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# F1 2012 SEASON GUIDE

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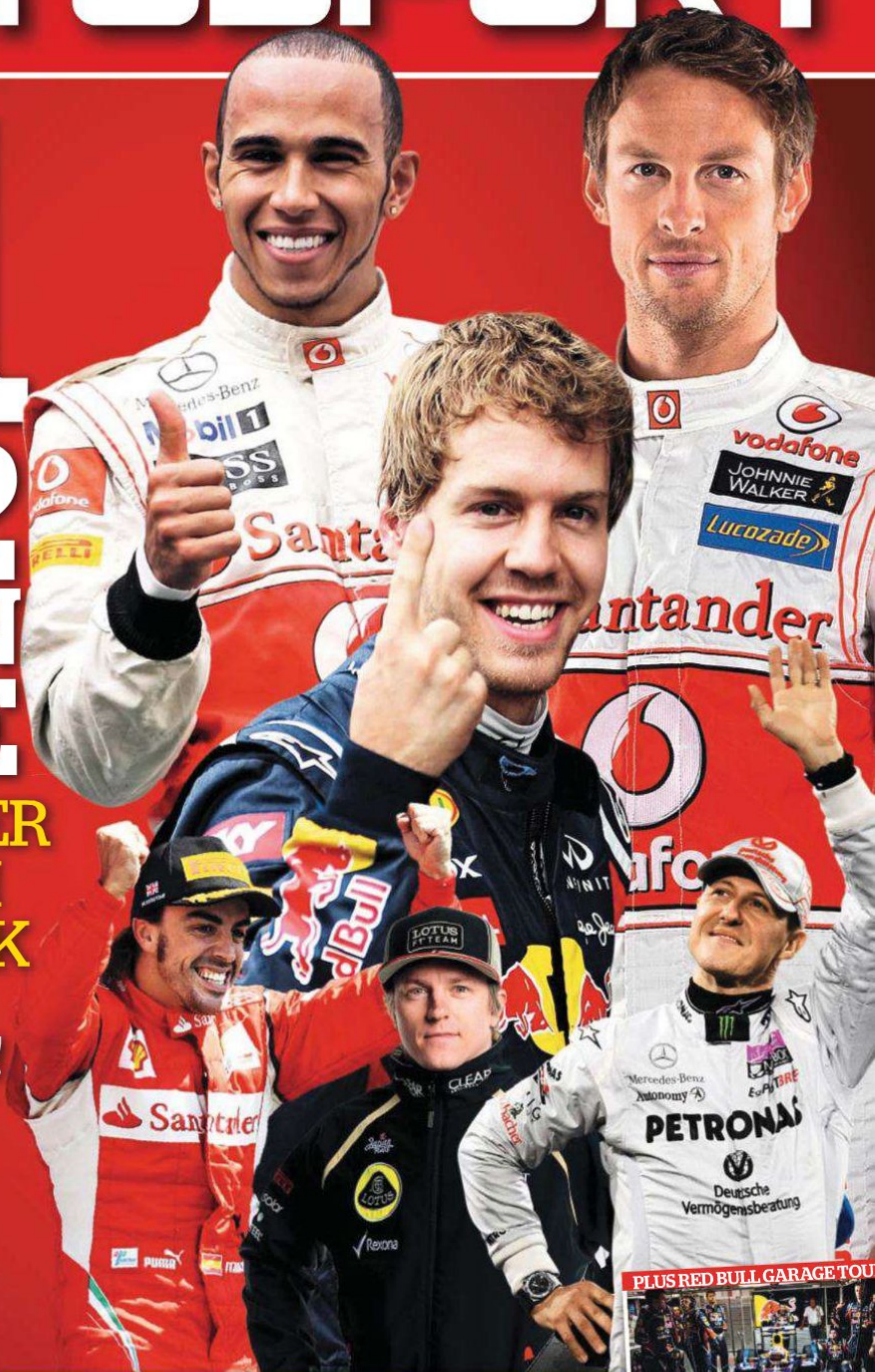
**Testing shock!**  
Ferrari facing  
midfield battle

FULL STORY P10

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**“If I’ve just finished my debrief with the team I could go off for dinner, but I won’t! I would feel bad and think it was maybe because I was lazy”**

**WORLD CHAMPION SEBASTIAN VETTEL HASN'T LOST HIS WORK ETHIC. YIKES!**

## 4873

The number of days that elapsed between Elliott Sadler's fifth NASCAR Nationwide win (in October 1998) and his sixth (last weekend). That's 13 years, four months and three days!

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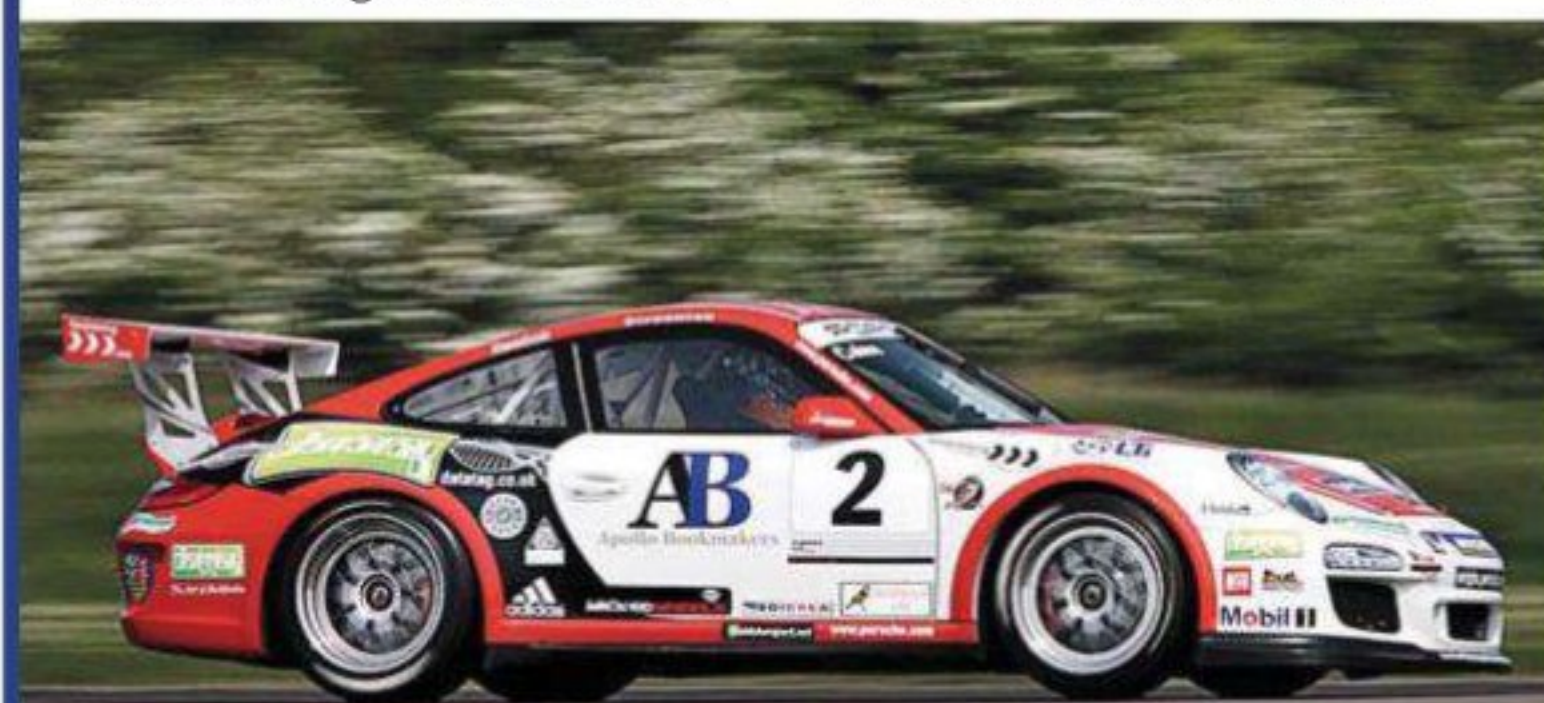
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## EDITOR-IN-CHIEF

Andrew van de Burgt  
[andrew.vandeburgt@haymarket.com](mailto:andrew.vandeburgt@haymarket.com) ext.5974

## EDITOR

Charles Bradley  
[charles.bradley@haymarket.com](mailto:charles.bradley@haymarket.com) ext.5889

## AUTOSPORT.COM EDITOR

Simon Strang ext.5093  
[simon.strang@haymarket.com](mailto:simon.strang@haymarket.com)

## GROUP F1 EDITOR

Jonathan Noble ext.5810  
[jonathan.noble@haymarket.com](mailto:jonathan.noble@haymarket.com)

## F1 EDITOR

Edd Straw ext.5887  
[edd.straw@haymarket.com](mailto:edd.straw@haymarket.com)

## FEATURES EDITOR

Kevin Turner ext.5432  
[kevin.turner@haymarket.com](mailto:kevin.turner@haymarket.com)

## NEWS EDITOR

Glenn Freeman ext.5309  
[glenn.freeman@haymarket.com](mailto:glenn.freeman@haymarket.com)

## REPORTS EDITOR

Jamie O'Leary ext.5811  
[jamie.oleary@haymarket.com](mailto:jamie.oleary@haymarket.com)

## MANAGING EDITOR

Peter Hodges ext.8617  
[peter.hodges@haymarket.com](mailto:peter.hodges@haymarket.com)

## US EDITOR

Mark Glendenning  
[mark.glendenning@haymarket.com](mailto:mark.glendenning@haymarket.com)

## WEB MANAGING EDITOR

Pablo Elizalde

## GRAND PRIX EDITOR

Mark Hughes  
[autosport.editorial@haymarket.com](mailto:autosport.editorial@haymarket.com)

## F1 COLUMNIST

David Coulthard

## RALLIES EDITOR

David Evans  
[david.evans@haymarket.com](mailto:david.evans@haymarket.com)

## INTERNATIONAL EDITOR-AT-LARGE

Gary Watkins

## ART EDITOR

Aubrey Smith ext.5914  
[aubrey.smith@haymarket.com](mailto:aubrey.smith@haymarket.com)

## PRESENTER/SUB-EDITOR

Henry Hope-Frost ext.5835  
[henry.hope-frost@haymarket.com](mailto:henry.hope-frost@haymarket.com)

## CHIEF SUB-EDITOR

Marcus Simmons ext.5807  
[marcus.simmons@haymarket.com](mailto:marcus.simmons@haymarket.com)

## NATIONAL EDITOR

Ben Anderson ext.5425  
[ben.anderson@haymarket.com](mailto:ben.anderson@haymarket.com)

## NATIONAL EDITOR-AT-LARGE

Marcus Pye

## DESIGNER

Will Clarke

## PICTURE EDITOR

Peter Mills ext.5918  
[peter.mills@haymarket.com](mailto:peter.mills@haymarket.com)

## AUTOSPORT.COM

TECHNICAL TEAM LEADER

Geoff Creighton  
[geoff.creighton@haymarket.com](mailto:geoff.creighton@haymarket.com)

## AUTOSPORT.COM USER

INTERFACE DEVELOPER

Pete Holmes  
[peter.holmes@haymarket.com](mailto:peter.holmes@haymarket.com)

## AUTOSPORT.COM

PICTURE EDITOR

Chris Bird  
[chris.bird@haymarket.com](mailto:chris.bird@haymarket.com)

## TECHNICAL EDITOR

Giorgio Piola

## NEWS GRAPHICS

Alan Eldridge

## CARTOONIST

Jim Bamber

## SECRETARY

Joanne Grove  
[joanne.grove@haymarket.com](mailto:joanne.grove@haymarket.com) ext.5804

## PHOTOGRAPHS

LAT Photographic

## CORRESPONDENTS

### ARGENTINA

Tony Watson

### AUSTRALIA

Phil Branagan

### AUSTRIA

Gerhard Kuntzsch

### BELGIUM

Gordon McKay

### BRAZIL

Lito Cavalcanti

### FINLAND

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### GERMANY

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Bernard Carpenter

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Richard Asher

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Raimon Duran

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UK & EIRE

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Jonathan Crawford,

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Marc Orme, Graham

Read, Peter Scherer, Ian

Sowman, Oliver Timson,

Ian Titchmarsh, Matt

Upton, Eddie Walder, Tim

Whittington, Richard Young

## ADVERTISING

Tel: +44 (0) 20 8267 5820  
Fax: +44 (0) 20 8267 5850  
E-mail: [autosport.ads@haymarket.com](mailto:autosport.ads@haymarket.com)

## SALES MANAGER

Rachel Brock,  
[rachel.brock@haymarket.com](mailto:rachel.brock@haymarket.com)

## DISPLAY ADVERTISING

Andrew Barclay,  
[andrew.barclay@haymarket.com](mailto:andrew.barclay@haymarket.com)

Peter De Vries,  
[peter.devries@haymarket.com](mailto:peter.devries@haymarket.com)

Karen Reilly,  
[karen.reilly@haymarket.com](mailto:karen.reilly@haymarket.com)

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## ADVERTISING

Victoria Townsend,  
[victoria.townsend@haymarket.com](mailto:victoria.townsend@haymarket.com)

William Putt,  
[william.putt@haymarket.com](mailto:william.putt@haymarket.com)

Alex Newberry,  
[alex.newberry@haymarket.com](mailto:alex.newberry@haymarket.com)

ONLINE SALES

MANAGER

Luciano Candilio,  
[luciano.candilio@haymarket.com](mailto:luciano.candilio@haymarket.com)

ONLINE ADVERTISING

Leanne Foley,  
[leanne.foley@haymarket.com](mailto:leanne.foley@haymarket.com)

Chris Gowland,  
[chris.gowland@haymarket.com](mailto:chris.gowland@haymarket.com)

Chris Gowland,  
[chris.gowland@haymarket.com](mailto:chris.gowland@haymarket.com)

## AD PRODUCTION

Tel: +44 (0) 20 8267 5740 Fax: +44 (0) 20 8267 5320

## ADVERTISING

DIRECTOR

Matthew Witham

## SPECIAL PROJECTS

DIRECTOR

Derek Redfern

LICENSING DIRECTOR

Tim Bulley

PRODUCTION MANAGER

Carrie McNally,  
[carrie.mcnally@haymarket.com](mailto:carrie.mcnally@haymarket.com)

## SENIOR DISPLAY

PRODUCTION

CONTROLLER

Saba Bonser, ext: 5740  
[saba.bonser@haymarket.com](mailto:saba.bonser@haymarket.com)

## PRODUCTION

CONTROLLER

Marc Baker, ext: 5563  
[marc.baker@haymarket.com](mailto:marc.baker@haymarket.com)

## SUBSCRIPTIONS

UK 0844 8488817

OVERSEAS +44 (0)1795 592 974

## EMAIL

[autosport@servicehelpline.co.uk](mailto:autosport@servicehelpline.co.uk)

US & CANADA 1-866-918-1446

US & CANADA EMAIL

[haymarket@usnews.com](mailto:haymarket@usnews.com)

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## BACK ISSUES

Tel: 0844 8488817

## DIRECT MARKETING EXECUTIVE

Karen McCarthy, ext: 5658

[karen.mccarthy@haymarket.com](mailto:karen.mccarthy@haymarket.com)

## MANAGEMENT

### PUBLISHING DIRECTOR

Peter Higham

### PUBLISHER

Rob Aherne

### PUBLISHING MANAGER

Samantha Jemson

### DIGITAL PRODUCT MANAGER

Jim Foster

### SPECIAL EVENTS MANAGER

Laura Coppin

### SYNDICATION SALES MANAGER

Roshini Sethi, +44 208 267 5396

[roshini.sethi@haymarket.com](mailto:roshini.sethi@haymarket.com)

### CIRCULATION TRADE ENQUIRIES

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## EDITORIAL DIRECTOR

Mark Payton

## DESIGN DIRECTOR

Paul Harpin

## STRATEGY AND

PLANNING DIRECTOR

Bob McDowell

## MANAGING

DIRECTOR

David Prasher

## CHIEF EXECUTIVE

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## POLE POSITION

# Technology race heats up – in F1 and at AUTOSPORT!



## COULD THIS BE THE CLOSEST FORMULA 1

season ever? Certainly, McLaren looks in much stronger shape at this stage of the season than it did 12 months ago, while Mercedes and Lotus (formerly Renault), both appear to have made big strides forward over the winter.

But the team they all have to beat is Red Bull and, while the RB8 experienced some technical issues in the final pre-season test, there's no reason to think that the team won't be among the pacesetters when the season kicks off in Melbourne on March 18.

In order for you to get the most out of the year ahead, we've put together what we believe is the most comprehensive guide possible. Every team, driver and track is covered in detail. We hope you enjoy it.

● Those of you with iPads will be able to enjoy it in an all-new digital format too. Available through Apple's Newsstand and the App store, the AUTOSPORT iPad version takes the existing magazine content and adds a new dimension to it. Check it out in the Newsstand store.

*A van de Burgt*

**ANDREW VAN DE BURGT**  
**EDITOR-IN-CHIEF**

[andrew.vandeburgt@haymarket.com](mailto:andrew.vandeburgt@haymarket.com)

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## BAMBER'S WEEK





INDYCAR

## Land of opportunity welcomes Rubens

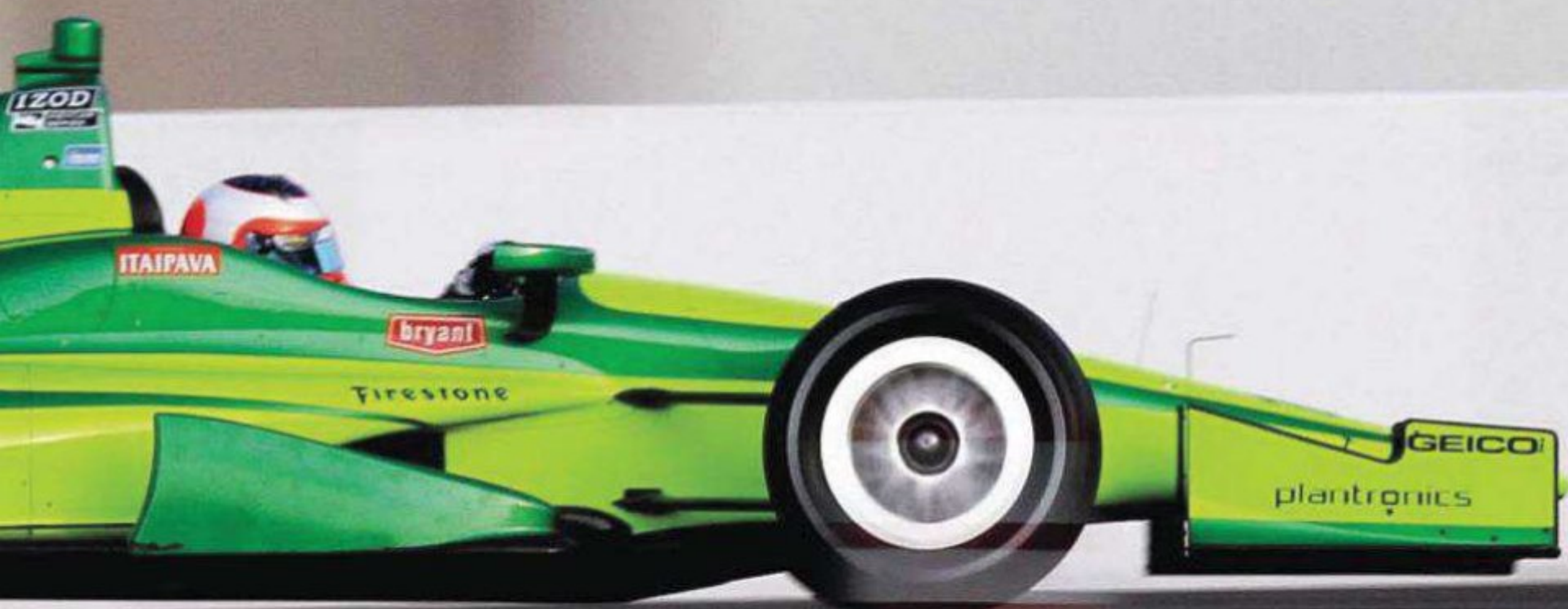
Ex-Formula 1 star Rubens Barrichello committed to run the full season – including all the ovals – in the IndyCar Series for 2012 following this test in Tony Kanaan's patriotically-liveried KV Racing Technology car at Sears Point last week. For the full story, see p22.

