certainly provides excitement, with DRS zones typically set up to allow two overtaking spots.





## BAHRAIN GP RACE DATA

**Circuit Name** Bahrain

International Circuit

**First GP** 2004

**F1 races held** 9

**Laps** 57

**Circuit length** 3.362 miles

**Race distance** 191.529 miles

**Direction** Clockwise

**Winners from pole** 4

**Tyre compounds**

Medium/soft

## TV TIMETABLE

(UK TIME)

**Friday 4 April**

**Practice 1** 12:00-13:30

**Practice 2** 16:00-17:30

**Saturday 5 April**

**Practice 3** 13:00-14:00

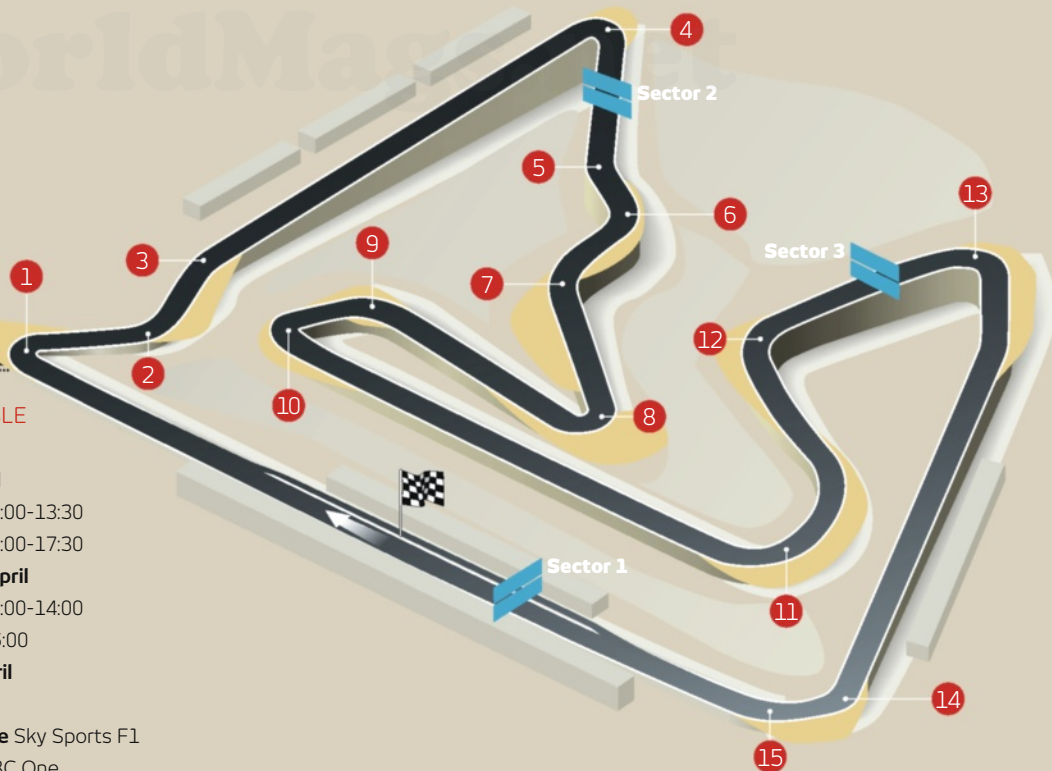
**Qualifying** 16:00

**Sunday 6 April**

**Race** 16:00

**Live coverage** Sky Sports F1

**Highlights** BBC One



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

**Winner** Sebastian Vettel

**Margin of victory** 9.111s

**Fastest lap** 1m 36.961s, S Vettel

**Race leaders** 4

**Pitstops** 71

**Overtakes** 63



Despite claiming pole position, Nico Rosberg was quickly passed by Vettel and Alonso. The latter had a problem with his DRS, which stuck in the open position, leaving Vettel clear to take a dominant victory. He won from the Lotus duo of Kimi Räikkönen and Romain Grosjean.