Pic: Pruett/LAT



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# Pressure on Ferrari as F1 heads into tightest season

Italian giant not only behind Red Bull and McLaren – it could even be struggling to score points in Melbourne. By JONATHAN NOBLE



**F**errari is facing increased urgency to get on top of its underperforming car, as Formula 1's tightest start to a season for years threatens to derail its hopes at the first hurdle.

The Scuderia has endured trouble with its F2012 since testing began. But last week's final pre-season running at Barcelona highlighted that it needs to turn around its below-par performance as swiftly as possible – or risk falling into the clutches of a fiercely-contested midfield battle.

Detailed data analysis by AUTOSPORT of the testing form during the four days of running at the Circuit de Catalunya last week suggests that Ferrari is not only off the pace of Red Bull and McLaren, but could even have slipped behind Mercedes and Lotus.

And with Sauber, Williams and

Force India having shown flashes of strong form in testing, there is a genuine possibility that if Ferrari cannot improve its car for next week's season-opening Australian Grand Prix the team may face an uphill battle even to score points.

## WHAT'S GONE WRONG?

Ferrari headed into last week's Barcelona running buoyed by a positive final day of the preceding test, when number-two driver Felipe Massa talked of a breakthrough in the development of the F2012.

But Ferrari's form took a turn for the worse when Massa and two-time world champion Fernando Alonso failed to rediscover the good feel they had found the previous week. The car once again appeared awkward on track, with the drivers complaining that the car lacked precision on corner entry.

Technical chief Pat Fry said the team was still trying to work out why the F2012 dropped in and out of a good balance over long runs, and felt the squad was on the back foot after revising its exhaust concept away from the design it had used in the earlier test sessions.

There was a further blow on Friday afternoon when a race-simulation run by Alonso at the same time as Romain Grosjean, whose Lotus team had missed the second test, showed that Ferrari could be in more trouble than it had appeared the previous week.

Alonso went trackside to watch F2012





## AUTOSPORT SAYS...

**JONATHAN NOBLE**  
GROUP F1 EDITOR

jonathan.noble  
@haymarket.com



**W**hen Martin Whitmarsh talked at the end last year of wanting Pirelli to give the teams a few headaches this year, he probably had no idea that they'd now be facing the prospect of having their skulls rattled by a nine-iron every other weekend.

Formula 1 looks like it's serving up a perfect storm in 2012: of an ultra-competitive field with so little to choose between the cars, and tyres that are going to be a challenge to get the most out of.

Either of those elements on their own would be enough to delight fans, but it's the combination of that's really mouthwatering as the days tick down to Melbourne.

For however easy it may be to drive at the perfect pace to look after tyres while testing at Barcelona, that luxury of doing your own thing is not going to happen when you've got rivals breathing down your neck for lap after lap in the races.

And if, as appears to be the case, there is so little to choose in pace between so many cars, how do you judge taking it easy to nurse your rubber at the risk of losing places, against going flat-out but perhaps putting you in the tyre-wear danger zone?

No team or driver has the answer to that at the moment. That's why the first few races of the new season are set to serve up a real treat – even if the boys on the pitwall may need to crack open their bottles of paracetamol.



More Ferrari tyre woe

Ferrari at risk of falling into midfield

**"Last year Mercedes could have been quicker, but they couldn't get the best out of the tyres"**

Pirelli's Paul Hembery

Analysis from the data of that run (see graph, p13) suggests Alonso would have finished 4.68 seconds behind Grosjean at the end of a race.

The day after that run, Ferrari cancelled all media sessions with its drivers in a move viewed by some as confirmation of the extent of the team's troubles.

Ferrari appeared not to sort its issues in the final two days of the test. Fry conceded that the team is facing a challenge – and that he does not expect either Alonso or Massa to fight for a podium finish at the Australian Grand Prix.

When asked whether he feels Ferrari's problems lie in optimising its package or whether the F2012 actually requires a fundamental rethink, Fry said: "Whether we fix that in a small update or a big update, I don't know yet to be honest."

### JUST HOW CLOSE IS IT?

Mercedes team principal Ross Brawn told the media last weekend that he believes Formula 1 is heading for a vintage campaign, with testing form showing there is little separating the frontrunning cars.

"I am expecting the tightest start to a season that we have seen for a number of years," he said.

His view was shared up and down the pitlane, with a number of leading teams unable to ascertain exactly where they stand in the pecking order – despite 12 days of winter testing.

Such an outcome points towards a closing-up of the competitive order, with some predicting that the midfield is so close that the tiniest differences in lap times could be the difference between qualifying near the front and ►

## BIG NUMBER

**0.902**

Seconds covering the best lap by each 2012 car in pre-season testing at Barcelona this winter



◀ failing to progress from Q2.

Lotus team principal Eric Boullier told AUTOSPORT: "You can see already from some of the timings here [in testing] that there was less than one second – maybe six tenths – between 10 cars. It looks like Red Bull and McLaren are a little bit ahead, but the rest of the pack is quite close."

### NEW TYRES ADD TO PROBLEMS

Ferrari's workload in improving its car is increased by the fact that the softer 2012 tyre compounds are putting a premium on a well-balanced machine – so it will not just be a question of adding downforce.

Control-tyre supplier Pirelli had vowed to go aggressive this season, and McLaren team principal Martin Whitmarsh famously said at the Brazilian Grand Prix that he hoped the company would give the teams more 'headaches' for this year.

That request appears to have been met, with teams experiencing high levels of tyre wear in winter testing – although this may not be repeated when F1 races at warmer tracks that are more rubbered in.

Pirelli motorsport director Paul Hembery believes that a lot of teams have made good progress in working the tyres better this year – which means those teams who fail in this regard will pay a much bigger penalty.

"Last year we had cars that could have been quicker, like Mercedes, but they just couldn't get the best out of their tyres," he said. "This year, it's clear from the data and the comments we are seeing that they are far better with the situation. They still



Alonso wants more 'feel' from car

have to manage the degradation, but are in a far better position to compete with the others."

The new 2012 rubber has also improved the warm-up issues that many teams – especially Ferrari – suffered last year. But sources suggest that Ferrari may now be facing a totally different problem: that it warms up the tyres so well that it could actually be overheating them.

### RACE AGAINST TIME

The biggest positive on the horizon for Ferrari is that in-season testing returns this year, with four days of running scheduled to take place at Mugello from May 1-4.

That gives the team the chance to evaluate developments – or perhaps a major rethink of its car concept – away from the pressure of grand prix weekends.

But Ferrari will need to make progress before then if it is to prevent early favourites Red Bull and McLaren from building too



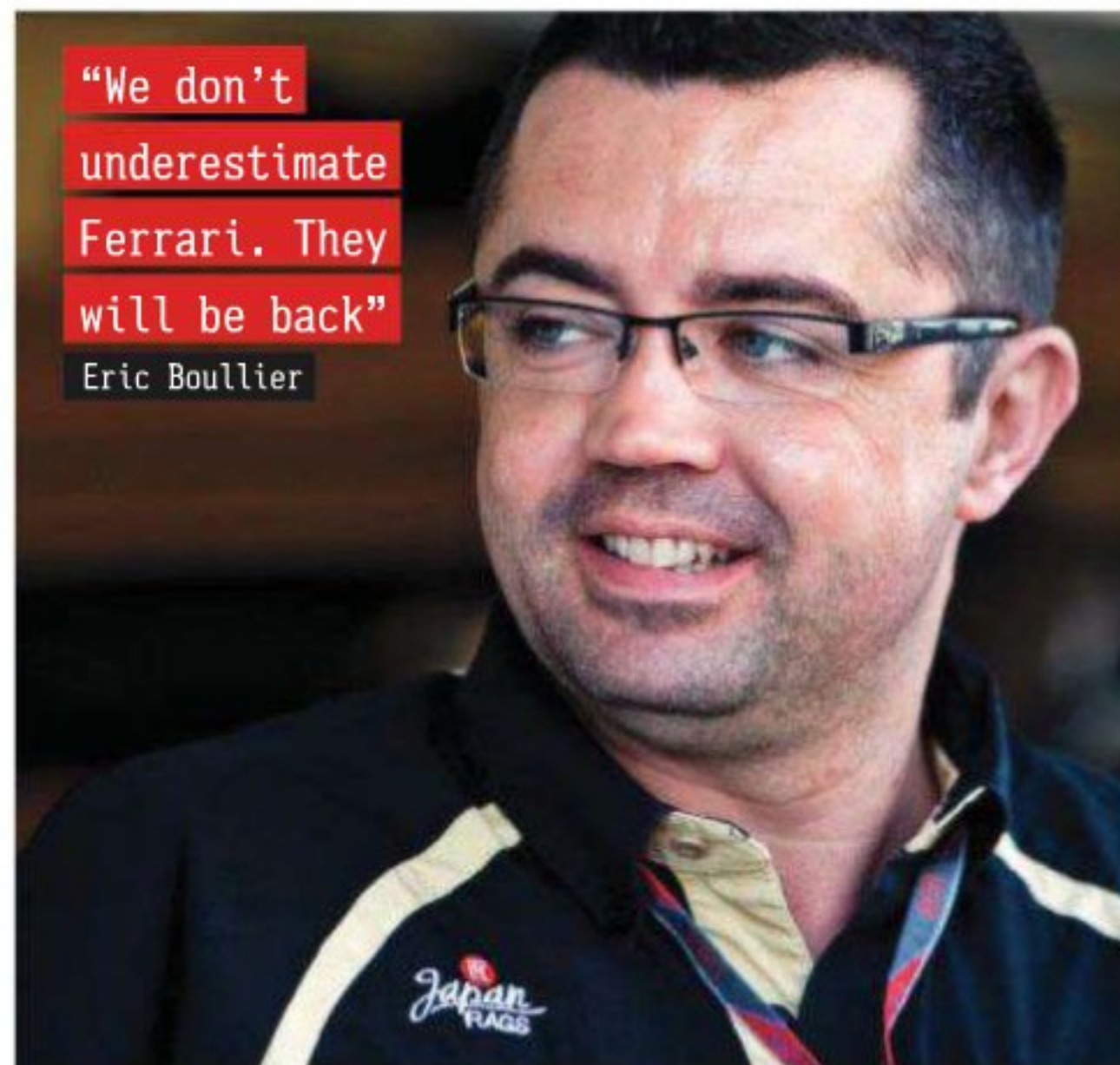
Force India is a threat to Ferrari

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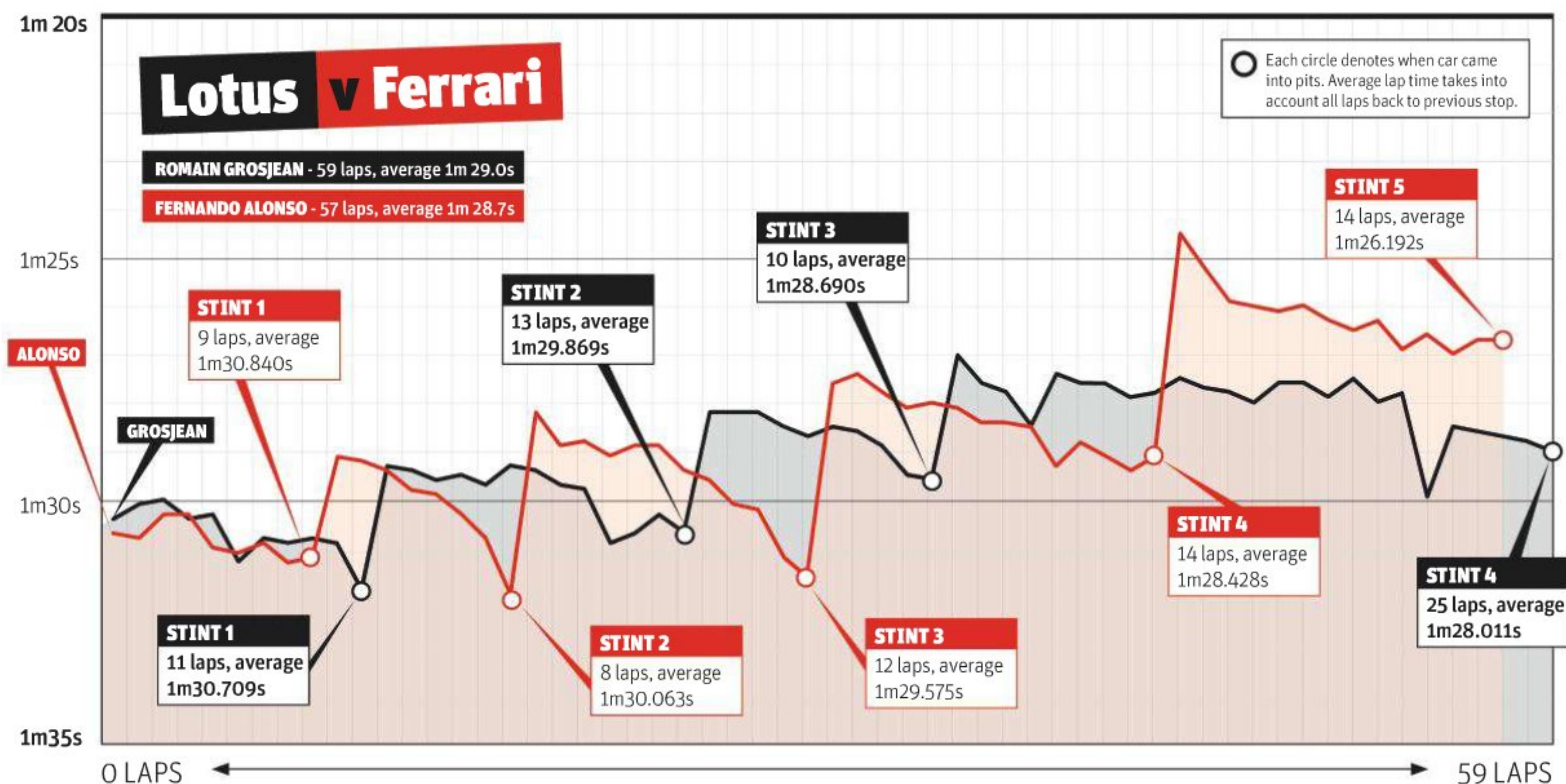
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2	Sergio Perez (MEX)	Sauber-Ferrari C31	1m23.820s	-	1m22.094s	-
3	Jenson Button (GB)	McLaren-Mercedes MP4-27	1m23.510s	-	1m22.103s	-
4	Daniel Ricciardo (AUS)	Toro Rosso-Ferrari STR7	-	-	1m22.155s	1m23.393s
5	Fernando Alonso (E)	Ferrari F2012	-	1m23.447s	-	1m22.250s
6	Bruno Senna (BR)	Williams-Renault FW34	-	1m24.925s	1m22.480s	1m22.296s
7	Nico Hulkenberg (D)	Force India-Mercedes VJM05	-	1m23.893s	-	1m22.312s
8	Kamui Kobayashi (J)	Sauber-Ferrari C31	-	1m23.836s	-	1m22.386s
9	Felipe Massa (BR)	Ferrari F2012	1m24.318s	-	1m22.413s	-
10	Lewis Hamilton (GB)	McLaren-Mercedes MP4-27	-	1m24.111s	-	1m22.430s
11	Paul di Resta (GB)	Force India-Mercedes VJM05	1m24.305s	-	1m22.446s	-
12	Romain Grosjean (F)	Lotus-Renault E20	1m23.252s	1m22.614s	-	-
13	Heikki Kovalainen (FIN)	Caterham-Renault CT01	-	1m23.828s	1m22.630s	-
14	Mark Webber (AUS)	Red Bull-Renault RB8	1m23.830s	-	1m22.662s	-
15	Vitaly Petrov (RUS)	Caterham-Renault CT01	1m24.876s	-	-	1m22.795s
16	Nico Rosberg (D)	Mercedes F1 W03	1m23.992s	-	1m22.932s	-
17	Michael Schumacher (D)	Mercedes F1 W03	-	1m23.978s	-	1m22.939s
18	Jean-Eric Vergne (F)	Toro Rosso-Ferrari STR7	1m24.216s	1m23.126s	-	-
19	Pastor Maldonado (YV)	Williams-Renault FW34	1m25.587s	1m25.801s	-	1m23.347s
20	Sebastian Vettel (D)	Red Bull-Renault RB8	-	1m23.361s	-	1m23.608s

"We don't underestimate Ferrari. They will be back"

Eric Boullier







Lotus long run was quicker than Ferrari

**FERNANDO ALONSO AND ROMAIN GROSJEAN** both ran race simulations on Friday afternoon at the Barcelona test, offering us the best glimpse yet of the relative form of Ferrari and Lotus respectively.

Although Alonso's average pace on his four-stop strategy (tyres: medium/soft/soft/medium) was quicker, the extra 25-second stop over Grosjean's

three-stopper (tyres: soft/soft/soft/hard) meant that had it been a race he would have finished 4.68 seconds behind the Frenchman.

The figures cannot tell us the full picture – because Alonso used a mixture of scrubbed and new tyres, and we do not know DRS use – but it shows Ferrari is no longer in a comfort zone ahead of the midfield.

much of a points advantage.

One of the flip sides of a condensed midfield battle is that it does at least provide more opportunity for Ferrari to overcome any car deficiencies with clever thinking on the pitwall.

Brawn said: "Tight groups definitely give more potential to gain position with good calls on strategy. So, if it's as tight as it looks like it may be, and nobody runs away, then strategy will be deciding some of the race wins this year, whereas last year most of the time the fastest cars won."

And although rivals are aware that Ferrari is facing difficulties, they do not expect the Maranello squad to stay down for long.

Boullier said: "Ferrari have a lot of resources, and are also very competent people, so you never know how it will be."

"It's not because of one race simulation where we were supposedly faster than them that we're going to beat them this season. We have to keep focused on the car. Don't underestimate the capacity of Ferrari to react. They will be back."

## TOTAL MILEAGE IN OFFICIAL PRE-SEASON TESTS

### 2012 CARS

1 Williams 3311 miles
2 Ferrari 3105 miles
3 Sauber 3058 miles
4 McLaren 2978 miles
5 Force India 2976 miles
6 Toro Rosso 2815 miles
7 Caterham 2812 miles
8 Red Bull 2674 miles
9 Mercedes 2414 miles
10 Lotus 2176 miles
11 HRT 0 miles
12 Marussia 0 miles



Williams on top on mileage

## AVERAGE MILEAGE PER DAY, OFFICIAL PRE-SEASON TESTS

### 2012 CARS

1 Mercedes 292 miles*
2 Williams 275 miles
3 Ferrari 259 miles
4 Sauber 255 miles
5 McLaren 248 miles
5= Force India 248 miles
7 Lotus 241 miles**
8= Toro Rosso 234 miles
8= Caterham 234 miles
10 Red Bull 223 miles
11 HRT 0 miles
12 Marussia 0 miles



Mercedes made up for lost time

\*Mercedes ran its 2011 car at first test. New car has run for nine days

\*\*Lotus lost three days of running due to a chassis problem



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# Revealed: what Red Bull didn't want you to see

Red Bull Racing went to extraordinary lengths – including shrouding its car with umbrellas – in the Barcelona test to hide the secrets of its updated RB8 from its rivals. Here, AUTOSPORT technical consultant GARY ANDERSON helps explain some of the design aspects the team tried to hush up

## EXHAUSTS

➔ A lot of effort has been put in over the winter to optimise the new periscope exhausts to respond to new rules. On the final two days of last week's Barcelona test, Red Bull revised its design completely.

**GARY ANDERSON:** The exhaust is as far forward as the rules allow, and if the team was aiming to get an effect on the rear brake-duct area or floor, then that's a long, long way forward.

There has been some interest in a duct in the floor, with some believing the team is trying to direct its exhaust flow into

the diffuser for an aerodynamic benefit, but that's quite a hard thing to achieve and is probably not the primary aim.

The amount of airflow between the front wheels and the end of those tailpipes at top speed is horrendous when the car is doing 60-70 metres per second, so to get that high-velocity air to concentrate on something particular is very difficult.

I think the aim is to cause the minimum inconvenience to airflow and allow the team to

maximise the basic car package. If you can get good flow around the rear Coke-bottle area of the car and to the aerodynamic vanes on the brake ducts, as well as energise that flow with the exhaust gases, that will provide a significant benefit.

## REAR WING

➔ Red Bull appears to have followed Mercedes' lead in running a slot-gap concept on its rear wing.

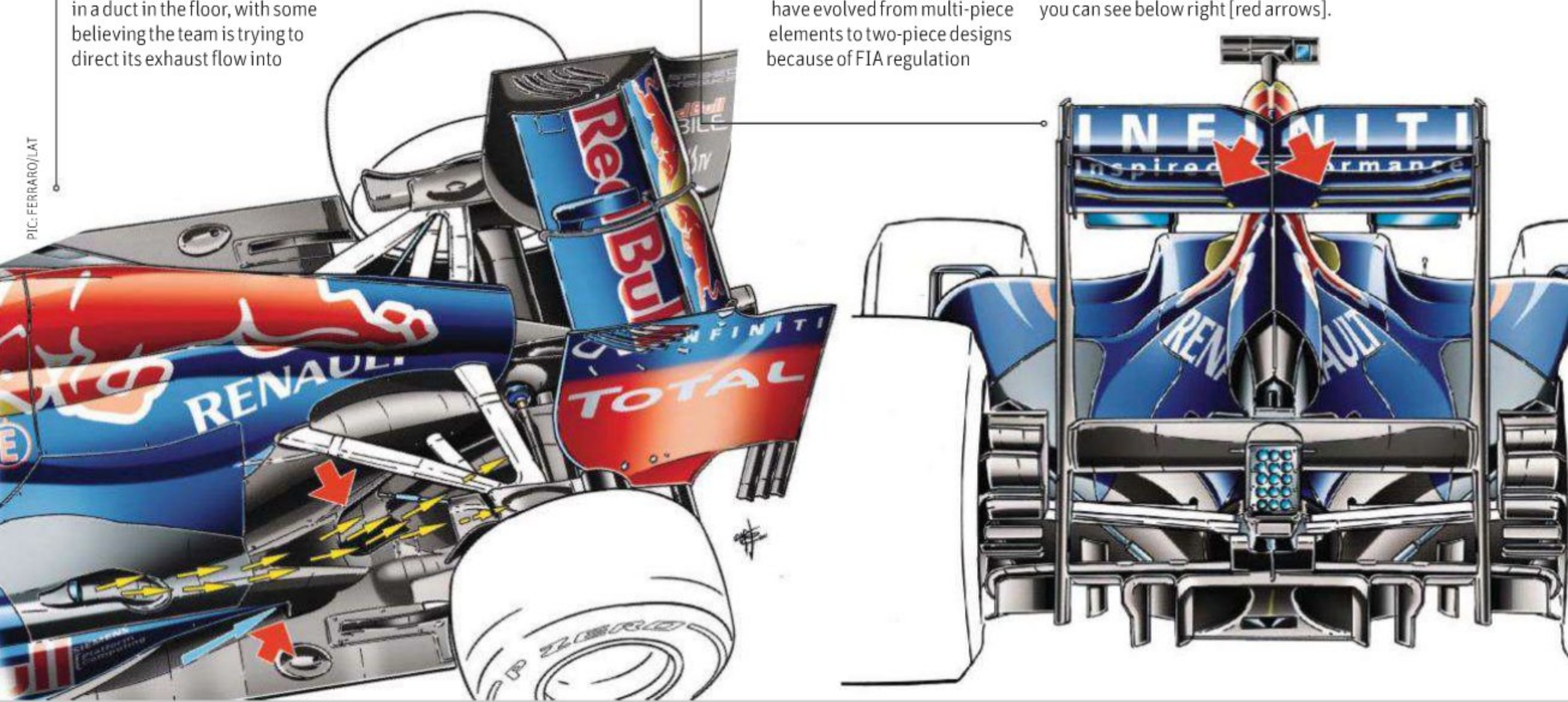
**GARY ANDERSON:** Rear wings have evolved from multi-piece elements to two-piece designs because of FIA regulation

changes over the years.

Furthermore, the arrival of DRS means that main planes have got longer and the top flaps have got shorter, because that's the most efficient way of getting the DRS to work hardest.

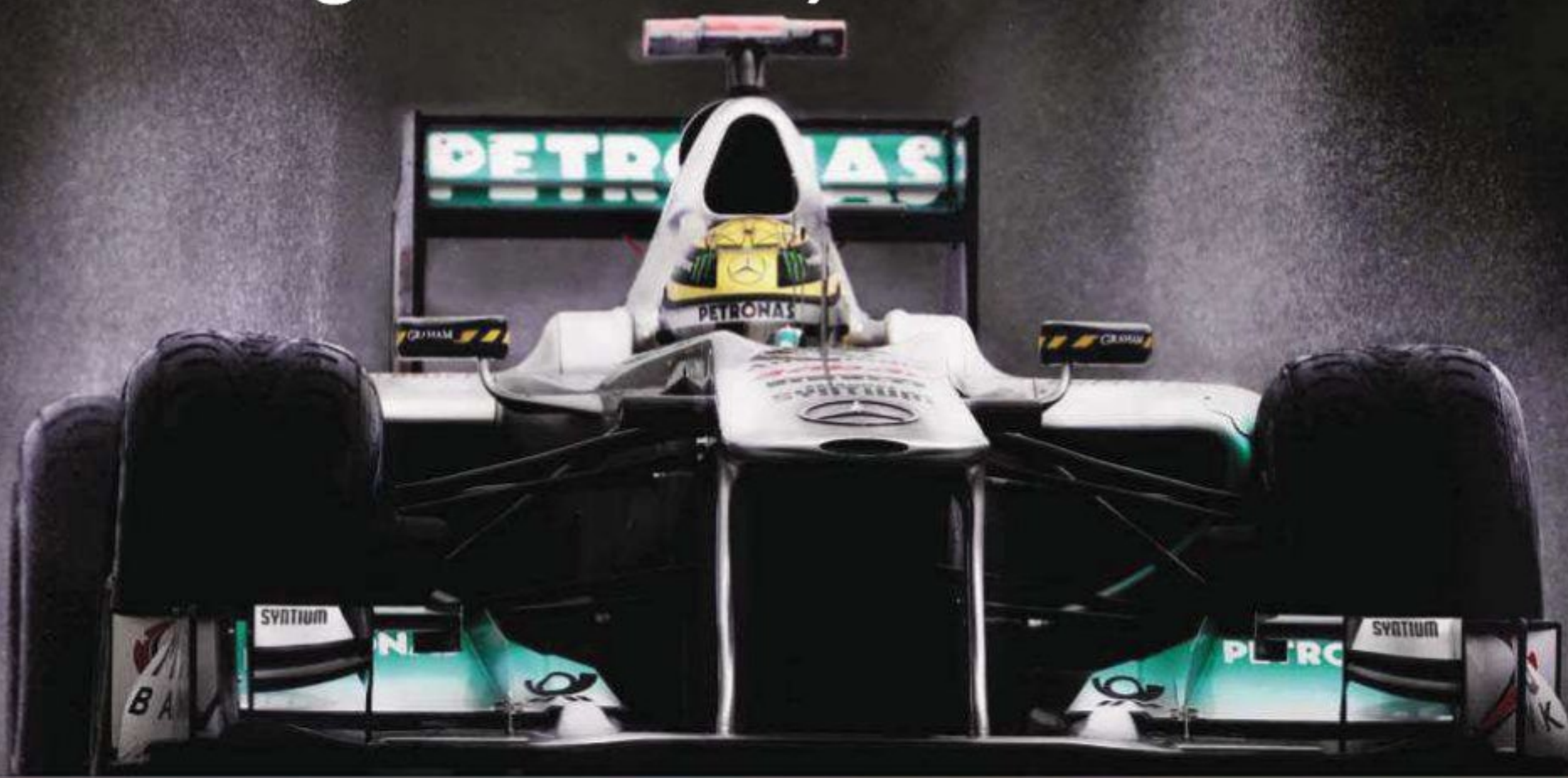
Red Bull was never a big fan of optimising its rear-wing design to make the most of the DRS straight-line-speed boost. Instead it went for ultimate rear-wing performance.

It appears to have tweaked its philosophy again, and in testing it ran a wing that features the slot gaps you can see below right [red arrows].





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# Last two F1 cars break cover

**AUTOSPORT** technical consultant GARY ANDERSON gives his verdict on Marussia and HRT challengers

## MARUSSIA MR01

The new Marussia is fairly basic. The team hasn't gone out into dreamland because of its technological partnership deal with McLaren. Marussia is bigger than HRT, and with consultant Pat Symonds has someone who's been around a while, so it's a surprise that it's having the fight it is to get to the first race.

## SIDEPODS/REAR BODYWORK

The design of this area of the car is fairly conventional. It has undercut sidepods, and towards the rear it drops down into a reasonably decent Coke-bottle design. But like everything, what matters is the detail and that is what takes a lot of research.

## NOSE/FRONT WING

This is a bit more elegant than some. It looks like it's got a high rear section to the nose but it's lower at the front, which from the side view gives it a nice line. So although the chassis remains reasonably high, it's an elegant enough solution. The front wing is not complicated, but it has bits on it that will function well.



## HRT F112

Just by getting its car running this week, HRT is ahead of where it has been in any year up to now. We should give the team some credit for doing that, with all the changes that have gone on. This will be an important year to just keep heads down and prepare the structure needed for the future.

## FRONT WING

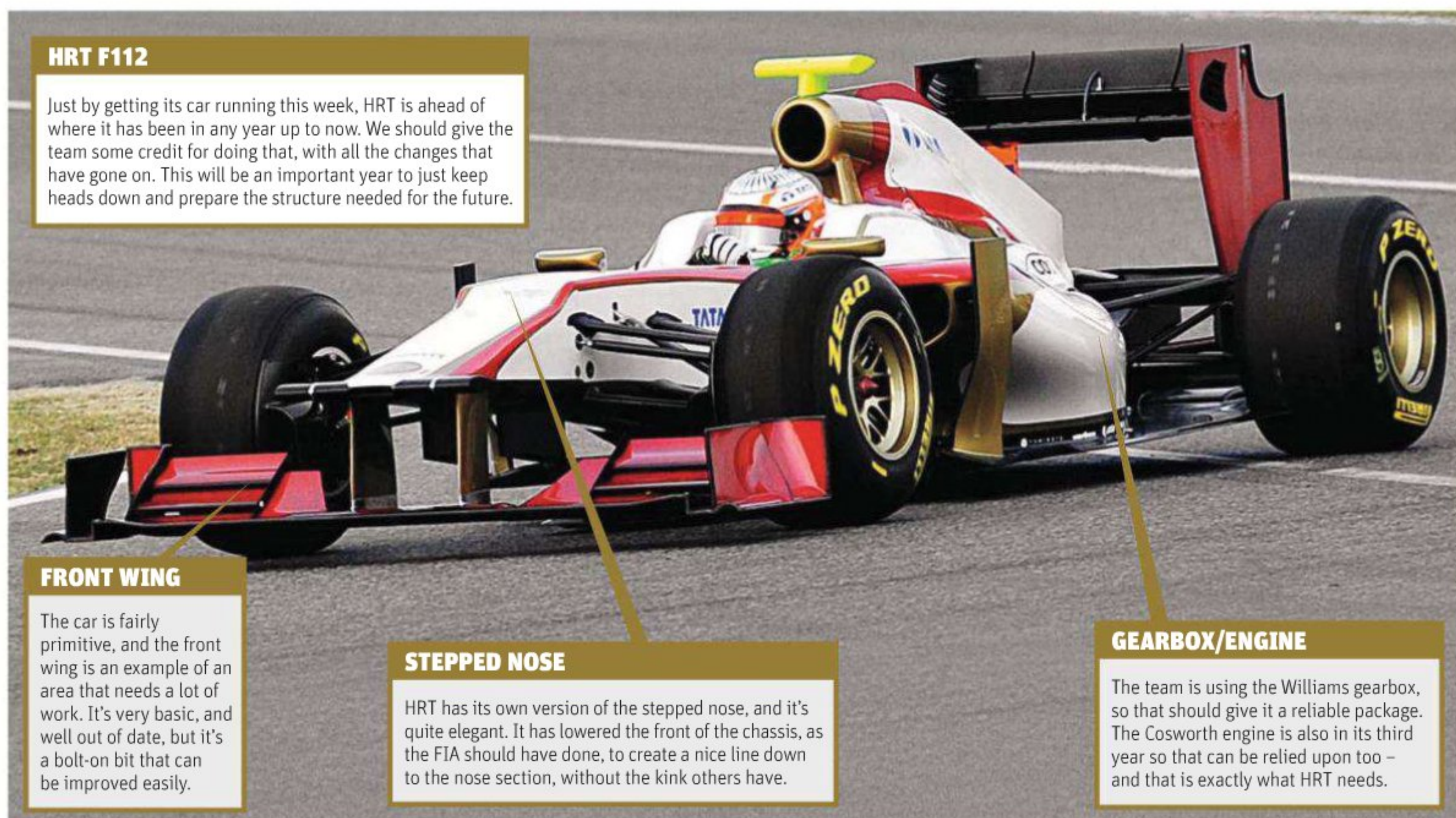
The car is fairly primitive, and the front wing is an example of an area that needs a lot of work. It's very basic, and well out of date, but it's a bolt-on bit that can be improved easily.

## STEPPED NOSE

HRT has its own version of the stepped nose, and it's quite elegant. It has lowered the front of the chassis, as the FIA should have done, to create a nice line down to the nose section, without the kink others have.

## GEARBOX/ENGINE

The team is using the Williams gearbox, so that should give it a reliable package. The Cosworth engine is also in its third year so that can be relied upon too – and that is exactly what HRT needs.





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# THIS WEEK IN F1



## ENGINE ROW RUMBLES ON

Fernando Alonso's presence track-side at last week's Barcelona test, and the way in which he took video footage of rival cars on his mobile phone, prompted conspiracy theories that he was trying to capture evidence of rivals using off-throttle exhaust blowing.

But Renault's F1 engine technical boss Rob White has scoffed at such talk – and says that the continued strange sound of engines on corner entry is more to do with fuel consumption than trickery.

"You can hear it on track, and even in the pits," he told AUTOSPORT. "We know the cars can wait at the end of the pitlane without boiling over like they used to do, so even within the limits of mapping restrictions, we do things for other reasons."

## Williams steps down from board



Frank Williams is to step down from the board of his team at the end of this month, with his place being taken by daughter Claire.

Although team founder Williams will retain his position as team principal, and will be an observer at board meetings,

he has decided to reduce his involvement as part of a succession plan.

"I am 70 in April and have decided to signal the next stage in the gradual but inevitable process of handing over the reins to the next generation," he said.

**I don't think it is a good situation for F1 to not test from the first race to the last race. This is the world championship – and drivers and engineers need to test. It is not logical, and it is not safe**

Pedro de la Rosa has strong feelings about the lack of testing in Formula 1. The Spaniard could well use his new role as chairman of the Grand Prix Drivers' Association (GPDA) to help get support behind changes.



## Alguersuari lands pundit role



Ex-Toro Rosso racer Jaime Alguersuari will be returning to the Formula 1 paddock this year after agreeing to become BBC Radio 5 Live's expert pundit. The Spaniard, who was dumped by Red Bull's junior team at the

tail end of last year, failed to find a full-time drive but will now spend the year behind the microphone working alongside lead commentator James Allen.

His continued presence at races puts him in the perfect place for a call-up should a team's regular driver be unable to race.

"Given that I'm still only 21, this agreement permits me to return to F1," he said.

Speculation over the winter most strongly linked him with a potential tie-up with Mercedes.

## More fan forums planned

FOTA is hoping to run a series of Fans' Forums throughout this year, following another successful event in Barcelona last week on the eve of the final pre-season test. Vitaly Petrov, Pastor Maldonado, Marc Gené, Eric Boullier and Norbert Haug were among the panel of guests that took questions from the 200 members of the public who attended.

There are also rumours of a promotional event planned for New York to lift interest in the US.



## TRIALS FOR 'EMERGENCY' TYRES



Pirelli activated its disaster contingency plan in Barcelona last week when it shipped sets of 'emergency' tyres for teams to try. As a fall-back plan should its factory in Turkey ever be unable to make tyres for a race because of a natural disaster or other event, Pirelli has another facility at a top secret location that can produce replacement F1 rubber. Pirelli wanted to ensure these new tyres performed exactly like the standard P-Zeros – so gave each team two sets to try during the final test.

# 1,044,000

The number of lines of data that Formula 1's testing timekeeper TSL has provided to each team over the course of the 12 days of pre-season testing



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21-22 July – Curitiba (BR)

22-23 September – Sonoma (USA)





# MARK HUGHES

## GRAND PRIX EDITOR

The rulemakers didn't like exhaust-blown diffusers, but to eradicate their effects completely is proving fiendishly difficult

**S**o here's the story so far: the biggest performance toy has been taken from the box, banished, put on the top shelf out of reach. The rulemakers have been so thorough, so specific, in the way they've sought to limit exhaust-blown diffusers, it must surely be time for those speed-junkie boffins to look elsewhere for laptime. Chief among their number, Adrian Newey, even said a few weeks ago that there's virtually no prospect left of finding aerodynamic performance from the exhausts, that there's no point reaching for that top shelf.

Except... the new cars begin to

performance. So we have upward exhausts poking out of downward channels, aerodynamic shrouds around exhaust outlets, exhausts channelled over aero-profiled brake ducts or lower beam wings, exhausts pointing in directions and around bodywork shapes that make it necessary to have flow-visualisation software just to have a clue what the aim may be.

Then, as they all test together and everyone takes a look at what everyone else has done, so the speed ferrets try out a few of those other ideas in their CFD programmes, in their tunnels – and then come back to the track with lots of new pieces to try.

They cannot let the idea go, no matter how hard the rules make it. Because if you can get it working, it's hugely powerful. If you can somehow get the exhaust gasflow around that diffuser, you seal it off, preventing the underfloor airflow from leaking away in the gap between the track and the diffuser – and if you can do that, you can run a higher rear ride-height and therefore have more rake on the car. And if you do that, the gains are spectacular and self-reinforcing.

The negative pressure at the kick-up point of the diffuser can double between zero and 10 degrees of rake. Furthermore, the front wing ends can run in ground-effect, and therefore be vastly more aero-efficient. The increased load they take on in this way unloads that centre part of the front wing, allowing a cleaner, faster route through for flow that can be used around the sidepods and to the underfloor.

So you can see why it's such a pot of honey, why the top guys

especially have refused to simply shrug their shoulders and say, 'Oh well, it's been taken away'. Blowing the diffuser is the holy grail. But how the hell to do it with the exhaust outlets now so far away and so high?

McLaren's initial solution appears to have been the most sophisticated. That downward channel will pull the airflow down in such a way it will bring the exhaust flow with it, even when that pipe is pointing slightly upwards (as the rules insist). That gets it down to the right sort of height and the fact that it's not pointed inboard, like the initial Red Bull one over the suspension arms and beam wing, may mean it still has energy enough to reach the rear and seal that diffuser.

So Red Bull turns up on the Saturday of Barcelona testing with a different exhaust, no longer pointed so far inboard and surrounded by bodywork featuring a bridge – guiding the exhaust flow back and around the diffuser's edge – and a tunnel formed by the starter hole, taking the non-exhaust flow from the bottom of the sidepods and over the middle of the diffuser. This looks even more trick than McLaren's. But both appear to be using the upper-body airflow to seal the exhaust flow into going to the right place, where it in turn seals the underbody airflow into going to the right place.