## BAHRAIN TELEMETRY

2014 ■ 2013 ■

HOW A SIMULATED LAP HERE IN A 2014 CAR COMPARES WITH LAST YEAR

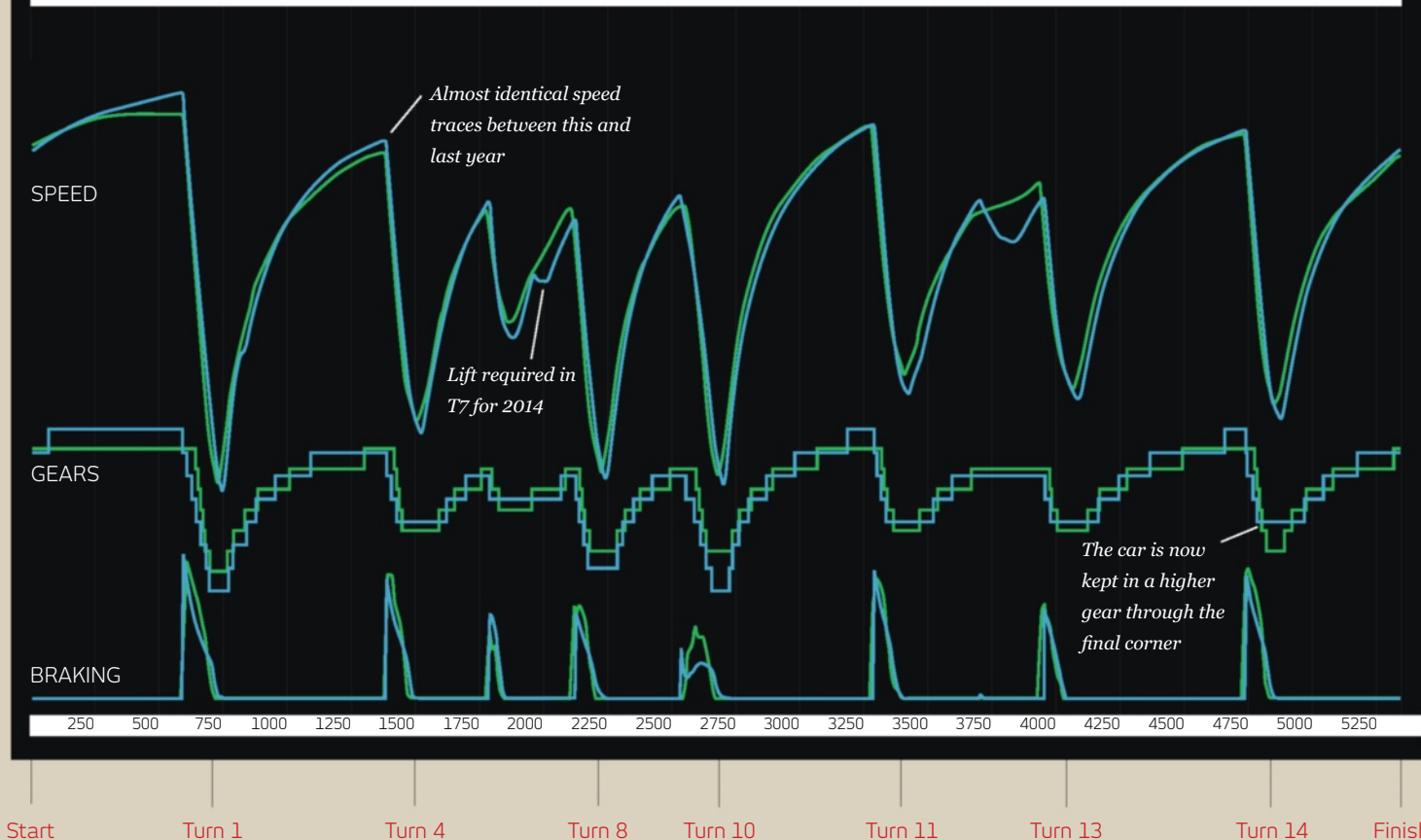


ILLUSTRATION: ALAN ELDREDGE. PHOTOS: CHARLES COATES/LAT; GLENN DUNBAR/LAT; ANDY HONE/LAT



# The Chinese GP preview



Round 4 / 18-20 April 2014 / Shanghai International Circuit

The last of the flyaway races is a highly technical circuit, notoriously tough on tyres



## THE ENGINEER'S VIEW

**Pat Symonds,**

Williams' chief technical officer

**This is another** modern circuit and one that has a good mix of slow-, medium- and high-speed corners, with one of the longest straights of the year thrown in for good measure.

Many of the corners at Shanghai are very technical and the first corner, a tightening, long-duration right-hander that leads directly into a blind apex, often catches drivers out, especially at the start of the race when picking a line through this complex is of utmost importance for them.

Teams have little time to rest between races, given the first of the in-season tests takes place in Bahrain just after the GP there. Consequently it may take time to acclimatise to the different demands of Shanghai. Although there are a two long straights here, the brakes get a chance to recover in between, and the circuit is different to the point-and-squirt nature of Bahrain, which has the highest turn angle of the year.

While Shanghai isn't hard on the brakes, it's still important to have a good car under braking, since it's so easy to destroy a set of tyres by flat-spotting them. With 2014 regulations in force, lower grip and more torque will make caring for the rear tyres even more important at a track that is notorious for ruining rear rubber.

Typically cool in terms of temperature and with low abrasiveness, Shanghai can create issues with warm-up and graining. However,

both these issues should be alleviated somewhat by the 2014 Pirelli tyres, which have a lower working range (making them easier to warm up) and a better graining resistance.

Despite the improved resilience of the tyres, Shanghai stills present a strategy dilemma. Because of the difficulty with tyre management, teams will be pushed towards more pitstops. But the lower speed limit and an already lengthy pitlane will sway them towards fewer stops.

Shanghai is the last flyaway race before Europe, and it will be some time before F1 returns to such a modern and large facility as this. But having been purpose-built on reclaimed marshland does have its downsides. This circuit sits on a buoyant polystyrene 'sandwich', making it vulnerable to subsidence and the appearance of bumps. Without resurfacing prior to the race, these bumps can often catch drivers unawares.





## CHINESE GP RACE DATA

**Circuit Name** Shanghai

International Circuit

**First GP** 2004

**F1 races held** 10

**Laps** 56

**Circuit length** 3.387 miles

**Race distance** 189.558 miles

**Direction** Clockwise

**Winners from pole** 5

**Tyre compounds**

Medium/soft

## TV TIMETABLE

(UK TIME)

**Friday 18 April**

**Practice 1** 03:00-04:30

**Practice 2** 07:00-08:30

**Saturday 19 April**

**Practice 3** 04:00-05:00

**Qualifying** 07:00

**Sunday 20 April**

**Race** 08:00

**Live coverage** Sky Sports F1

**Highlights** BBC One



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

**Winner** Fernando Alonso

**Margin of victory** 10.168s

**Fastest lap** 1m 36.808s, S Vettel

**Race leaders** 6

**Pitstops** 57

**Overtakes** 60



Fernando Alonso started on soft tyres and quickly passed Lewis Hamilton to take the lead. His strategy worked, helping him to his first victory since Germany 2012. Vettel started ninth on the mediums and was forced to make a late-race stop for softs that placed him fourth at the flag.