Which works better might even determine the championship, as these two cars appear the fastest. Then it rains on Saturday before the RB8 gets a proper run and it has a gearbox problem on Sunday. And that's it, the end of testing. No more clues. What happens next? Tune in a week and a bit from now... ❧



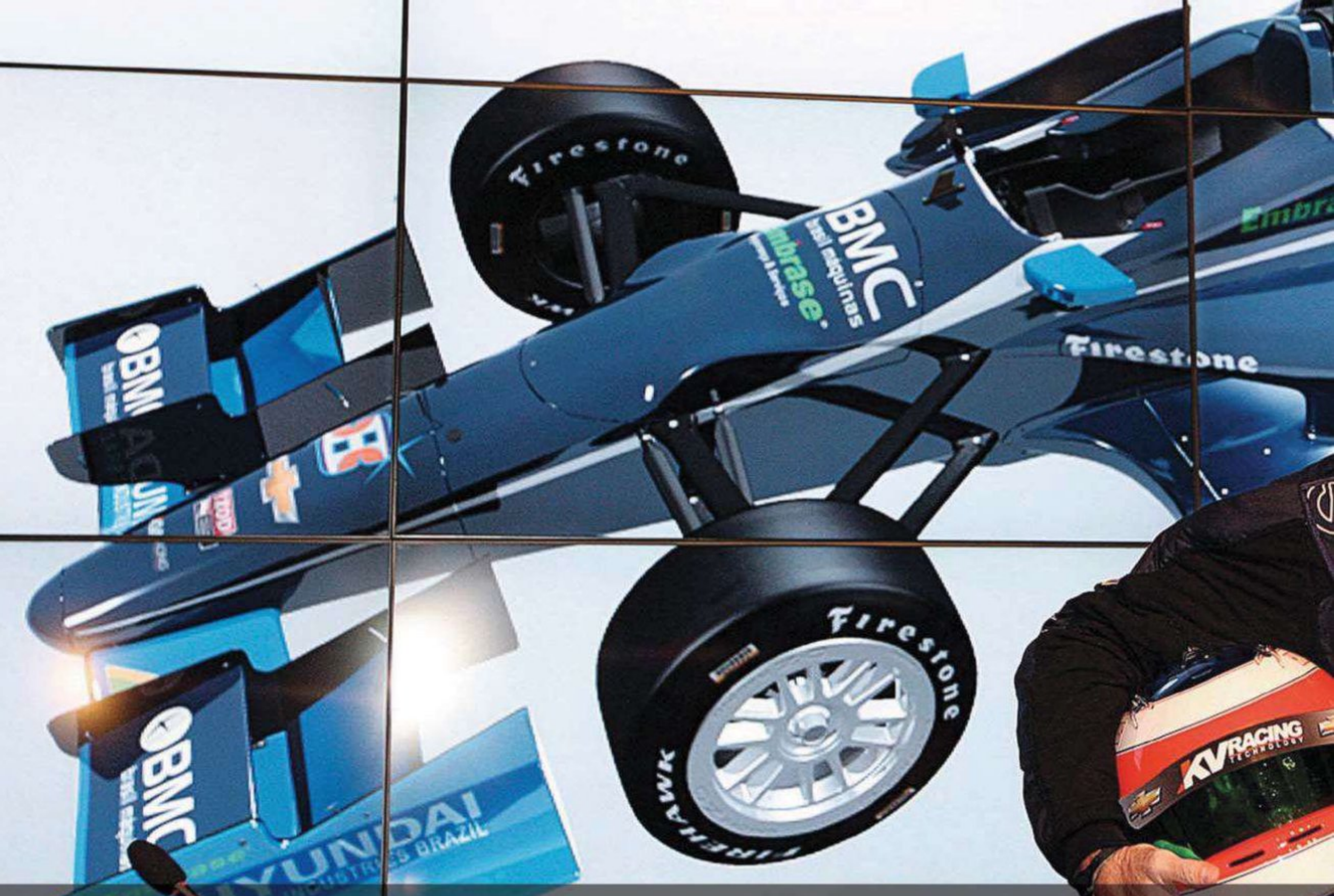
Red Bull: work going on with the exhaust

PICS: FERRARO/LAT

break cover and, what do you know, those tinkers have not simply poked the exhausts out of the back of the bodywork, forgotten about them and looked elsewhere for

**“Red Bull’s new exhaust looks more trick than McLaren’s”**





INDYCAR

# Kanaan delayed Barrichello deal

IndyCar ace 'hoodwinked' his bosses to get grand prix veteran into IndyCar for 2012 season

**R**ubens Barrichello's new IndyCar team-mate Tony Kanaan has admitted that he was to blame for his friend's deal to join the series with KV Racing taking so long to complete.

Following Barrichello's first test at Sebring at the end of January, it seemed a formality that the most experienced driver in the history of Formula 1 would sign a deal to race for KV. But Kanaan, who offered Barrichello the test in the first place, revealed last week that he had misled his team in the hope of getting some momentum behind the deal.

"My part in Rubens's deal — I

think I set them up pretty bad," said Kanaan. "I was with Rubens when he got the phone call that his deal was not going to happen in Formula 1, and I said 'Hey, why don't you test my car to help me out?' Then I go to [team co-owners] Kevin [Kalkhoven] and Jimmy [Vasser], and I said, 'he wants to race, he has full sponsorship, he's ready to go. He just wants a couple of laps in the car, and he'll make his decision.'"

Despite Kanaan's assurances that the funding was in place, it took over a month for Barrichello and KV to put a deal together for the 39-year-old Brazilian to race full-time in IndyCar this year.

"After the test, with what I'd told them, obviously Jimmy and Kevin talked to Rubens. So now they're expecting Rubens to make his decision, and he asked if they had sponsorship. They said: 'No, we thought you had it.' Then Jimmy gave me a dirty look, and realised it was a set-up. But I think it was a good one."

Barrichello said he is looking forward to racing in a series in which the machinery is more closely matched than in F1. He added that it was only after his hopes of remaining in F1 for a 20th season faded that he started to consider the potential of turning Kanaan's

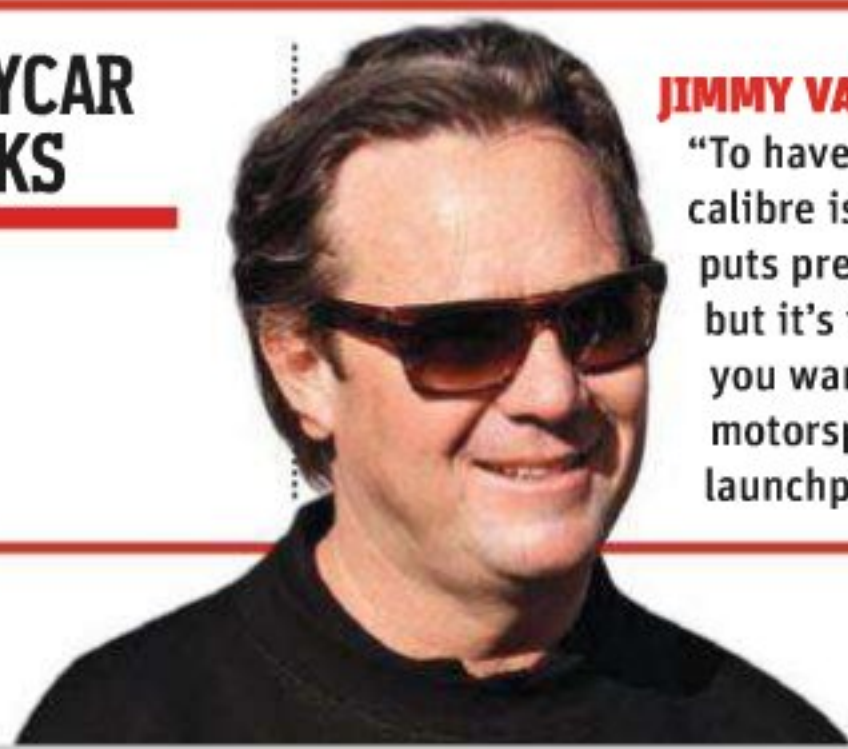
long-standing offer of an IndyCar test into something serious.

"Tony was inviting me to test for a long time," he said. "All of a sudden I got the message that possibly this test could mean something. I think this is a good chance for me after such a long time competing. I'm really happy I'm going to have a competitive car right now. The last time I had a competitive car was with Brawn in 2009, and I won races."

Barrichello was scheduled to return to the KV cockpit today (Thursday) at Sebring for the second half of IndyCar's official four-day pre-season test.

## WHAT THE INDYCAR PADDOCK THINKS

Leading IndyCar figures welcome Barrichello's signing for KV



### JIMMY VASSER

"To have a driver of Rubens' calibre is awesome. It really puts pressure on the team, but it's the kind of pressure you want to have in motorsport. This is a launchpad for our future."

### HELIO CASTRONEVES

"The entire series will get a boost with Rubinho's presence. He will be fighting for the title, and the championship will only gain from that."



### DARIO FRANCHITTI

"Rubens ups the level of competition in the field. Besides the guys we know already who are tough to beat, it's another major name to fight against."







## Rookie status only for Indy

The IndyCar Series has already declared that Rubens Barrichello will not be eligible for Rookie of the Year honours this season. However, he will be officially entered as a rookie for the Indianapolis 500, which will be his first oval race.

"I'm loving the idea that I'm going to be a rookie," said Barrichello, who attended the race as a spectator in 1993. "That makes me young, and I'm really enjoying that."

The 39-year-old Brazilian is well aware that JR Hildebrand came within a few hundred yards of winning at the Brickyard as a rookie last year, but he's not using that as a gauge of what he should be aiming for on his first attempt.

"[Hildebrand] was a rookie, but he's done ovals before," Barrichello said of the 2009 Indy Lights champion. "These guys come a little bit more prepared than myself. Can I win Indy in the first year? I don't think we know. But it's going to be a great experience."

## AUTOSPORT SAYS...

**GLENN FREEMAN**  
NEWS EDITOR

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**R**ubens Barrichello is no Nigel Mansell, but these things are all relative. And the 2012 IndyCar Series has little in common with the phenomenon of a championship Mansell joined straight from Formula 1. Given Indy's current standing in world motorsport, getting the 11-time grand prix winner on board is almost as significant a boost as the reigning world champion crossing the Atlantic 19 years ago.

In this internet age, it's a lot easier for us to measure the consumption of stories than it used to be. And AUTOSPORT, just like IndyCar, can see from the numbers that interest from racing fans in Barrichello's move has been huge.

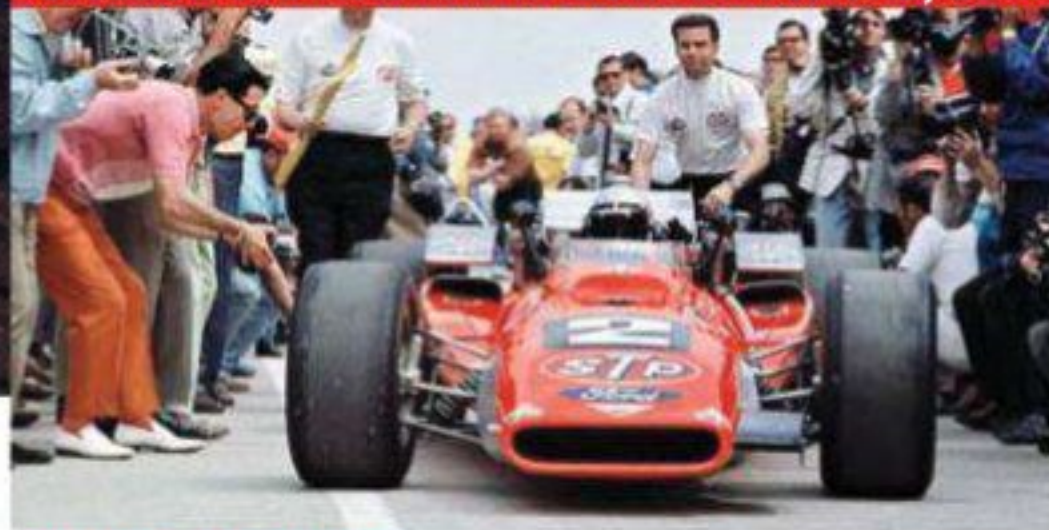
It would be foolish to expect F1 fans to automatically tune in for the first IndyCar race of the season and begin following the championship religiously just to keep track of the most experienced driver in the history of the world championship.

But even if they just start paying attention from a distance, be it through reading news reports or watching highlights clips, then all it needs is for 'Rubinho' to be mixing it at the front and a few more people might start tuning in.

Despite unfair comparisons with Mansell, the timing is right for Barrichello to have just as much of an influence on US open-wheel racing as Britain's moustachioed racing hero.



Barrichello isn't the first driver to switch from F1 to US open-wheelers. These four crossed the Atlantic in both directions, sometimes on multiple occasions...



### MARIO ANDRETTI

Switched between US and F1 more than most. Won Indy 500, world championship and Indycar crown.



### TEO FABI

Alternated between the two for a decade, taking Indycar runner-up spot in '83 and poles in F1.



### NIGEL MANSELL

The '92 world champion won the '93 CART title, and quit a year later to briefly return to Formula 1.



### ALEX ZANARDI

F1 tail-ender with Jordan and Lotus won two CART crowns in '97-98, netting him a Williams seat for '99.

## REMEMBER WHEN...



...a rookie last won the Indy 500?

The last time it happened was back in 2001, when Helio Castroneves took the first of his three victories at the Brickyard for Roger Penske's legendary squad.

### SCOTT DIXON

"It's obviously huge for the series as Rubens has some real name recognition that he can bring on an international level. His addition just adds to the buzz surrounding IndyCar right now."



### RANDY BERNARD

"It's a positive step to start 2012. This will create great competition and increase our international platform. Millions of fans will want to see what Rubens can do."



### TONY KANAAN

"I don't expect any less than for Rubens to be right on top of the game right away. I believe he has a very good chance of fighting for race wins and the championship."





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## IN BRIEF



Van der Garde at Caterham

### MORE GP2 FOR VAN DER GARDE

GP2 veteran Giedo van der Garde will race for Caterham (formerly Team AirAsia) alongside fellow regular Rodolfo Gonzalez this year. Carlin has retained Max Chilton and added GP3 race winner Rio Haryanto. Lazarus, Arden and Racing Engineering have snapped up Auto GP racer Fabrizio Crestani, GP2 race winner Luiz Razia and Formula Renault 3.5 graduate Nathanael Berthon respectively.

### DALY GETS LOTUS GP3 SEAT

American Conor Daly, son of ex-F1 racer Derek, will remain in GP3 for a second season after joining the ART-run Lotus squad. Jenzer Motorsport will run Swiss Patric Niederhauser, who won the Italian Formula Abarth title with the team.

### STANAWAY STEPS UP TO FR3.5

New Zealander Richie Stanaway, the reigning German F3 champion, and his 2011 title rival Marco Sorensen will race for Lotus in Formula Renault 3.5 in a team run by Gravity-Charouz Racing. Draco has taken on GP3 race winner Nico Muller, and Britain's Nick Yelloly has joined Comtec.

### CAMPANA TOPS AUTO GP TEST

Auto GP teams tested the series' new Kumho rubber for the first time at Monza last week. Italian F3 champion Sergio Campana was fastest for new squad MLR71, ahead of Euronova's Sergey Sirotkin. British GP3 graduate Adrian Quaife-Hobbs was seventh quickest for Super Nova.

### TEXAS TEST POSTPONED

IndyCar's planned oval test at Texas Motor Speedway has been postponed from March 13 to May 7 – after the first four road-course events – following a request from teams.

### HUNTER-REAY OUT FRONT

Andretti Autosport's Ryan Hunter-Reay topped the first day of IndyCar's four-day Sebring test on Monday. Penske's Helio Castroneves was second, giving a one-two for Chevrolet-powered machinery.



Hunter-Reay quick at Sebring

## FORMULA NIPPON

# Sato for Nippon debut

Former F1 racer to make guest appearances in Japan. By MARCUS SIMMONS

Japanese racing hero Takuma Sato is to make his debut in his home country's biggest single-seater series later this year.

The Formula 1 podium finisher, who currently drives in the IndyCar Series for Bobby Rahal's team, will contest the final Formula Nippon round at Suzuka on November 4, plus the series' non-championship Fuji Sprint Cup on November 18.

Sato could even contest the Sugo round on September 23, but time is tight as that is just a week after the IndyCar season finale.

His Nippon activity is due mainly to the cancellation of the Motegi

IndyCar round, meaning that Honda – which owns Motegi and Suzuka and backs Sato – would otherwise not benefit from the huge crowds he draws to his home events.

"That's the whole point and it's very important to Honda," he said. "There is no Indy Japan, but I'm very happy to race in front of my home crowd. It's a great opportunity for me."

Sato, 35, will race for the Honda-powered Mugen squad and tested the team's Swift FNo9 chassis last weekend at Suzuka.

He completed fewer than 10 laps in the dry before Monday's official

test, which was wet. "At least I got some experience," he said.

"It's a very quick car. In the dry at Suzuka you can do 1m38s – just a few seconds off my F1 lap times. And there are some very good drivers – I know Andre Lotterer [the 2011 champion, who is dovetailing a Nippon title defence with his Audi commitments in the World Endurance Championship] from my British F3 days.

"It's going to be very tight now to get in any more testing because of the in-season ban in Formula Nippon, but it's a big challenge and I'm really looking forward to it."

## WTCC

# Rules weigh Muller down

### WORLD TOURING CAR CHAMPION

Yvan Muller believes Chevrolet will be at a disadvantage when the season kicks off at Monza this weekend, due to a controversial decision regarding the weight of the Cruze he will drive.

The Cruze initially had 30kg added to its base weight for the season, taking it up to 1180kg. This was then lowered to 1160kg – the same as the BMW 320TC – following a fax vote by

the FIA World Motor Sport Council.

But all Cruze 1.6 Ts must carry the maximum 40kg of ballast, under the championship's compensation-weight rules, for the opening two race weekends. The normal calculation process will be used afterwards.

Muller said: "We have progressed during the winter, but starting the season 40kg heavier than the rest of the field will complicate life."

Life is heavy for Muller



## NASCAR

# Penske Ford for long term

### PENSKE RACING'S SHOCK SWITCH

from Dodge to Ford machinery in NASCAR for next year has enabled the team to start long-term planning, according to lead driver Brad Keselowski.

Dodge's lead team last week announced that it will join forces with Ford from 2013. Owner Roger Penske cited the need to compare his squad against benchmark Ford teams – such as Roush Fenway Racing – as a key reason for the move.

Keselowski said he had no problem with Penske being the only top Dodge team, but understood the reasons for the change.

"The big picture is Penske wants every duck in a row for the long term," he said. "Personally, I feel that [being the only team with a make] is not a disadvantage."



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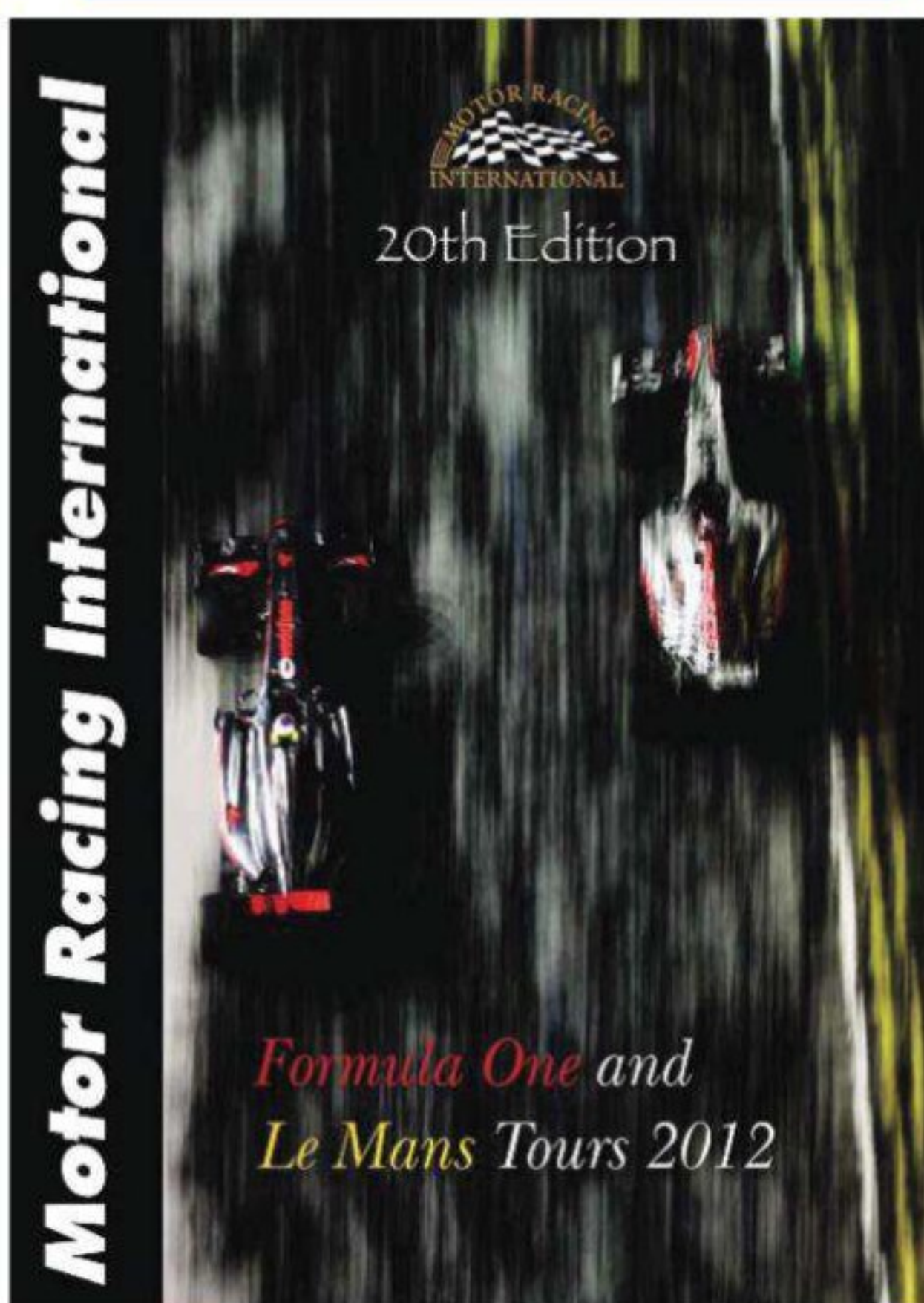
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## IN BRIEF

**JWA Porsche ran at Donington**



### JWA PORSCHE IN ACTION

The British JWA-Avila squad ran its 2011-spec Porsche 911 GT3-RS at Donington last weekend ahead of the Sebring 12 Hours. The team's WEC line-up will be led by Markus Palttala and Joel Camathias, with Bill Binnie joining them at Sebring in place of team principal Paul Daniels, who will complete the season.

### JARVIS FOR WORLD GT1

Audi factory driver Oliver Jarvis will race for the Belgian WRT squad in this year's GT1 World Championship. The roster of drivers for WRT's pair of Audi R8 LMS ultras is completed by Frank Stippler, Stephane Ortelli and Laurens Vanthoor.

### BAGUETTE GETS OAK DRIVE

Former IndyCar racer Bertrand Baguette will drive for OAK Racing in the World Endurance Championship. The Belgian, 25, will share the solo LMP1 OAK-Pescarolo-Judd 01 with team regular Guillaume Moreau and Dominik Kraihamer, who moves over from the Boutsen LMP2 team.

### VERNAY SWAPS LMP FOR GT

Former Peugeot reserve driver Jean-Karl Vernay has joined Luxury Racing for the WEC. The Frenchman will drive the squad's GTE Pro Ferrari 458 with team regular Frederic Makowiecki and Jaime Melo, a Luxury driver at Le Mans last year.

### DELTAWING HITS TEST TRACK

The DeltaWing experimental Le Mans 24 Hours contender turned a wheel for the first time last week. The car was given a shakedown at Buttonwillow Raceway in California by Marino Franchitti. The team has yet to reveal the identity of the engine powering the car.

### NEW LOLA LMP1 BREAKS COVER

Lola has unveiled its 2012 LMP1 contender. The B12/60, the first of which will be given its debut at the Sebring 12 Hours on March 17, incorporates heavily-revised front-end aerodynamics.



LMP1 Lola is striking



Audi launched its LMP programme last week

LE MANS

# Audi backs flywheel system

German giant confident its choice of hybrid will have edge over rival Toyota's

**A**udi believes its choice of a flywheel storage system for the new R18 e-tron quattro hybrid offers key advantages over the supercapacitors used by Toyota.

The German manufacturer has revealed that it opted for a flywheel over supercapacitors or batteries for reasons of reliability.

Christopher Reinke, Audi Sport's LMP technical project leader, said: "We are not saying that the supercapacitor is the wrong way, but it is our philosophy that the flywheel will get us to the finish.

"At Le Mans, which is always the most important race for Audi, we are talking about 4000 recuperations. We believe at the moment a flywheel offers the most stable platform."

Asked if there were cooling issues to overcome with supercapacitors, Reinke said: "To our level of assessment that would be one of the challenges."

Audi started working on its hybrid project in 2008. It held its first meeting with Williams Hybrid Power, with which it has developed

the system, later that year.

Head of Audi Sport Wolfgang Ullrich said that the decision had been made independent of sister marque Porsche, which has worked with Williams on the development of its 911 GT-R Hybrid.

"We have our programme and they have theirs," he said. "There is not one screw that is identical between the two systems."

Audi began its hybrid programme in earnest in February 2010. The system was running in a modified R8 LMS GT3 car later that year.

LE MANS

## Capello set for LMP swansong

**THREE-TIME LE MANS 24 HOURS** winner Rinaldo Capello expects this year's running of the French enduro to be his last at the wheel of prototype.

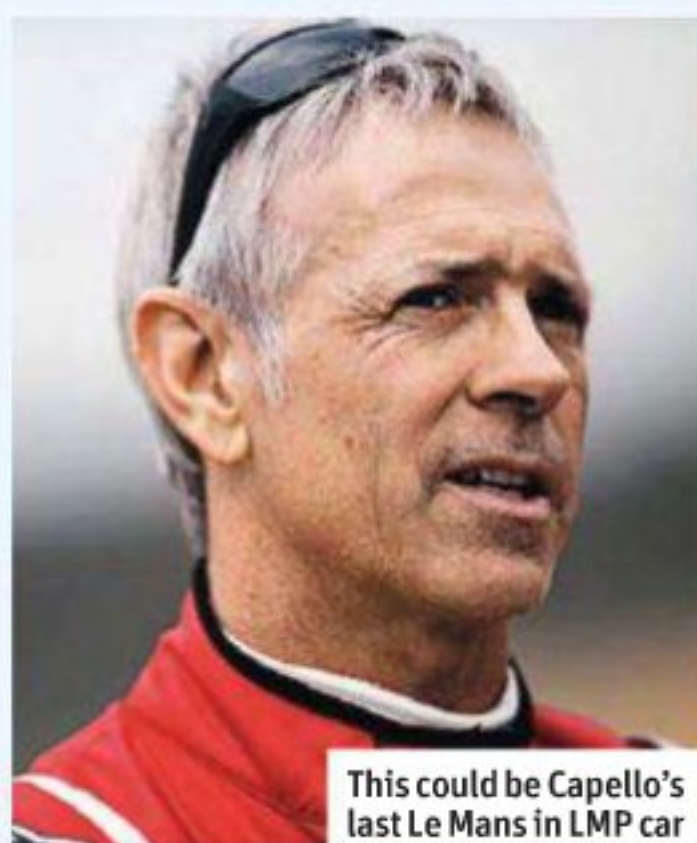
The 47-year-old Italian has revealed that he expected to retire from Audi's LMP line-up at the end of 2011. That plan was put on hold when it became clear that the German marque was planning to run four cars at Le Mans.

"Audi told me to wait a little before

making a decision," said Capello, who will share an R18 with Allan McNish and Tom Kristensen. "They thought, why take on lots of new drivers when they already have experienced guys?"

Capello insisted that he wouldn't be retiring after Le Mans.

"I will continue in other [non-prototype] races as long as I feel fast," he added. "I will do some races with an R8 in Italian GTs, like last year."



This could be Capello's last Le Mans in LMP car

WORLD GT1

## Ratel confident of World GT1s continuing

**FIA GT1 WORLD CHAMPIONSHIP BOSS** Stephane Ratel was seeking entries from three teams this week in order to secure the future of the series.

A sixth team signed up for the series last week in the form of the Reiter Lamborghini squad, which will run two Gallardo LP600s. That left Ratel needing six cars from three teams to reach the 18 he contractually requires to continue the

series ahead of Friday's entry deadline.

Ratel revealed that he was talking to four unnamed teams and remained confident of achieving his target.

"I am confident I will get there," he said. "But I will only claim victory when I cross the line."

One of the teams in talks is the French LMP Motorsport squad, which has competed in FIA GT3 and French GTs.

It plans to enter an Aston Martin DBRS9 before switching to the new Vantage V12 GT3 mid-season. There are also talks with a team, believed to be Muhlbauer Motorsport, planning to run Porsches.

Plans to combine the grids for the GT1 world series with the FIA GT3 Championship, should either fail to hit 20 cars (see AUTOSPORT, December 1, 2011) were thrown out by the GT Commission.



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GP2

## VALSECCHI DAMS GOOD

GP2 veteran Davide Valsecchi topped all three days of testing at Jerez last week for his new team DAMS. Lotus driver Esteban Gutierrez was second fastest with Max Chilton (Carlin) third.



BRITISH F3

# Fortec to join Carlin in expanding to five cars

Second team breaks gentlemen's agreement on car count to boost grid

**B**ritish Formula 3 Championship squad Fortec Motorsports is set to join series powerhouse Carlin in running five cars in the series this season.

Carlin, which has won four successive British F3 titles, has already signed five drivers for 2012, breaking teams' group FOTA's gentlemen's agreement on a maximum of four.

Fortec last week snapped up Dutchman Hannes van Asseldonk, a frontrunner in German F3 last year, as its fourth driver. Team boss Richard Dutton also stated his intention to add a fifth Mercedes-



Fortec boss Richard Dutton

powered Dallara to his stable. Sources indicate that it could be driven by Bolivian Pedro Pablo Calbimonte, who competed with Fortec in Formula Renault UK last season, finishing 13th overall.

Dutton, who is chairman of FOTA, said: "We would never have done it first, but if Carlin will break the agreement then we will follow suit. At the moment, it's the right thing to do for the series because we need more cars on the grid."

Carlin boss Trevor Carlin said he was pleased to see more cars.

"Even if Richard wanted to run seven I'd be over the moon," he said. "We need cars on the grid – the more the merrier. No-one else had a problem with five cars until they all got bees in their bonnets about it. I thought it was madness at the time and this proves it."

## IN BRIEF

WTCC Civic out in October



### WTCC HONDA REVEALED

Honda has revealed images of a concept version of the Civic to make its World Touring Car Championship debut at Suzuka in October and race full-time in the 2013 series.

### MONTEIRO BACK IN SEAT

Ex-F1 racer Tiago Monteiro will stay under the umbrella of SEAT team SUNRED Engineering in the WTCC, as will teenager Pepe Oriola. Ex-Chevrolet racer Darryl O'Young has switched to Special Tuning Racing to race a SEAT alongside Tom Boardman.

### RYDELL GETS MONZA DRIVE

Scandinavian Touring Car champion Rickard Rydell will compete in the WTCC for the first time since 2009 at Monza this weekend. Chevrolet star Rydell, 44, is making a one-off appearance in a Cruze.

### DC STICKING WITH DTM

David Coulthard will spend a third year with Mercedes team Mücke Motorsport in the DTM. The 40-year-old Scot will drive one of the manufacturer's new C-Coupe racers.

### HOMOLOGATED A5 UNVEILED

Audi has revealed the definitive version of the new A5 DTM that will compete in the German-based series this year. The series' homologation deadline passed last Thursday, meaning that Mercedes and BMW have also now finalised their designs.



No livery yet for Audi

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WRC

## SAINZ IN POLO TEST

Volkswagen continued its test programme with its Polo R WRC in Spain last week. Double world champion Carlos Sainz drove the car and sat alongside Sebastien Ogier for the first time.



WRC

# Mexico key to 2012 gravel form

First gravel rally of the season will be crucial in this year's Citroen/Ford loose-surface battle. By DAVID EVANS

**T**his week's Rally Mexico will give the strongest indication of whether the balance of World Rally Championship power has shifted in Ford's favour.

Citroen dominated the gravel events last year and the third round of 2012, which gets under way in Leon this evening, is the first of six consecutive loose-surface rounds of the championship.

The high-altitude nature of the roads in the state of Guanajuato (almost all stages run above 2000 metres) will starve the World Rally Car engines of as much as 60bhp. While the rally isn't entirely typical of the rest of the gravel events, it does provide an all-important chance to see how new-for-2012 driver/car combinations will run on the bulk of the season's mileage.

## SOLBERG'S 2005 HOPE

Much of the attention will centre on former world champion Petter Solberg and his switch to Ford from a private Citroen.

Solberg is a former winner in Mexico – the last man to win before Loeb's run of five straight

victories in central America – and the only other current driver to have won the event.

"The car was absolutely fantastic in the test," said Solberg. "I drove it for a day in France on some really rough gravel and it was just flat everywhere. Honestly, I couldn't believe how hard we could push the car over some of the roughest roads. Then we had two days of fine-tuning in Spain and we were looking at changing small details and seeing what it did to the car."

Solberg worked off his team-mate Jari-Matti Latvala's base set-up and the two Fiesta RS WRCs arrive in Guanajuato in similar trim.

Hirvonen (l) and Lehtinen: ready to fight Ford in Mexico



"Our set-up is very close for the gravel," admitted Solberg.

## HIRVONEN READY TO TWIST FOR CITROEN

Mikko Hirvonen finished second to Loeb with Ford in Mexico last year, but the new Citroen signing says he can see how the French team dominated the gravel rallies in 2011.

"The biggest difference on the gravel between the Citroen and the Ford is on the narrow and twisty roads," said Hirvonen. "The Citroen is definitely strongest in this area and this gives me good confidence ahead of the event. I feel very happy going into this event after the test – it's going to be good."

Hirvonen added that he's less stressed arriving in Leon than he was in the snow of Sweden. "In Sweden, I'd made more changes to the car and I didn't know if they would work," he added. "It's not like that here, this car is so strong on the gravel and we know it works."

## GRAVEL KEY TO 2012

After two specific events in Monte Carlo and Sweden, Mexico is where the proper rallying starts, according to Hirvonen.

The Finn added:

"Most of the WRC is now held on gravel, so it will be interesting to see a real pecking order between the drivers and the teams taking shape."

Solberg agreed, and said: "This is the start of the championship. I've had a couple of rallies with the team and I think we're all happy with the way things have gone and I feel I did my job well, but I have more confidence now and we are ready to put those Citroens behind us."

## WRC PREVIEW

Event:	Rally Mexico
Round:	3/13
Based:	Leon
Date:	March 8-11
Stages:	24
Mileage:	253.45 miles
Surface:	Gravel
Last year's winner:	Loeb
Championship leader:	Loeb





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WRC

## LET'S NOT FAFE ABOUT

Thirteen World Rally Cars – including the factory Citroens and Fords – will contest the Fafe Rally Sprint on Saturday March 24. The 3.7-mile stage is being run to promote the Rally of Portugal, running in the Algarve five days later, in the north of the country. The Fafe jump (pictured) is one of the most famous in the WRC.

WRC

# Meeke back on Mini duty

Briton gets his first outing of 2012 as Prodrive tests updated car

**K**ris Meeke drove the Prodrive team's Mini WRC for the first time this year during a test in Spain last week.

The former Intercontinental Rally Challenge champion was part of Prodrive's initial running of the new-specification Mini, which will be inspected for homologation by the FIA this week. The car is expected to make its event debut in Portugal later this month.

Meeke, who hasn't driven one of the Prodrive cars since just missing out on a Rally GB podium on the final round of last year's WRC, said: "It was good to be back and working with the engineers and technicians

again – they are an incredible bunch of people. There are some small changes with the car which have taken it further forward and I had two trouble-free days of testing. But where I go from here, I don't know."

Prodrive's Richard Taylor said the Banbury firm is still chasing funds to get Meeke in the car this year, but with a severely restricted programme it is looking unlikely.

The new homologation Mini will include more than 100 changes, mainly to the engine. The car will have three per cent more power and shed 10kg. The only visual change will be the front spoiler, which has been altered to aid cooling and aero.

Meeke has tried the new-spec Mini



JOHN COOPER

## AUTOSPORT SAYS...

DAVID EVANS  
RALLIES EDITOR

david.evans  
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**L**ook at the picture that goes with this column. Does that man scare you? He should. He still scares me. I don't know any driver who manages, or managed, the level of brooding intensity mustered by Carlos Sainz. And the World Rally Championship misses it.

The prompt for this column is the picture on page 31 of Sainz alongside Sebastien Ogier in the Polo R WRC during the car's first significant gravel test in Spain last week – and Sainz's return to competition in Madrid this week. Sainz is a picture of focus. His mind is nowhere but on making that car eat through the inches milliseconds faster than last time.

I've been lucky enough to work with Sainz in my professional career and almost emerged unscathed from what could be a seething glare. My only (to date) indiscretion came in New Zealand a few years ago, when the whole world was complaining about the loose gravel for the drivers at the front of the field.

"The drivers ahead are talking about the loose gravel – is it a problem for you, Carlos?"

"No," he said, with a stare. "It is not a problem for me. When the gravel sees me coming, it moves off the road and when I have passed by, it comes back to the line."

The stare.

I had no more questions.

When my mobile rings and flashes 'Carlos Sainz' I still feel a sense of apprehension. He's still known as 'the King' and he still has that aura.

Who, of today's bunch, will have that aura a decade down the line?

Sainz: the eyes have it



## Anders Kullang 1943-2012



### ANDERS KULLANG WAS BORN

close enough to Karlstad, the home of the Swedish Rally, that he soon discovered the sport.

He first tackled the Swedish in 1970, aged 26, driving a Group 1 Opel Kadett, finishing fourth. Two years on he took P2 in an Ascona.

Collecting three Swedish titles through his career, Kullang never landed a full factory drive in the WRC, but he was always an Opel favourite. He started the RAC Rally

eight times, with a best result of fifth in 1980. Earlier that year he had taken a 1m30s Swedish win over Stig Blomqvist's Saab. It was his only success at the top level.

His last WRC outing came in Sweden in 1988, after which he set up his own driving school – and a decade on taught Sebastien Loeb. "He taught me to left-foot brake and how to use a shovel!" said the eight-time champion. "He was a cool guy."

## IN BRIEF

### SAINZ TO RALLY PORSCHE

Carlos Sainz will contest this week's Rally de Espana Historico in a Porsche 911 – the first time the Spaniard has driven one of the German machines in competition. The asphalt event starts with four stages tomorrow night (Friday) before a further 10 close to Madrid on Saturday.

### FILMWORKS BACK IN MEXICO

While season-long deals have yet to be agreed, the same company that produced the television from Rally Sweden – Filmworks – will supply footage from Rally Mexico this week. Motors TV will screen the footage. The FIA met with the manufacturers and organisers in Paris on Monday to deliver news on how the pursuit of a promoter was progressing.

### SALAZAR TO MAKE WRC DEBUT

Former Formula 1 driver Eliseo Salazar will contest next month's Rally Argentina in a Mini WRC. Salazar, a former IRL race winner, was a regular in his domestic Chilean Rally Championship for Hyundai between 2004 and 2007, but this is the first time the 57-year-old has competed in the WRC.

### PADDON WINS IN GROUP N AGAIN

Hayden Paddon returned to a Group N Mitsubishi on Saturday's Ronde Valtiberina rally in Italy. Partnered by Fabrizia Pons for the first time, the Kiwi took his Lancer Evo X to victory ahead of three World Rally Cars on the Arezzo gravel. Paddon will contest further Italian events this season, but his focus is on the SWRC in a Skoda Fabia S2000 co-driven by John Kennard.





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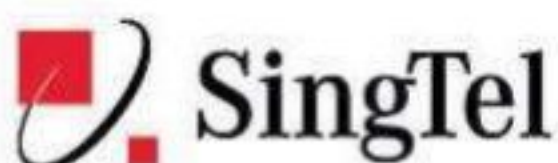
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# F1 2012

## SEASON

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# Stackin to Schumacher

For the first time in its history, Formula 1 has six world champions on the grid. *MARK HUGHES* assesses their strengths and weaknesses compared to how the most successful racer of all operated at his peak



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S

even world titles and 91 victories. Those numbers can't help but do the talking - shouting even.

They establish Michael Schumacher as the most successful - and, for some, the greatest - grand prix driver of all time and by quite some margin. Even among a collection of six world champions - the most an F1 grid has ever featured - those extraordinary statistics stand on their own. But while numbers as emphatic as these are clearly saying something very loudly, they don't always tell the full story.

Extraordinarily skilled though Schumacher was throughout his peak years, he was also able to give himself the circumstances in which those skills could be converted into numbers in a way out of reach to most others. There may have been an element of luck in getting the

opportunity to those circumstances, but his drive and personality seized upon that and maximised it. Even so, it's intriguing to ponder at the outer edges of F1 driver ability, just how these champions compare with the guy who set all those records.

The post-comeback Schumacher clearly is not operating at quite the same level behind the wheel, though he continues to progress. In a year where a quarter of the grid are world champions, we take a look at how the individual talents of each as they are performing now - including Schumacher himself - compare to the bar set so high by peak-era Schuey.

This is not an analysis of the chances of anyone challenging those numbers, but rather an attempt at an assessment of their current levels of performance with those of the man who set the records - when he was setting them. ►



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## MICHAEL SCHUMACHER

(1994, '95, 2000, '01, '02, '03, '04)

### THIS IS A SLIGHTLY DIFFERENT

Michael Schumacher to the seven-title-winning colossus of yore. That stinging speed, which gave him the ability to conjure a qualifying lap that flattered the car, allowed him to unleash the mesmerising sequence of qually-style laps at the crucial point of a race, that could switch the event's destiny with an unbelievable in-lap: that has all gone. He's no better than averagely good at those things now.

But he's still in full possession of all the other assets that contributed to the greatest track record of all time. The relentlessness, the way he will not lie down, the competitive will that allows him to spring right back up no matter how badly he's fared, the steely defence of his position that verges on dangerous, the enormity of the sheer desire to succeed, the brainpower he brings to bear on his task: all these things he does just like he always did.