## SHANGHAI TELEMETRY 2014 2013

HOW A SIMULATED LAP HERE IN A 2014 CAR COMPARES WITH LAST YEAR

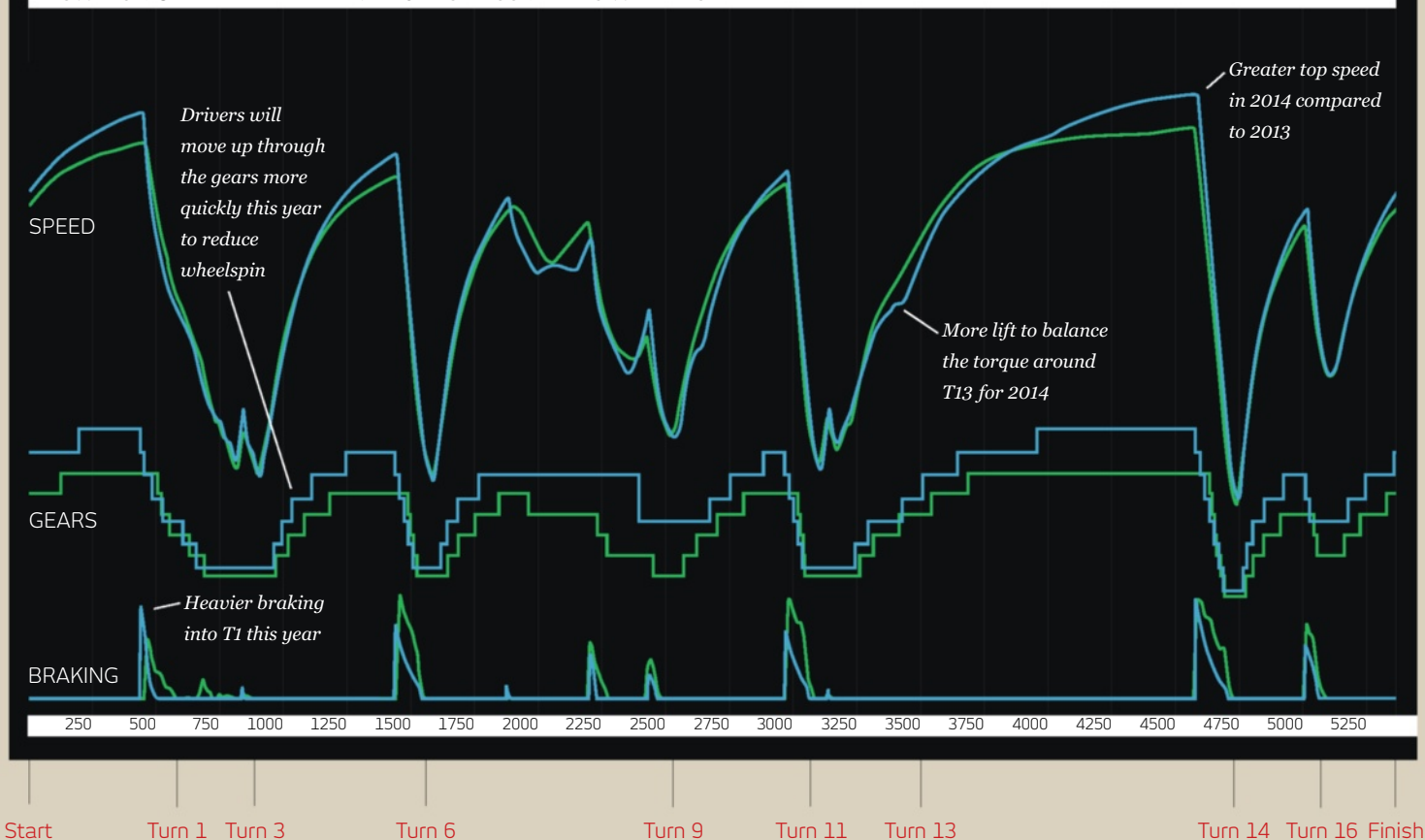






ILLUSTRATION: ALAN ELDREDGE. PHOTOS: STEVEN TEE/LAT, ALASTAIR STALEY/LAT, ANDY HONE/LAT



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## STAR LETTER



The new season gets under way at Melbourne with unexpected results

## Exciting racing – it's back!

Well, what an opening race! It had everything: engine failures, driver failures, pit-crew mistakes, Safety Cars, overtaking, excitement, and then that change of results afterwards.