It used to be that he could sit the car on the knife-edge from the beginning of the braking

phase right to the apex. Nowadays his feel for that edge is not so sharply defined. He's still as brave as ever, will still stand on the brakes as late as before, but his great car control then has to be called upon to rescue the consequences, whereas it used to be that he could seemingly feel when he was upon that knife-edge without actually crossing it and losing time rescuing it. That's where perhaps 0.5s of qualifying pace has gone – enough to take him from two tenths faster than a normal frontrunning F1 driver to three tenths slower. It's the sort of margin by which he has typically trailed Mercedes team-mate Nico Rosberg.

But the races are a different matter. Last year in particular there were growing signs that Schumacher had a better handle on making the Pirellis last through a stint than his team-mate. Coupled with a veteran's instinctive feel for track positioning that habitually made him places on the opening lap, it allowed him to be a genuine raceday threat to Rosberg. But

if the new Mercedes is properly competitive, how costly will that 0.3s qualifying deficit be to grid position? For much of 2011 there was a void behind the Merces, allowing Michael to usually start from a similar part of the grid to his team-mate regardless.

Will that deficit still be there? It depends where it's come from. Is it age, those three years away, the neck injury or different traits of car and tyre? If he could somehow magic a few of those missing tenths back, it would be a fairy story. But they don't usually happen.



“He's gone from two tenths faster than a normal top F1 driver to three tenths slower”

Schumacher: age shall indeed wither?

### PERCENTAGE OF PRIME-SPEC SCHUMACHER

#### SPEED

**80%** The last few tenths have gone



#### RELENTLESSNESS

**100%** Absolutely still the mindset of a champion



#### LEADERSHIP

**80%** Difficult to lead when you're not the team's faster driver



#### ERROR RATE

**100%** Makes occasional mistakes, but then he always did



## FERNANDO ALONSO

(2005, '06)

### JUST LIKE SCHUMACHER, ALONSO HAS

in spades the demanding, cajoling mindset of a champion – and that's the very thing that Ferrari has always needed. He's in the lineage of John Surtees, Niki Lauda and Schumacher himself; strong men who have focused and galvanised the team around them – and only them.

For such an approach to work requires the driver to go out on the track and deliver, pretty much every time – and that is precisely what Alonso does. He doesn't have a weakness as a driver; he's fast, adaptable, hungry, aggressive, smart and fantastically combative.

The only weakness Alonso has ever shown was when, at McLaren in 2007,

he wasn't treated as a partner in success by the team, but as an employee. Team boss Ron Dennis did not understand just how profoundly such an approach would rile someone of Alonso's temperament and standing – and Fernando's reaction to that situation put him off-kilter.

But even then, even when some of his off-track moves were of questionable wisdom, he was still contending for the world championship right to the end, still able to deliver some superlative performances. That's a measure of his strength, and since that time he has matured further without losing any of the attack and speed. At Ferrari there is no chance of him ever being treated as anything other than the centre of their



Alonso at Ferrari has team around him



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## PERCENTAGE OF PRIME-SPEC SCHUMACHER

### SPEED

**95%** As fast as ever, but would be shaded in qually by prime Schuey



### RELENTLESSNESS

**100%** One of tiny number to stand comparison with peak-spec Schuey



### LEADERSHIP

**98%** Galvanises everyone at team, but never idolised quite like Schuey



### ERROR RATE

**110%** Makes significantly fewer errors than Michael ever did



First title with Renault in 2005

◀ world, and as such the team will always get the best from him.

Even at his most emotional, Alonso has fantastic control over what he's doing in the car, and despite a similar relentlessness he doesn't overdrive anything like as often as Schumacher used to do in his prime. It's not that he's never done so: in his troubled 2007 season he did it at the first corner in Spain and in the rain of Japan. But compared to Schumacher his career is punctuated with far fewer instances of losing everything when

trying for the unfeasible. He also showed a steelier surety of purpose in those delicate title-deciding moments than the slightly panicky Michael of 1994, '97 and 2003.

On the other hand, there have been fewer instances of lap times that simply beggar belief. Alonso is more about producing a pummeling sequence of great laps than a one-off qualifier that seems to transcend normal limits, the sort of surreal territory that Schumacher, Ayrton Senna or Mika Hakkinen could occasionally explore.

## SEBASTIAN VETTEL (2010, '11)

**IT ISN'T ONLY VETTEL'S STATURE THAT** grows and grows, but his actual all-round ability was still expanding last year, and that must be a scary prospect for his rivals. Fernando Alonso said recently that he doesn't rate Vettel as quite as tough a rival as Lewis Hamilton, that his natural speed isn't quite on that level. Others are not so sure, and last year his ability to stand that Red Bull on its nose in qualifying and faultlessly put together every bit of the jigsaw built up until that point was a crucial part of his dominance.

There were races where, had he not secured the pole, a McLaren would likely have beaten him on raceday. His Hamilton-like ability to use oversteer to help with direction change into slow corners was a big qualifying asset with last year's Pirellis. In short, there's every indication his one-lap speed is now up with the greats of the sport on a race-to-race basis. But

that territory beyond? The special place? Perhaps we'll only see if he's got that when he's in a car no faster than anyone else's - or has Hamilton alongside him in the other Red Bull!

How the grid's smartest brain goes about maximising his talent is what makes Vettel truly formidable. He's constantly operating at several frequencies all at once, something you can pick up from him just in normal conversation; the brain's always bubbling away on thoughts ready to be brought into the mix at the relevant time. The whole thing is fuelled by the champion's intensely competitive will, which is however contained within such a likeable persona that all those around immediately want to help.

It's an irresistible combination and Red Bull has happily plugged itself into his drive. He commands every bit as much respect within ▶

“He's constantly operating on several frequencies at once, something you pick up from him just in normal conversation; the brain's always bubbling away”

Vettel - getting better all the time



## PERCENTAGE OF PRIME-SPEC SCHUMACHER

### SPEED

**98%** Fantastically fast but yet to be pushed to absolute outer reaches



### RELENTLESSNESS

**100%** Produces whatever is required, whether all-out attack or measured



### LEADERSHIP

**90%** As yet he still seems more an employee than a leader



### ERROR RATE

**110%** Over his '10 wobbles; now less error-prone than Michael ever was





◀ the team as Alonso or Schumacher, has them responsive to his whim. But he has not demanded that he be the sole focus, with the other driver only along for support. Mark Webber would never fulfil such a role anyway, but whenever the team has showed a Sebcentricity it's been from the marketing, Austrian side of the operation rather than the race team itself (Silverstone 2010 excepted). Is that because he has the self-confidence to prevail regardless, or because his personality is not as demanding as Schuey's or Alonso's?

Because he's at such an early stage of his career, it's difficult to be definitive about such things. How would he fare at Ferrari alongside Alonso? Or at McLaren alongside Hamilton? The errors he's made have tended to be in establishing the limits during practice and only very rarely in the race does he stray. Would that remain the case in a car no faster than the opposition's? But at the moment anything seems within the grasp of this freewheeling, smiling yet savagely competitive phenomenon.



Another race, another win: Korean GP 2011

## KIMI RAIKKONEN (2007)

### FERRARI PRESIDENT LUCA DI

Montezemolo believed so much that Kimi was the new Michael Schumacher that he actually forced Schumacher himself to make way for him at Ferrari. Although a world title was subsequently achieved at the first attempt, it was clear that, for Ferrari's needs at least, Kimi was not a full replacement for Michael, and after three years he in turn was squeezed out to make way for Alonso.

But it's easy to see why Montezemolo had such belief in him; his performances during his five years as a McLaren driver were invariably fabulous. Savagely fast, immune from pressure and error-free, it was difficult to see a weakness. But then he joined a team that relied on the driver to lend the whole endeavour a buzz, to spearhead rather than simply represent, to buy into rather than merely fulfil obligations. That was never going to be Kimi. It was as disastrous a match-up of driver/team personalities as Fernando Alonso with Dennis-era McLaren. The dynamics were

hopelessly ill-matched in both cases, even though the teams and talents of the drivers in each case were of a high enough calibre to give reasonable success regardless.

Raikkonen does not buy into what he sees as the peripheral stuff of being an F1 driver. He turns up, drives the wheels off the thing, stays for as long as required by the team, then leaves. He'd no more dream of spending downtime at the factory than Schuey would think of donning a gorilla suit to take part in a powerboat race.

Furthermore, at Ferrari Raikkonen found himself in a car reluctant to heat up its front tyres quickly enough to give decent front-end bite in qualifying - giving the very opposite traits to those suiting his driving style. The team could clearly see his sheer class, the way he'd instantly adapt to complex operating procedures, could play with the variable controls with more dexterity even than Schumacher. They observed the way he could actually live with more oversteer than

Michael ever could while still being quick.

But he could not deal as well as team-mate Felipe Massa with the qualifying understeer the cool front tyres invariably brought - and quite often that would decide their respective races. He did not have Schumacher's luxury of having the tyres developed as he needed them, for Kimi's first year at Ferrari coincided with the beginning of the control-tyre era. But even within that constraint, he did not get the team onside to develop the car towards his preferences rather than those of Massa. That would have been unthinkable with Michael.

The early signs from 2012 testing are that Raikkonen's sheer speed is still very much there. He's a decade younger than Schuey, and F1 has not moved on as much in Kimi's absence as it did in Michael's. At Lotus he's with a team that will place a less-complex set of demands upon him than did Ferrari. He will almost certainly show that he is still a very great driver indeed. But his is a less encompassing ability than was Schumacher's.

"He'd no more dream of spending downtime at the factory than Schumacher would think of doing a powerboat race in a gorilla suit"



Raikkonen won title in a Ferrari

### PERCENTAGE OF PRIME-SPEC SCHUMACHER

#### SPEED

**98%** Mega-fast with car balance he needs, but lacks adaptability of Schu



#### RELENTLESSNESS

**85%** Has lost races through not pulling out the vital big laps before pitstops



#### LEADERSHIP

**70%** Team needs 'pull' approach to get best from man who will not 'push' them



#### ERROR RATE

**115%** Along with Kubica, the most error-free top driver of recent years





## LEWIS HAMILTON (2008)



Hamilton in the saddle in 2012 testing

**HAMILTON FIRMLY FEELS HE SHOULD** be chasing the records Schumacher set, and that his competitive circumstances have been thwarting him. It's arguably a simplistic view but there's definitely something in it.

The guy is overflowing with talent. Just watch his opening lap of the weekend on a dusty Monaco track or around the Singapore streets: breathtaking audacity, precision and car control, invariably whole seconds faster than anyone else, yet a perfectly safe pair of hands. Watch him around Montreal, where the closest a team-mate has ever qualified to him in five years is 0.27s (Button last year).

But you sometimes ponder if in fact he is not overwhelmed by his natural gift – whether there's too much horsepower for the chassis. Certainly he did not direct it well last year, frustrations both on and off the track giving him the least impressive of his five F1 seasons.

Hamilton was kept on a tight leash when other youngsters were having their rites of passage, was earning millions before he'd properly kicked loose. It's as if his teenage years are playing out in his mid-twenties – in front of an audience of millions. The further he has

strayed from being directed by the team, as his status has grown, the less impressive he's been. Although he seems to recognise where his problems are coming from, it's as if he's constantly trapped as the ping-pong ball between the demands of his profession and his enjoyment of the showbiz community.

As this played out, the recruitment by McLaren of Jenson Button alongside him just underlined it all – and made Hamilton's position within the team weaker. Far from Lewis leading that team, bending it around his needs, McLaren finds itself in the position of trying to protect him. He does not have as effective a communication with the team as his team-mate and, even though Button has looked at his telemetry and reckoned that here is "one of the fastest drivers of all time", he's been able to compete and even beat him on a regular basis.

Yes, strapping himself into a Red Bull may be the only way Hamilton's stats are ever going to match his expectations. But even that may not be the easy route to the Schumacher records. F1's biggest talent is also its least consistently accessed, and he'd need more than that to beat Vettel on current form.

## JENSON BUTTON (2009)

**BUTTON TOOK NINE YEARS TO GET A** fully competitive car, but even during that barren time he was disproving perceptions for those willing to look. He did so again last year, when he became the first team-mate in Lewis Hamilton's entire motorsport career to beat him over a season. The odds you'd have got on that when he walked away from Brawn and into Hamilton's home territory of McLaren would have been exceptionally long.

Button's is a very deep talent that stands worthy comparison to any of this elite group of champions. His main weakness is that his ability is so dependent upon specific handling traits but, when the car is as he needs it, he's virtually unstoppable – just recall Montreal last year, one of the all-time great grand prix victories. His traits make for a performance profile with incredibly high peaks, but with notable valleys too.

His spooky wet-

weather ability has been apparent ever since his debut season with Williams in 2000, when his speed on slicks in the damp fooled half the field into coming into the pits about eight laps too early at Indianapolis. Schumacher himself had many days of virtuosity in the rain; Button's skill in those conditions is absolutely of that magnitude.

In the dry, with a car in which he can maintain high entry speed without any rear instability, he's exceptionally quick. When you combine that with a requirement to keep the tyres from generating too much heat – as current rules do – he's more than just that.

But it's not just what he does in the car that makes him great. The way his easy-going, amusing persona gets those around him onside is a crucial part of his strength, and should form a crucial lesson in how to do it for Hamilton. Just as with Vettel but even more so, that nice surface can give the false impression that he lacks the killer instinct. But that is simply not the case. He inspires, he leads – and he will absolutely do what is necessary (Montreal collision with Hamilton?).

He's got the steel of all the champions, and since his title win that's been combined with the extra assurance – that self-certainty and inner confidence that was perhaps not always there until he'd proved himself to himself.

### PERCENTAGE OF PRIME-SPEC SCHUMACHER

#### SPEED

**101%** Natural gift may even be beyond peak-era Schuey



#### RELENTLESSNESS

**90%** Can drive flat-out attack race, but can occasionally sulk to slower pace



#### LEADERSHIP

**70%** Although he can inspire, leadership needs more than that



#### ERROR RATE

**95%** Error sequence in 2011 skews the picture to look worse



“The way his easy-going, amusing persona gets those around him onside should form a crucial lesson for Hamilton”

### PERCENTAGE OF PRIME-SPEC SCHUMACHER

#### SPEED

**95%** Same mark as Alonso, but peaks are higher and valleys lower



#### RELENTLESSNESS

**95%** Performance sometimes too easily compromised by handling traits



#### LEADERSHIP

**100%** At least as effective as the way Schuey used to do it, if more subtle



#### ERROR RATE

**110%** Safer pair of hands than peak Michael – and indeed JB was before title



Button became a champ with Brawn





# THE SIX STEPS LEWIS NEEDS FOR SUCCESS

The coming season will be decisive in dictating Lewis Hamilton's Formula 1 career path. *EDD STRAW* evaluates the challenges lying in wait for the 2008 world champion

**L**ast year, Lewis Hamilton made a headline-grabbing statement in the middle of the season that pretty much sums up the way most feel about a driver whose prodigious talent may go unfulfilled.

Groomed as a world champion from the day McLaren signed him up in the late 1990s, he delivered

in 2008, but since then he has failed to add a second title. The fact that some are predicting that crown will be the only one the 27-year-old wins in Formula 1 would have seemed totally inconceivable three years ago.

"It would massively suck if I only ever won one world title," said Hamilton. "It would feel like a waste of years of my career. While people say it's all about

participating and competing, it's rubbish. I want to win."

If anything, last season showed that Hamilton was leaning towards the path of squandering his talent rather than fulfilling what he clearly sees as his destiny. There were still some high points, including three excellent victories, proving that such a destiny lies mainly in his own hands. ▶







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## 1 BEAT JENSON BUTTON

In each of his first four years in Formula 1, Hamilton was the highest-placed McLaren driver in the championship. Given that the list of his team-mates includes reigning double world champion Fernando Alonso (in Hamilton's rookie year), that stood as a formidable record. But after beating Jenson Button by 26 points in their first McLaren season together, the situation was reversed in 2011. While Hamilton languished fifth in the standings, matching his worst season, Button was 43 points and three positions better off.

The raw statistics only tell part of the story, however. Increasingly, Button has become the reliable half of the McLaren driver line-up, the one who is expected to deliver week-in, week-out. It was those qualities that led to Button and McLaren agreeing a contract extension last year that will stretch their partnership for the long term. Hamilton's five-year deal, which started in 2008, expires at the end of this year and suddenly he may be expendable.

Hamilton denies that Button's improving McLaren form played any part in his struggles last year. But he would say that. The fact is, McLaren no longer appears to be Hamilton's team in the way it was once Alonso departed at the end of 2007. So you can be certain that he fully attends to reassert himself over his team-mate this year.

If he does that, it should ensure a new megabucks deal, and that the Hamilton/McLaren partnership will continue. If not, who knows what will happen?

## 2 CUT OUT THE MISTAKES

Had a rookie become embroiled in the number of on-track clashes that characterised Hamilton's 2011 efforts, some would be campaigning for his superlicence to be revoked. Fortunately, Hamilton has a fair bit of credit in the bank, but that doesn't mean that some of his mistakes weren't deeply concerning.

Every driver makes the odd error or has the occasional collision; that can be excused. But Hamilton's 2011 clashes were too numerous to be dismissed so lightly. Monaco, Canada, Belgium, Singapore, India... the list is extensive and, even though Hamilton had varying stakes in the responsibility for those incidents, there were some frightening errors.



Clash at Spa with Kobayashi's Sauber



Good relations with team members crucial

## 1

Take his clash with Kamui Kobayashi at Spa. After being overtaken, Kobayashi came back at the McLaren on the run up the Kemmel straight. Hamilton was clearly aware that the Sauber had a run on him - he returned to the middle of the track to defend. The Japanese took advantage of the space on the outside, but Hamilton simply moved left to take the ideal line into Les Combes as if the Sauber didn't exist. Exit one McLaren stage left.

No grand prix driver, let alone one with pretensions of winning more world championships, should be making those sorts of errors more than once. If Hamilton is as cack-handed in 2012, it will be time to become very concerned.

## 3 GET THE TEAM ON YOUR SIDE

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“What you don't need to do is moan about the car, criticise team errors and very obviously eye up a switch to the opposition”

possible car. What you don't need to do is regularly moan about the car not being good enough, criticise team errors on areas such as gear ratios (as in Montreal) and very obviously eye up a switch to the opposition. A great driver getting the absolute maximum out of his car can just about get away with that, but not one who is being beaten by his team-mate.

Hamilton was once worshipped by many of those working for McLaren. Many were blown away by his calmness, his attitude and his ability to drive an F1 car as quick, if not quicker, than anyone. But some of that lustre has faded. With Button loved in the team, Hamilton is starting to look a little spoiled and uncooperative by comparison. ▶





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◀ But the relationship is definitely fixable - if Hamilton carries himself in the right way with the team in the early stages of the season and avoids criticising the car too overtly if it's not quite as strong as he wants it to be. That can only have a positive influence on results.

## 4 FOCUS ON 2012

Once again, this is hung around the thorny issue of Hamilton's future. Inevitably, Hamilton and management company XIX Entertainment have their eyes on a new and improved long-term contract. Equally inevitable is that other teams will be interested in pitching for Hamilton's services from 2013 onwards. He needs to be very careful about spending too much time thinking about this kind of thing.

Famously, in Montreal last year he made an evening visit to Red Bull team principal Christian Horner to have a chat about the possibility of a move. Less famously, there has been at least one more similar conversation between them.

People often question why drivers need managers, and this is the perfect illustration of the kind of thing that can only be a distraction. Hamilton clearly must have the final decision on his future, but he needs to leave it to XIX Entertainment and experienced new handler Didier Coton - formerly Mika Hakkinen's manager - to deal with it.

If Hamilton fails to achieve the single-minded clarity needed of a top-line grand prix driver, surely this will make him more likely to make errors. Psychologists talk about the need to remain process-focused at all times and how crucial it is not to get distracted by the bigger picture or wider objectives. Hamilton needs to take every corner as it comes and let others expend energy on the topic of his future.

Then again, at the Abu Dhabi Grand Prix, Hamilton claimed he would "never" resort to any kind of sports psychologist - as if the idea was abhorrent to him...

## 5 MASTER TYRE MANAGEMENT

Hamilton thrived from the off in the maximum-attack era of short stints between refuelling stops on durable tyres. He continued to drive well when refuelling was banned, but the arrival of high-degradation Pirelli rubber, which forced drivers to think more deeply about tyre management, created the circumstances



Less time in here means more chances of victory



Distraction? Surely not!



for Button to assert himself over Hamilton.

The evidence is clear for all to see. Few seriously doubt that Hamilton is fractionally faster than Button over a single, balls-out lap - and last year's qualifying comparison was 13-6 in Hamilton's favour. But what he needs to do is beat Button at his own game and win a race that depends on tyre management.

Granted, Hamilton's victory in the Chinese Grand Prix did come in a race afflicted with high tyre wear, but it was significant that he made one more stop than Button. This year, if he can pace himself perfectly throughout every stint of a race, then he will have shown that he has adapted to the changes of F1 and is ready to gun for the championship once again.

## 6 DON'T GET DISTRACTED

Hamilton's relationship with Pussycat Doll Nicole Scherzinger seems to be back on, which has elicited groans

"There are those in senior positions at McLaren concerned about which parts of his LA lifestyle are more appealing to him"

from those at McLaren who reckon that he would be better off cutting back on the trips to Los Angeles and concentrating on his job.

It's difficult to draw definitive conclusions about what effect, if any, the so-called LA lifestyle has on a lad who grew up in Stevenage, but there are those in senior positions at McLaren who are concerned about such distractions, about which parts of Hamilton's life are more appealing to him.

Fortunately, it seemed that during the final few races of last season, Hamilton had cut out diversions on grand prix weekends. If he keeps doing that, he should be in good shape this year. ❧





Fangio completed hat-trick with Ferrari in 1956



Schuey strolled to third Ferrari title in 2002

# In search of the

Sebastian Vettel is favourite to claim a world championship hat-trick this year. *EDD STRAW* investigates why it's so difficult to do the triple in Formula 1

**O**nly two men have known what it's like to win the world championship three times on the bounce. Michael Schumacher and Juan Manuel Fangio are the sole drivers to have achieved what Sebastian Vettel may be able to do this year, proof in itself that only the greatest of the great can pull off such a remarkable feat. Given how rare this achievement is, it's amazing to think just how likely Vettel is to take that hat-trick. A glance back through the history books reveals a lot about why those drivers who came close to winning three-in-a-row failed to do so. There are some very clear reasons that make it so difficult and many of those pitfalls do not appear to lie in Vettel's path.

If he does end this year as a triple world champion, it will be another giant stride towards confirming the all-time great status many believe he's already earned.

So what does history teach us about Vettel's chances of doing the triple?

## A RULE CHANGE

Rules stability is something that the leading team will always welcome. If you have the best car one year, it stands to reason that, provided you do your job properly, you should produce the best car a year later.



End of Formula 2 era hampered Ascari hat-trick

"If you have the same regulations for two or three years, it's difficult for the cars that win championships to lose their advantage," said Fernando Alonso a couple of years ago. "So it's easier to win back-to-back championships when the regulations are the same."

Testing Alonso's theory is relatively straightforward. The first double world champion, Alberto Ascari, won the 1952 and 1953 titles when the championship was run to Formula 2 regulations. But with his all-conquering Ferrari 500 no longer suitable to challenge for the 1954 title, he failed to win a race in outings in Maserati, Ferrari and Lancia machinery.

It was a similar story for the next double world champion who failed to make it three-in-a-row, Jack Brabham. Having won the title in 1959 and 1960 driving the rear-engined Cooper-Climax T51/T53, things took a turn for the worse, as the Australian racing legend told AUTOSPORT in an interview in 2009.

"That was due to the rule changes," said an indignant Brabham, who clearly holds it against the lobbying powers of Ferrari. "We had everything going for us in 1960 and we'd have continued winning races





Can Vettel join Fangio and Schumacher with the RB8?

# triple crown



if they hadn't changed to 1500cc."

While Phil Hill took the championship for Ferrari, Brabham didn't win a race in the Cooper T55 or T58...

The regulations this year are largely unchanged and trace their roots back to a major rules overhaul in 2009. However, the effective ban on exhaust-blown diffusers does throw a curveball into the mix for Red Bull, as chief technical officer Adrian Newey explains.

"Because we pioneered the use of the exhaust effect at the start of 2010 and have been using that technique for the past two years, perhaps we have got more to re-learn having lost it," says Newey. "It reminds me a little bit of when I was at Williams, having had active suspension for two years. When we lost the active, we actually had more of a struggle going back to passive than other people who hadn't been on active for very long at all."

"The 1994 Williams was not a good car at all at the start of the year. It was very difficult to drive because it relied too much on the active suspension. We developed the aero using the active in a very small window. It wasn't until we got to Magny-Cours with the short sidepods

that the car got easier to drive. This car [the Red Bull RB8] feels a bit like that. There was a lot of learning to do."

Having said that, pre-season testing suggests that the RB8 has more than compensated for the change in design concept. Overall, Vettel has a big tick in the rules-stability box to carry in to the season.

## CHANGE OF TEAM

A change of machinery has put paid to plenty of drivers' hopes. Most recently, Fernando Alonso's switch from Renault to McLaren in 2007 set the stage for him being dethroned after his relationship with the Woking team fell apart.

That said, the Spaniard still only lost the title by a whisker and Renault's struggles that season indicate that there's no way he would even have been in the hunt had he stayed there. A more explicit example of a driver 'throwing away' the title for a switch of team is Michael Schumacher in 1996. Had he stayed at Benetton, few doubt that he would have won the 1996 title even though his successors, Jean Alesi and Gerhard Berger, failed to win a race between them.



Rule change hurt Brabham (left) in 1961

"In the last race of 1996, we had the quickest car but just didn't get it together," says Ross Brawn, a key part of Benetton's success. "Gerhard had a problem and came out a lap down, got in front of the leaders and started to pull away, which was very frustrating. It was a bit of a wasted year really."

Schumacher is more emphatic, but points out that the Ferrari switch was in pursuit of the kind of long-term success that Benetton couldn't have delivered.

"Benetton at the time certainly had the potential to win one or two more championships and if I had stayed there I am pretty sure that I would have won ▶





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Could Schuey have won with Benetton in 1996?

◀ the title in 1996," reckons Schumacher. "It sounds a bit arrogant, but I'm almost certain about this. But it's not only about winning championships, it's about what your destination is."

## OUTSIDE ISSUES

Sometimes, a change of team isn't what brings the instability. After winning the 1969 world championship in a Tyrrell-run Matra MS80, Jackie Stewart continued with the team in 1970. But the French manufacturer's desperation to run its own V12 powerplant, rather than the ubiquitous Ford Cosworth DFV that powered its car to the title, forced Tyrrell to end its relationship and run the new March 701 while it prepared its own chassis for 1971, with which Stewart would dominate.

"It felt good, but it just didn't feel like a racer," said Stewart of his experience of the Matra engine. "It was driveable, but it felt too calm and there was no bite to it. It sang more sweetly [than the Cosworth] but that's not what you wanted. It was a like a soprano but you knew that the baritone was stronger."

For Stewart and Tyrrell, this was a case of taking one step backwards to go two forwards and he went on to win two more titles. But as he has often warned, the stresses of being the world champion, with all of the promotional activities that it brings, led to him suffering health problems in 1972 that potentially cost him the title. This is another pitfall that Vettel must avoid and we have yet to see whether the stresses outside the car will hinder his ambitions for sustained success.

Engines also contributed to Ayrton Senna failing to make it a hat-trick in 1992. After winning the 1990 and 1991 titles, McLaren pushed Honda to switch from a V10 to V12 engine, a decision that some argue played a part in the team being outperformed by Williams for much of the year. That said, the 1991 McLaren was overshadowed by Williams, and it's likely



Stewart ended Matra link after '69 season



Senna and V12 Honda struggled against Williams



Hakkinen narrowly missed out in 2000

that had Honda continued with its 10-cylinder powerplant, the results would have been unchanged.

As far as we can see so far, none of these possible hurdles seem likely to stand in Vettel's way.

## THE DRIVER

Grand prix drivers are human beings, and that element must never be overlooked. The question is, when will Vettel - if at all - become tired of climbing that same world championship mountain over and over again?

So far, there are no signs of this, although just as Schumacher did, you can see that somewhere down the line he might need a fresh challenge at a new team to maintain his intensity. But for now, Vettel appears content to start every year at zero and scale the heights anew.

Mika Hakkinen has admitted in the past that at the start of his title defence seasons, it was difficult to re-engage himself, but that passed in a few races. Often, people cite 2000 as an example of a year when he was demotivated, but the facts don't bear this out and he narrowly missed out on the title to an arguably superior Ferrari.

Right now, it seems that circumstances are on Vettel's side heading into 2012. If he doesn't make it three in a row, the reason will likely lie in his heart and mind rather than in external factors. ❧

## THE TRIPLE CHAMPIONS



### Juan Manuel Fangio

Uniquely, Fangio claimed his run of titles from 1954-1957 driving for three different marques. Two wins for Maserati early in 1954 preceded his switch to Mercedes, where he closed out that title and won it again in 1955. After Mercedes quit, Fangio switched to Ferrari, where he won again, but disagreements with Enzo Ferrari led to him returning to unfancied Maserati in 1957. There, he took his upgraded 250F to his fifth and final world title.



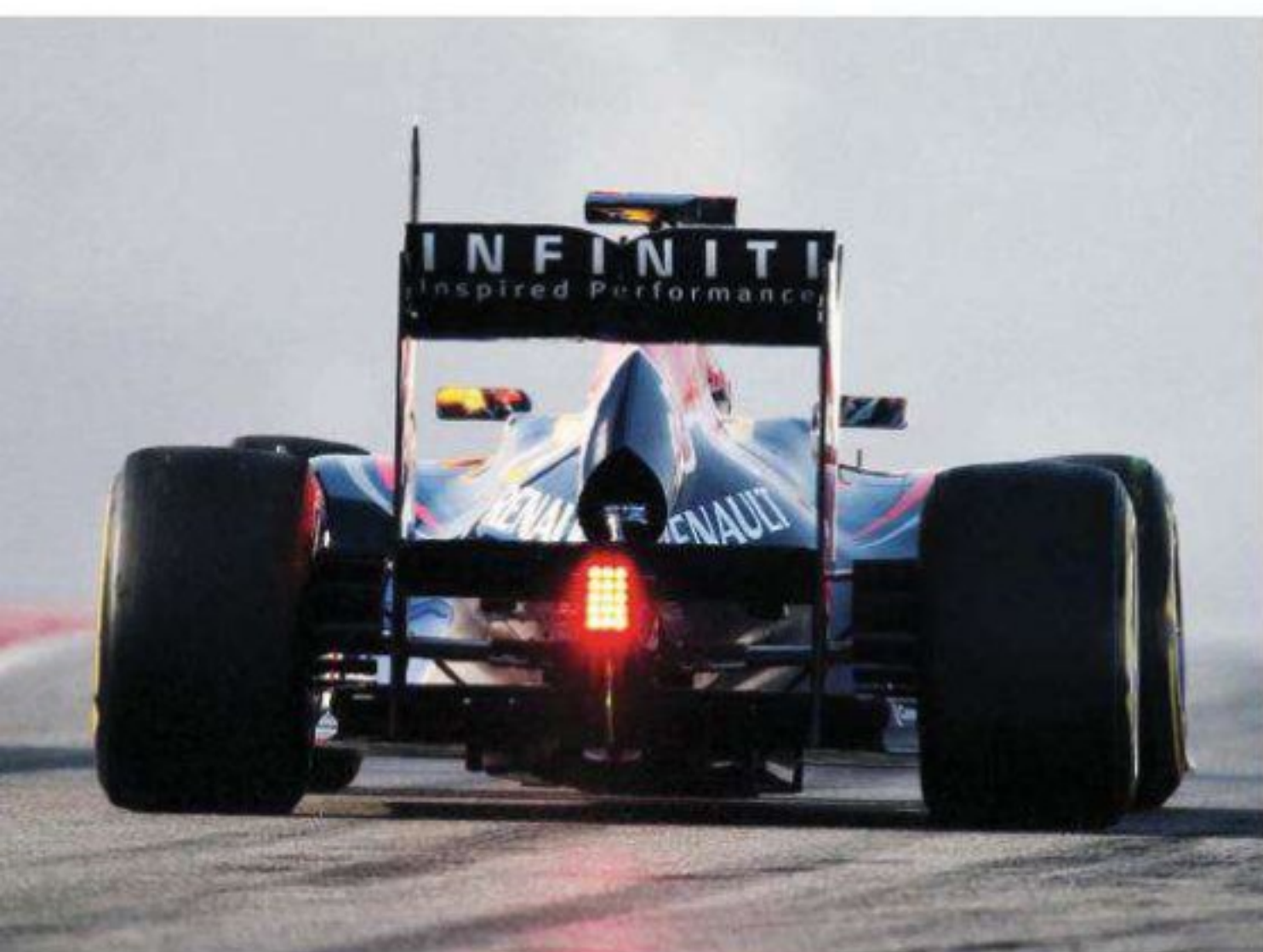
### Michael Schumacher

From 2000-2004, Ferrari and Schumacher were unbeatable thanks to a blend of inspirational driving, standard-setting car design, a close relationship with Bridgestone, and tactical savvy. This was F1's definitive superteam and it took a change of tyre regulations and the rise of Renault in 2005 to end their winning streak.



# What's **new** in F1 2012

Every new season seems to bring a raft of rule changes to the sport. *EDD STRAW* takes a look at the main developments for 2012



## EFFECTIVE BAN ON EXHAUST-BLOWN DIFFUSERS

Over the past two seasons, exhaust-blown diffuser technology had become increasingly elaborate and expensive. High-speed exhaust gases were directed into the diffuser, generating high levels of downforce.

In an attempt to eradicate

these designs, new regulations ensuring that the exhausts must exit on the top of the car's sidepods and point rearwards have been brought in.

While the exhaust gases can still be used to vastly reduced effect to help the aerodynamics of the rear of the car, it's no longer such a significant and costly design concept.

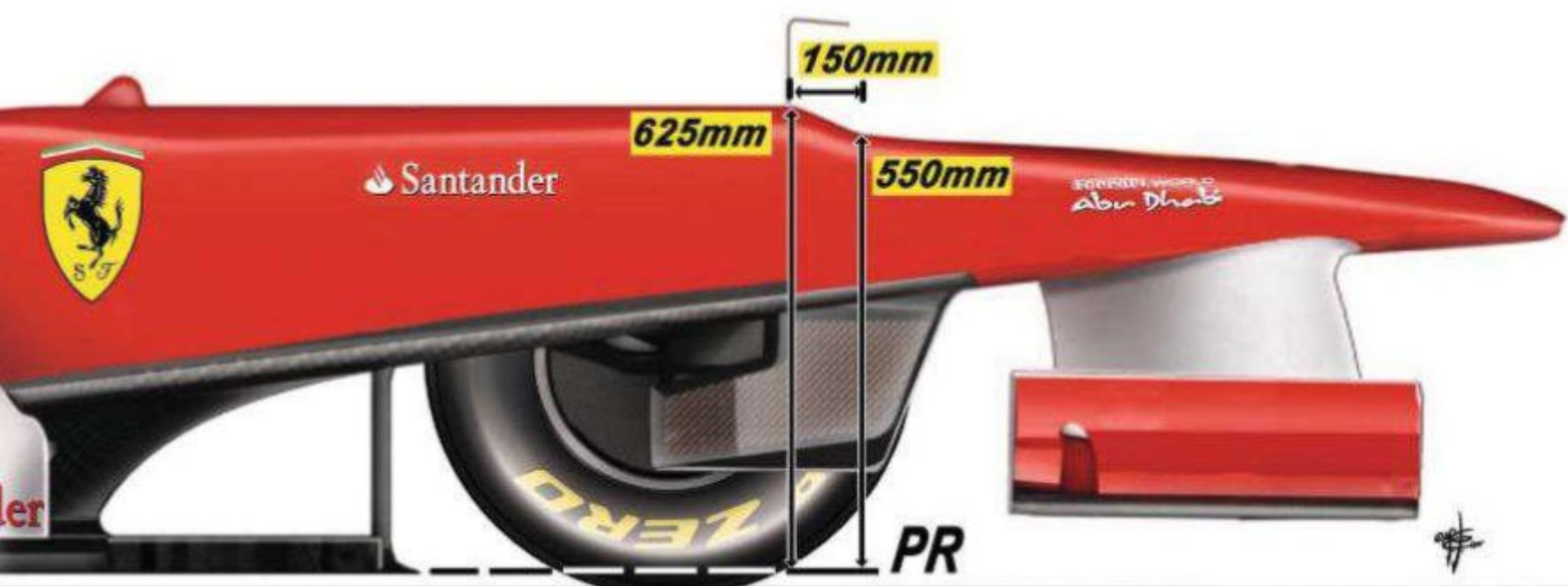


## SENSORS ON FRIDAY

Cars can now run up to five additional sensors during Friday practice. This will allow teams to gather data with additional sensor equipment not otherwise allowed.

## WHEELGUNS: NO HELIUM

Wheelguns can now only use air or pure nitrogen, rather than helium. This will slow down the wheelguns slightly, and therefore increase pitstop times a little.



## LOWERED NOSE SECTION

Following a lengthy investigation into side-impact cockpit safety and the risks of a car being launched into the air - as Mark Webber's Red Bull was in the 2010 European Grand Prix - the height of nose sections has been lowered by 75mm.

Because the front of the chassis is allowed to be 75mm higher than the nose, this explains why the majority of cars feature the unpopular step.

Of the leading teams, only McLaren has not included the step because, unlike its rivals, it has not followed the trend of running the front of the chassis as high as possible to maximise airflow under the front of the car.



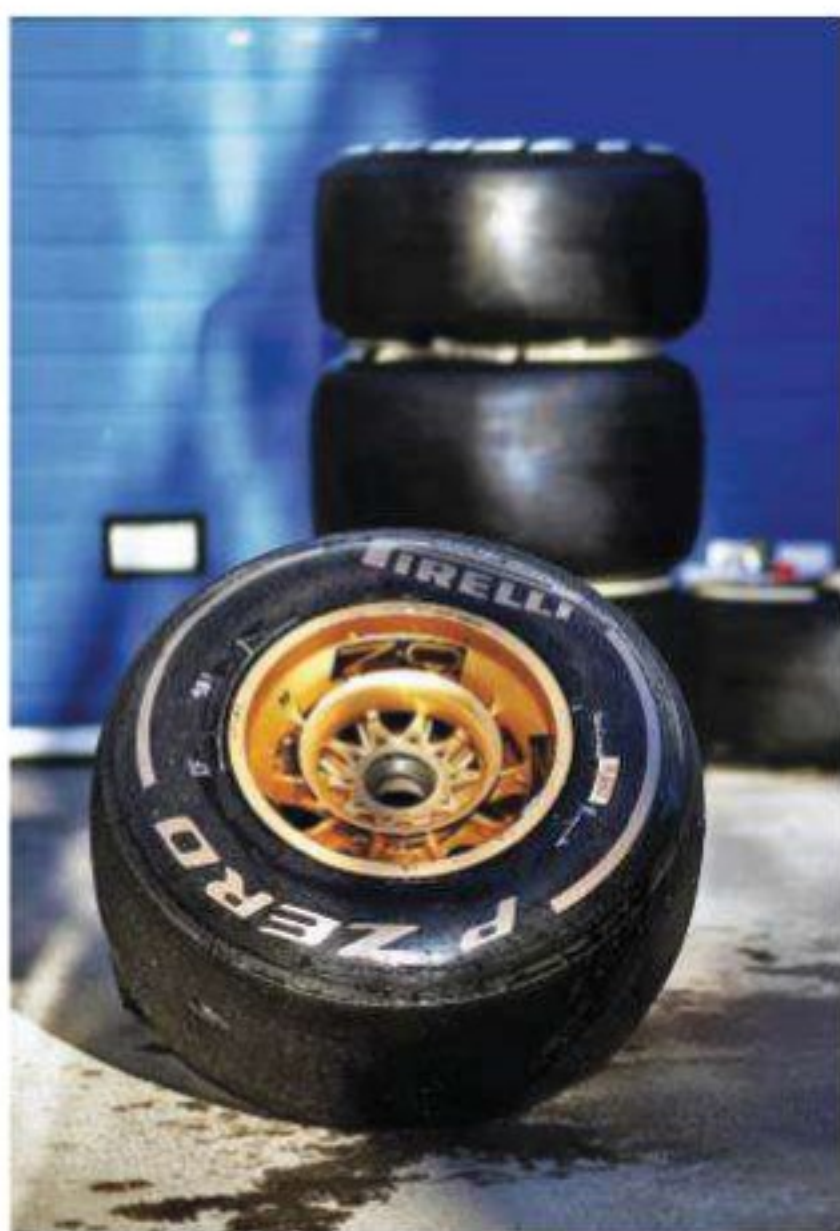
### STRONGER STATIC-LOAD TESTS

The intensity of static-load tests, designed to test flexible bodywork, has increased. This means that flexible front wings are far harder to produce.