What an excellent race Daniel Ricciardo drove. He was consistent and able to remain cool on his debut for a huge team. I am sure I am not the only F1 fan who had goose pimples, and I felt really happy when he came round the last corner and the crowd quite simply erupted and could be heard not only over the engines (which isn't the greatest feat in the world, but that's another story), but so clearly on our TVs.

Then came the disappointing news about his disqualification, and the teams announcement that they will appeal the decision. But before that happened, watching Ricciardo's post-race interview was brilliant. We have seen some drivers win races and be far less emotional: Ricciardo's smile was quite simply heartwarming.

**Danny Carlisle**  
By email



## SILVERSTONE STAR PRIZE

Danny Carlisle wins a pair of three-day general admission tickets to the 2014 Formula 1 Santander British Grand Prix. For more details, visit [www.silverstone.co.uk/events](http://www.silverstone.co.uk/events). Hotline number: 0844 375 0740

## Music to my ears

I like it. It's the Sunday morning before the Australian GP and I've woken up early: I'm just too excited about the race, even though at the start of qualifying I thought all my fears were being realised when the green light came on and the cars silently 'floated' out of the pitlane.

A few laps in, however, I was transfixed. Alonso locked a wheel and I could hear the tyre squealing. Later on in his lap I thought I saw him get some understeer in the final turn, and I swear I could hear the tyres scrubbing across the Tarmac. This previously imperceptible auditory information is going to be very useful in the season to come.

I love the new and complex technology, despite most pundits believing we fans are not interested and indeed are not capable of comprehending it. Well, I am not just some overtaking-obsessed Neanderthal: I can't wait for Silverstone when I can hear these cars for myself. Now I never expected to be saying that!

**Rob Stewart**  
Cambridge, UK

## More info on ERS please

It is fine if fans have to put up with the quieter new engines. But to replace the exhilaration we experienced from the sound of the old V8s, viewers should be provided with more insight into the functioning of the new ERS-equipped V6s. TV broadcasts should feature plenty of graphics showing how the ERS is being utilised in real time.

Also, why not show us how the fuel-flow rates change during the race? Perhaps the teams will argue that this provides the competition with too much information. Well, too bad – they will have to deal with

that as the price of entertaining the fans and keeping them engaged.

The lack of such information at the first race broadcast was inexcusable. Also, what is the point of having permanent driver numbers if they're barely visible? I'm sure the teams will say large numbers take up valuable sponsor space. But again, someone needs to step in and mandate a standard, visible number on all cars. Of course, this all assumes F1 still has some regard for its fans.

**Fareed Ali,**  
By email

## What a sorry sound

So the new era of F1 started with the Australian GP, and you could tell we were in Melbourne because the drone of the new car engines sounded like a cross between a didgeridoo and a B-17. The only other race engines I've heard that sound more boring than these are the Audi Le Mans diesel motors. F1 is a sport that should involve both your eyes and ears, and a large part of the fun has now been lost.

The race was pretty good, but I think the Safety Car saved it from becoming a fuel-conservation run. I am willing to bet the FIA will try to bring out the Safety Car as much as possible now to avoid just that.

Post-race, the new regulations reared their head and Daniel Ricciardo was excluded over his fuel-flow rate. I will reserve judgement on how much more of the season to watch, which is sad given that I've been watching F1 for more than 30 years. The engines sound depressing, and it is yet to be determined if the quality of the racing can keep me watching.

**Chuck Goldsmith**  
Colorado, USA

## New tech? Tell us more...

It was refreshing to read Peter Windsor's views ('Racer's Edge' March, p34) on the need to bring F1 viewers closer to the sport. I very much agree with his comments.

Adam Parr in fact made similar comments last year on Sky Sports



F1. He remarked that if fans understand the technical side of the sport, they can appreciate the racing on a different level.

I have a pretty good knowledge of most aspects of F1, having been a fan since the age of ten. So, I ask, how can I, sitting at home, watching my basic TV coverage, possibly get any insight into this new technical side with what is on offer? I am not in a pitlane with thousands of pieces of team information in front of me. The average viewer gets shown whatever the TV director wants to show, plus the occasional graphic, and, if you're lucky, you might get lap times during qualifying. If you want more information, you generally have to fork out for an app, or pricey TV subscription that may offer you additional information online.

Come on FIA, teams and circuits. Please open this up a little and make this a 365-day F1 party.

**Rachel Simpson,**  
By email

### No fans... no F1

Having been one of the lucky F1 fans to have benefited from their Fan Forums, I am devastated by the demise of FOTA. The Fan Forums were a crucial link for F1 fans unable to attend race weekends due to financial constraints. It gave us a chance to engage personally with the sport we love.

F1 has always been distant from the supporters, but the Fan Forums were fantastic at breaking down barriers and had the teams conversing with us in a constructive manner. Now with the disbandment of FOTA I fear the teams will go back to the old days of cloak-and-dagger activities and will not work together for the good of F1.

Yes they need to look after their own interests, but none of them would exist if it wasn't for F1. And F1 would not exist if it wasn't for the team and sponsors – and none of them would exist if it wasn't for the fans!

**Clive Bariana**  
Worcestershire, UK

### Go #BO77AS!

It's so refreshing to come across a driver like Valtteri Bottas in F1. He's friendly, charming, open, humble and truly respects the chance he's been given.

He had a respectable rookie season and his driver's perspective in last year's *F1 Racing* columns was a joy to read. Will he be successful with some podiums and maybe more? Only time will tell, but I'll be cheering him on.

**Dennis Kline**  
California, USA

### Let's embrace change

I don't understand the views expressed by people like Simon Cooke in your March issue ('Letters', p160), claiming change in engines, rev reductions and fuel economy are ruining their commitment to the sport.

I agree with Adam Berriman: we should embrace change. F1 is a sport, but the world changes and the sport will change with it. We'll all be driving hybrids soon, and we'll be replaced by a generation amazed that we used to burn fuel without getting the most out of it.

Like Simon, I'm a committed Silverstone attendee but, unlike him, I fully intend to get my tickets for 2014. I'll miss the aural assault of the old cars, but I'm looking forward to seeing how F1 adapts.

The early races may bring lots of retirements and struggles with fuel economy but, this is F1 – it won't be long before teams and engine manufacturers have it sussed and we'll be approaching similar speeds and reliability to last year.

In a year or two, regulations regarding the noses will be rectified. And we'll all benefit from it; from the road cars we drive through to F1 becoming more technically advanced and the racing getting as good as we all remember 'in the good old days'. And we'll tell our children, "I remember the races when they used to burn as much fuel as they wanted!"

**Andrew King**  
By email

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## NEXT MONTH...



### THE RETURN OF RON...

**Will the influence of Ron Dennis at McLaren take Jenson Button back to the top of the podium? Plus...**

- > Robert Kubica answers your questions
- > Maurice Hamilton dines with a legend: Mario Andretti
- > Revealed: the dark arts of Formula 1

**ISSUE ON SALE 24 APRIL\***



# MURRAY WALKER



UNLESS I'M VERY MUCH MISTAKEN...

**"Ayrton Senna: where to begin with this deep-thinking, passionate and charismatic legend?"**

I saw a lot of him while commentating on his illustrious career... Formula Ford, Formula 3, every one of his 161 F1 races and so many interviews. I think Brands Hatch 1981, at the end of his title-winning Formula Ford debut year, is a good place to start. "How can I get a video of my races today?" he asked me. "If you win I'll send you one," I replied. He didn't win but I sent him one anyway and received a handwritten Christmas card in return, thanking me for my help. That's the sort of bloke he was.

Bear in mind that in pursuit of his burning ambition to get to the very top level in motorsport, he had left the warmth and security of a wealthy and loving family in Brazil, and gone to far-off England, where the winters were cold and damp, where he knew nobody and where he couldn't yet speak English. That would be

enough to discourage most people but, knowing England was where it was at in terms of developing a racing career, he made the move and even sacrificed his marriage as a result. Iron determination indeed: and he succeeded.

Interviewing Senna was like interviewing no one else. There was never a glib statement. He would ponder, sometimes for what seemed like minutes, before producing a perfectly formed response. His mastery of our language was complete and his attention to detail awesome. He missed absolutely nothing. I won't bore you with all the details but I learned that for years I had been pronouncing his Christian name incorrectly as 'Air-tun' instead of 'Eye-air-ton.' I resolved to put this right, only to be vilified by the public. So after just one race, I returned to the old way. "Well, Air-tun," I said. "Two races

down, no points and Schumacher on 20. Can you close the gap?"

"What happened to 'Eye-air-ton?' he replied.

"How on earth do you know about that? You're in the car when I'm commentating and you can't hear me!"


"Ah Murray, I keep in touch," he said.

Just amazing.

Where I was concerned, Ayrton was never anything other than helpful and polite. Lotus gave him a good car in 1985 and in Portugal he won his first grand prix in appalling weather. Afterwards, in a flimsy marquee, cold and wet, battered by driving wind and rain and excitedly jostled by countless people who had no right to be there, he could have been excused for brushing me off, but he didn't. I was astounded by his matter-of-fact calmness about his first grand prix victory. According to him, it was what he was there for, wasn't it, and: "It's not true that I made no mistakes. Once I had all four wheels on the grass."

Ayrton was, however, nothing if not human. At Monaco in 1988 he was pressured out of a certain win by McLaren team-mate Alain Prost, and the BBC team spent hours trying to locate him for an interview. Broken-hearted, he'd gone back to his apartment and refused to come out. But I always knew that if he said he'd give me an interview, he would – eventually. In 1989, when he and Prost were at loggerheads, I waited for four hours during one of Senna's seemingly endless debriefs. Prost emerged first and I remember saying: "In the name of God, Alain, what took you so long?"

"Oh, this and that, Murray, but I do not like to be the first to leave."

Ayrton Senna was a mixture of ruthless ambition, dedicated application to his chosen lifestyle, extreme self-interest, warmth, charm and great intelligence. He was a God-fearing, Bible-reading mystic, whose continuing contribution to Brazilian charities has been massive. He was not only a motor-racing genius but, after his career was over, could have become a business tycoon or the President of Brazil if politics had taken his fancy. It was a day of extreme tragedy when I had to commentate live on his last and fatal race at Imola in 1994. The sport has not seen his like since. 



"In Portugal 1985, Ayrton won his first race in appalling weather. According to him, it was what he was there for, wasn't it?"

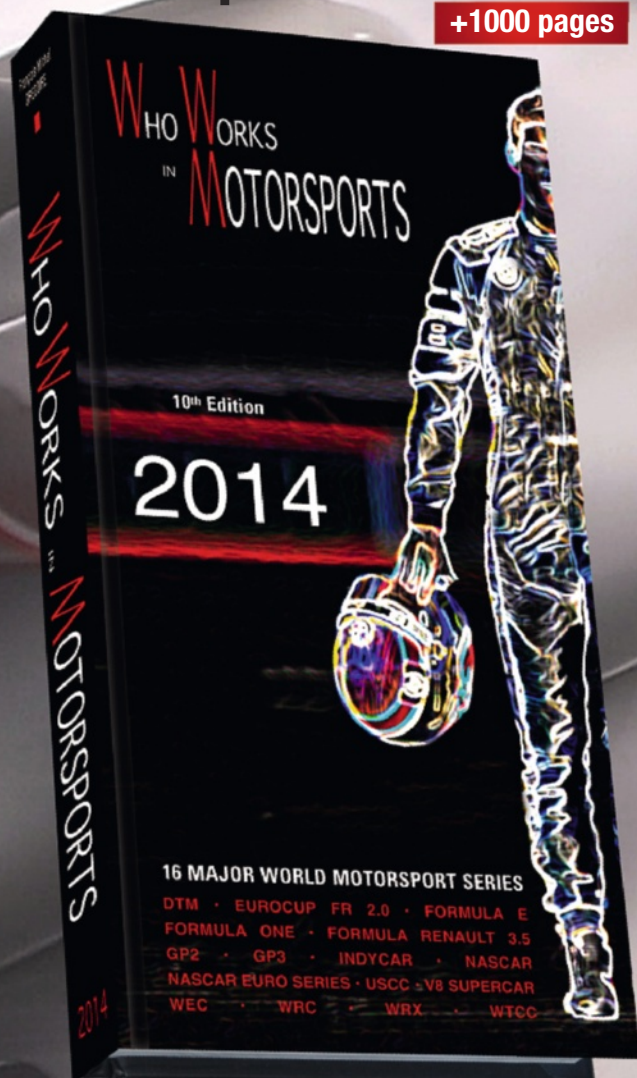


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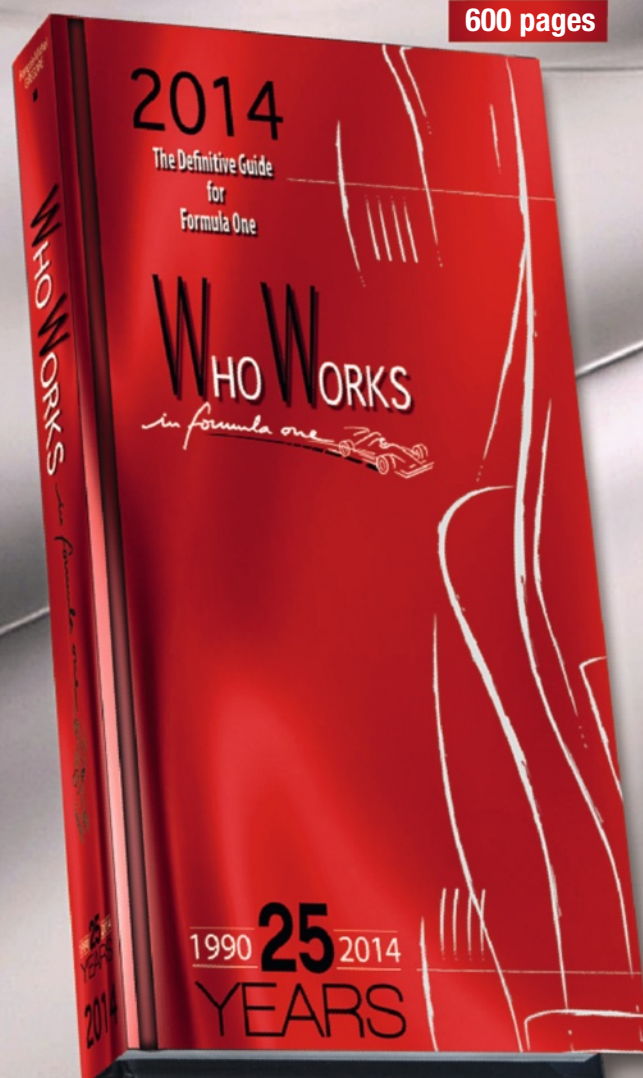
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