### NO MORE WEAVING ON THE TRACK

Drivers must now leave at least one car width between themselves and the edge of the track when moving back over to retake the line after defending. The new rule, Article 20.3, states that "more than one change of direction to defend a position is not permitted. Any driver moving back towards the racing line, having earlier defended his position off-line, should leave at least one car width between his own car and the edge of the track on the approach to the corner."



### STICKIER TYRES

Pirelli has switched to a less-rigid construction, which should place less of a demand on the tyre compounds and make the performance and wear of the tyres easier to predict. The four compounds - super-soft, soft, medium and hard - remain but they have been repositioned. The total performance difference between the tyres allocated for each race weekend should be a maximum of one second.

### BACKMARKERS CAN UNLAP UNDER THE SAFETY CAR

While the safety car is deployed, lapped cars will be waved past and allowed to complete a lap to rejoin the back of the queue. This will ensure that tail-enders will be kept out of the way of leading runners at restarts.





# Evolution of

This season is the fourth year of the current rules cycle. *EDD STRAW* takes a look at how Ferraris have evolved since the 'skinny' aero rules were brought in for 2009

2009

**REAR WING**  
A narrower, higher wing was mandatory

Described by Red Bull tech chief Adrian Newey as the biggest regulation change since mandatory flat bottoms in 1983, the 2009 rules restricted areas where aerodynamic devices could be placed

**DIFFUSER**  
Moved behind the rear-wheel centre line, reducing downforce. Toyota, Williams and Brawn pioneered the double diffuser

**KERS**  
A hybrid power unit allowed 6.7s boost of 80bhp per lap

**SLICK TYRES**  
After 11 seasons of grooved tyres, slicks returned

**FRONT WING**  
Full-car-width 'snowplough' introduced. Drivers allowed to adjust wing angle twice per lap

2010

**KERS**  
Banned for one year by agreement between the teams

**REFUELLING BANNED**  
For the first time since the end of 1993, cars could not be refuelled during races. Bigger tanks meant longer-wheelbase cars

**EXHAUST-BLOWN DIFFUSERS**  
Red Bull brought this technology back to F1

**F-DUCT**  
McLaren pioneered the device, which allowed the driver to stall the rear wing by covering a hole in the cockpit and altering the airflow

**WING MIRRORS**  
Mid-season, outboard wing mirrors were banned

**FRONT TYRES**  
Width reduced by 25mm to 245mm



# the F1 breed

2011

**F-DUCT**  
Banned after one year

**DRS**  
The drag-reduction system rear wing was adopted, allowing the driver to open a slot between the two main rear-wing elements to boost overtaking

**KERS**  
Returned on the same basis as in 2009

**SHARK FIN BANNED**  
Rules prevented engine covers connecting to rear wing

**DOUBLE DIFFUSER BANNED**  
Teams now had to run a single diffuser

**TYRES**  
Pirelli replaced Bridgestone as control supplier

**WHEEL SPOKES**  
Wheel spinners were outlawed, although teams ran aero profiles as part of the casting of the wheelrims



2012

**EXHAUST-BLOWN DIFFUSERS**  
Effectively banned by rules dictating the location, size and angle of exhaust-pipe exits

**LOWERED NOSE**  
To reduce the risk to the driver in a side impact, and the chances of a car being launched, the nose section has been lowered by 75mm relative to the front of the chassis. This has created the stepped-nose design





# It's a jungle out

**T**he pinnacle of any sport is a ruthless world, and Formula 1 is no exception. Deliver when it matters and you can become an instant hero; fall short of expectation and you can quickly end up on the proverbial scrap heap.

The uncompromising hand of Red Bull Racing swept through its junior outfit Scuderia Toro Rosso over the winter - casting incumbent drivers Sebastien Buemi and Jaime Alguersuari aside to make way for new blood in 2012.

The team's paymasters gave Buemi and Alguersuari several seasons to prove they had what it takes to succeed at the highest level - and decided they couldn't cut the mustard. Now it's up to Daniel Ricciardo and Jean-Eric Vergne to show the Sebastian Vettel-like qualities that Red Bull bosses clearly felt were missing in STR's previous driver line-up.

For Australian Ricciardo, the journey to STR has been eased by a sequence of race outings with bottom feeder HRT in 2011 - appearances in which he proved a match for experienced team-mate Tonio Liuzzi (himself a Red Bull reject) in qualifying. However, those races were never going to help him really prove his worth.

Ricciardo eventually hopes to become only the third Australian F1 world champion in history - and the first since Alan Jones in 1980, but that's for the long-term. For now, he has to impress his bosses at Red Bull by getting the most out of this year's STR7 and helping the team improve on

eight place in last year's constructors' title fight.

"With the situation we're in, and the team fighting normally in the midfield pack, ideally if we can get seventh or better it will be a good achievement," says Ricciardo. "And as long as I'm scoring more points than my team-mate then it's not a bad job!"

"It's hard to know where we stand in comparison with the other teams, but my feeling is quite good and at least we're going to be able to fight in the same region we were fighting in last year - not further back. I'm confident we can still fight for points and hopefully even more. I think with myself and Jean-Eric it's a bit of a new

motivation, not only for us but for the team."

Frenchman Vergne succeeded Ricciardo as British F3 champion in 2010 and Formula Renault 3.5 runner-up last season, and arguably arrives in F1 with a more impressive record in the junior categories. The French have been living through a lean period as far as top-line F1 drivers go in recent seasons, but there is a real sense that Vergne, who will line up alongside countrymen Romain Grosjean (Lotus's GP2 champion) and Charles Pic (Marussia) on this year's grid, could eventually succeed where many have failed since Alain Prost retired as France's only world champion in 1993.

## JEAN-ERIC VERGNE Born April 25, 1990



### 2011

• 2nd in Formula Renault 3.5 with Carlin (4 wins)

### 2010

• 1st in British Formula 3 with Carlin (13 wins)  
• 8th in Formula Renault 3.5 with Tech 1 Racing (1 win from 6 races)

### 2009

• 2nd in Formula Renault 2.0

Eurocup with SG Formula (4 wins)  
• 2nd in West European Cup with SG (5 wins)

### 2008

• 6th in Formula Renault 2.0 Eurocup with SG Formula  
• 4th in West European Cup with SG Formula

### 2007

1st in Formula Campus France (6 wins)

Vergne will make GP debut in Melbourne





# there

Daniel Ricciardo and Jean-Eric Vergne are the latest talents to roll off the Red Bull production line and into Scuderia Toro Rosso. Now it's up to them to repay the faith bestowed upon them. By *BEN ANDERSON*

"It's been a long time," says Vergne. "I don't know [if I will be France's next world champion], I can't tell you that, but I am giving everything I can to achieve this. [This year] I want to learn as much as possible, be as quick as possible, and make as few mistakes as possible. If we have a good car, my goal will be to score as many points as possible."

Vergne and Ricciardo have been team-mates before - at SG Formula in the Formula Renault Eurocup in 2008 (when the more experienced Ricciardo was ahead), and again at Tech 1 Racing for part of the 2010 Formula Renault 3.5 season. The two have always been at pains to stress the good nature of their relationship, despite one or

two close moments on track during their time in World Series, and the fact that how they compare will have a big impact on which one becomes Red Bull's next favoured son.

"We get on really good; he's a good guy and I know him really well," says Vergne. "We came into the Red Bull junior team together, so it's nice to be team-mates. He's a good driver and we work well together, so I think we will push the team forward."

There is always a certain excitement that comes with contemplation of the unknown. The intra-team fight to find 'the next Sebastian Vettel' at Toro Rosso is sure to be one of the most fascinating sub-plots to the story of F1 in 2012. ❧

Ricciardo drove for Carlin in F3 in 2009



## INTRA-TEAM BATTLE TOO CLOSE TO CALL

Eponymous British Formula 3 team boss Trevor Carlin reckons Daniel Ricciardo and Jean-Eric Vergne each have two years to prove themselves worthy of promotion within the Red Bull ranks. The man whose team ran these drivers to consecutive British F3 titles in 2009-10 feels both have the potential to be world champions.

"They're totally different characters," says Carlin. "Dan is the archetypal Australian surfer dude - so laid back in public that he's almost horizontal! But when he gets in the car he's a different bloke: determined and very fast. He's a very good qualifier and can get the best out of a car on new tyres. He's a Jim Clark sort, who tries to win the race by being the fastest bloke out there."

"Then you've got Jean-Eric, who when he's absolutely happy with the car is unbelievable in qualifying, but the car's got to be perfect. Come the race though, he's relentless; he's like one of those Duracell Bunnies, he just doesn't stop! He's very forceful and one of these drivers who needs success. The more he gets, the more confidence he gets and the better he gets."

Having seen them both operate close-up, Carlin is convinced the intra-team battle at Toro Rosso this year will be extremely tight.

"There won't be a lot extra to come out of that Toro Rosso chassis, but these guys will get the most out of it," adds Carlin, who expects Vergne will take more risks in wheel-to-wheel combat. "There will definitely be needle at some point. Whatever they say, there's massive competition between them and they're out to beat each other. They've both got a massive point to prove."

### DANIEL RICCIARDO Born July 1, 1989

#### 2011

- 11 F1 races with HRT
- 5th in Formula Renault 3.5 with ISR (2 wins)

#### 2010

- 2nd in Formula Renault 3.5 with Tech 1 Racing (4 wins)

#### 2009

- 1st in British Formula 3 with Carlin Motorsport (6 wins)

#### 2008

- 2nd in Formula Renault 2.0 Eurocup with SG Formula (6 wins)
- 1st in West European Cup with SG (8 wins)

#### 2007

- 6th in Formula Renault 2.0 Italy with RP Motorsport

#### 2006

- 3rd in Formula BMW Asia with Eurasia Motorsport (2 wins)



Ricciardo has 11 GP starts to his name





## BBC

### **BEN EDWARDS** lead commentator



Former ITV touring car talker Edwards admits he jumped at 'another chance' to commentate on F1 as the BBC reverts to a commentator/driver approach. "I'm more play-by-play," says Edwards. "I'm certainly not comparing myself to Murray [Walker], but I'll call the action and DC will bring the explanation - [that's] perhaps a little bit more clear-cut than the Brundle/Coulthard show, which was more a discussion." Edwards also says it's the perfect time to be coming back to F1 after his previous stint with Eurosport in the 1990s: "It's a golden period. The BBC and Sky competition will drive the coverage to the viewers' advantage. It's a fantastic time to be watching."

### **DAVID COULTHARD** co-commentator



This is DC's second year in the comm box, and he's looking forward to the highlight shows: "We'll be able to show real analysis. All the things we didn't have time for in the live broadcasts because we had to go off air." The Scot is relishing the resident-expert role too. "I've won some grands prix so I know what it feels like. Certain things are grey areas and are a matter of opinion. I'll give that." He recognises that could be easier with Edwards alongside. "Martin [Brundle] would remind the audience he was an F1 driver. Ben won't do that."

### **JAKE HUMPHREY** BBC anchor



Fast becoming BBC Sport's front man, Humphrey is convinced it can compete with Sky: "F1 teams are moving billboards and exist to have sponsor logos on telly. Each top team has said to me, 'You're so important to us', because we're the only station that can deliver the mass audience." He also believes the Beeb's F1 experience holds it in good stead. "We've learned what people want to see and we'll be doing more of that this year," he says. "What we have is honesty, an almost 'humanised' F1. You can spend all the money in the world on graphics... but I think people can relate to us."



# BBC v SKY: F1's TV head-to-head

Sky's new F1 channel raises the bar for UK coverage - if you're prepared to pay for the privilege. *SIMON STRANG* examines the options for subscribers - and BBC faithful

**T**hese are exciting times to be a Formula 1 viewer. In many ways you've not had it so good - the coverage has never been this comprehensive. But on the flipside, Sky's deal to show all the races live exclusively to its subscribers has enraged UK TV-licence payers who have had their long-held expectations of season-long 'free-to-air' coverage dashed.

While this remains a topic of flaming debate, Sky's vast investment in subscription broadcasting also signals a glimpse of how F1 will be consumed by future generations. Sky will provide a dynamically different, live-all-weekend, approach to its coverage through a dedicated live HD channel, while the BBC continues to offer first-class information delivery, with all that the red-button content can offer, just as licence payers would expect from an old friend they trust implicitly - even if that is only live for 10 weekends of the year (highlights for the rest of the season).

Like it or not, these are your options, and it will be fascinating to see which of these choices proves the most compelling. And, as Martin Brundle says, the audience will ultimately decide.

"People invite you into their front room through their television set," says Britain's only constant F1 TV voice since 1997. "That's a room that they only invite their closest family and friends into. If they don't like what you're doing, or how you're coming across, they can just get rid of you. They soon make their minds up about that."

"I've won some grands prix so I know what it feels like. Certain things are grey areas and a matter of opinion. I'll give that"  
**David Coulthard strikes for Beeb**





F1 is set to be covered like never before

## JAMES ALLEN ON F1

As Sky pushes UK consumers towards a world of subscription-based live F1 coverage, it's interesting how some view this as a signal of the way broadcast media is rapidly changing.

BBC 5 Live's new lead commentator and digital blogger James Allen believes audiences will have to adapt a great deal: "It's a shame for people who have got used to seeing F1 in a certain way, but the way we consume our favourite sport is changing. There will be good and bad in that for everybody."

"There are two routes for the future," he adds. "One is the Sky model and the other is doing it via fixed-line connectivity, such as the deal Bernie Ecclestone has done with Tata. Eventually the Googles and the Apples of this world will become the delivery mechanism and the threat to terrestrial free-to-air broadcasters is obvious."

Meanwhile Allen, ITV F1's former lead, admits he relishes the prospect of returning to live F1 commentary full-time: "I'd done 20 years of TV in F1 and radio is a refreshing change for me. Obviously I haven't commented on a race yet, but what I have done has given me the sense that you've got more space to work with, and it's a less aggressive medium than television."

"There'll be a lot of sharp elbows with Sky and BBC in the same paddock and I think Radio 5 Live sits in a very good place between all that."

## Live F1 TV calendar

March 18	Australia	sky
March 25	Malaysia	sky
April 15	China	BBC / sky
April 22	Bahrain	sky
May 13	Spain	BBC / sky
May 27	Monaco	BBC / sky
June 10	Canada	sky
June 24	Europe	BBC / sky
July 8	Britain	BBC / sky
July 22	Germany	sky
July 29	Hungary	sky
September 2	Belgium	BBC / sky
September 9	Italy	sky
September 23	Singapore	BBC / sky
October 7	Japan	sky
October 14	Korea	BBC / sky
October 28	India	sky
November 4	Abu Dhabi	BBC / sky
November 18	USA	sky
November 25	Brazil	BBC / sky

### SKY: THE COST OF THE NEWCOMER

Sky's new F1 channel, which launches tomorrow (Friday), will cover all the 2012 practice, qualifying and races. If you're new to Sky, its HD service costs from £30.25 a month, or £40 if you want all its sports channels. If you're already with Sky, the HD upgrade is from £10.25 extra per month, rising to £20 for all sports channels. It will also be available on the Sky Go service, for laptops, Xbox and mobiles, and also on the iPad. For more details, visit [f1.sky.com](http://f1.sky.com).

## SKY

### DAVID CROFT lead commentator



Switches to Sky's comm box as lead talker alongside Martin Brundle after six years with BBC Radio 5 Live. Brundle is convinced that critical relationship has already gelled: "We were meant to have two rehearsals; we're not bothering with the second one. He can talk forever, which gives me the time to analyse and absorb, which is what I like." Croft for his part is sold on Sky's approach to its new channel. "They've wanted F1 for 20 years; they're not doing this to make a fast buck," he says. "They are doing it because they're passionate about sport."

### MARTIN BRUNDLE co-commentator



Brundle wasn't convinced about a Sky switch initially, but now he's "100 per cent confident, because these guys just impress the hell out of me". F1's commentary standard insists Sky is investing "hundreds of millions" over seven years and is delighted to be its flag waver. "It's huge and it will move the goalposts. Sky has got a lot of creative resource, and they are serious sports television people." Brundle says it will be a while before it reaches its full potential though: "If you look back at the early stages of BBC and ITV, the on-screen relationships always took time to build. We're not going to be perfect straight away."

### DAMON HILL expert commentator



Hill returns to Sky for its second sojourn in F1 (its first was in 2002), and remains British TV's only championship-winning talking head, which the 1996 title holder reckons provides a unique perspective. "There are two classes of driver in F1," he says. "Those who go through the paddock gate on their way to set up a race win, and those who are focused on scoring points. But the intense spotlight is on the guys who fight for the championship. Once you get into that zone, everything looks different. The mind element is a much greater test at that level."



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
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**"AUTOSPORT.com's coverage extends beyond the here-and-now information to find the truth behind the headlines"**

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Add to this the very best interviews, features and analysis in AUTOSPORT's subscription-only PLUS section to carry fans through the period between F1 races, and there's no reason not to log on to AUTOSPORT.com regularly during 2012. 



Tony Dodgins (l) and Mark Hughes grill Christian Horner and Martin Whitmarsh





“With a well-oiled base, and stable regulations, it was always going to be a case of Red Bull carrying on what it's been doing brilliantly”

**Jonathan Noble**

AUTOSPORT RATING <b>1ST</b>	Drivers	●●●●●●●●
	Engine	●●●●●●●●
	Chassis	●●●●●●●●
	Budget	●●●●●●●●
	Tactics	●●●●●●●●

# Red Bull

Will the restriction on trickery such as flexible front wings and exhaust-blown diffusers negate the world champion's advantage? Rivals certainly hope so, although the RB8's winter-test pace has been good



**C**hristian Horner said last year that he didn't make the mistake of thinking Red Bull's level of success was normal and that it would continue like this indefinitely. He was fully accepting the prospect that one day things would become a lot tougher. Will that day come in 2012, though?

Perhaps, but it will require the others to step up their games for there's little sign of Red Bull making it easier for them. The RB8's pre-season testing form looks formidable and this team senses every tiny opportunity to investigate every

advantage, from pitstop practice to the interpretation of the resource-restriction agreement to the speed of component production to keep up with the mind of Adrian Newey and his design team as the car is developed.

There have been many attempts at identifying the golden bullet of Red Bull's speed over the past three seasons: variable rideheight, flexi noses etc. This year's front wing flexibility tests have been made yet tougher and the abolition of blown exhausts makes it much more difficult to get an advantage from running a lot of rake - both key features of last

year's RB7. That's about the only sliver of hope for the opposition.

If anyone can beat Red Bull to pole position, their chances of beating it in the race will increase exponentially if the performance patterns from last year are repeated - namely that its performance takes its toll on the Pirelli tyres and that its weaker mini-KERS makes it less raceable than some. New-spec rubber from Pirelli means the first pattern may not necessarily be repeated, but Newey has again opted for 'KERS-lite' - so it's likely that gaining pole will remain crucial for Red Bull in the winning of races.





## KEY STAT

**2005**

Red Bull was formed in 2005 from the team that was originally Stewart GP, then Jaguar Racing

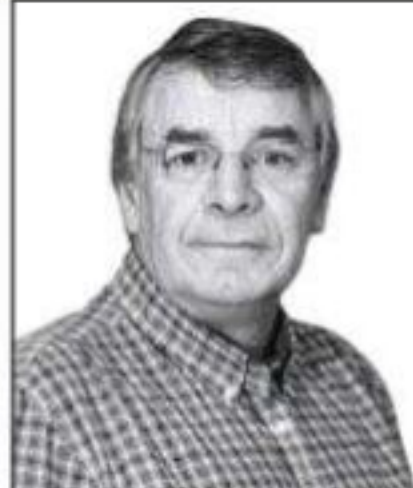
## KEY STAT

**AUT**

Although Red Bull Racing is based in Milton Keynes, it in fact competes under an Austrian licence



Red Bull-Renault RB8



**GARY ANDERSON**  
Technical consultant

**NOT SHOWN ITS ULTIMATE** pace yet and has concentrated on longer runs with all the different-compound Pirelli tyres, but if looks

are anything to go by the RB8 is the best-balanced car in fast corners and puts its power down very well out of slow ones. This will be a huge benefit when it comes to tyre degradation and should allow it to run that little bit longer before

needing a stop. Both drivers seem to be able to get down to a lap time with relative ease. The car also looks good in Barcelona's bumpy braking areas, meaning the suspension absorbs bumps well when heavily loaded, again reducing tyre load.

## KEY STAFF



**Adrian Newey**  
Technical director

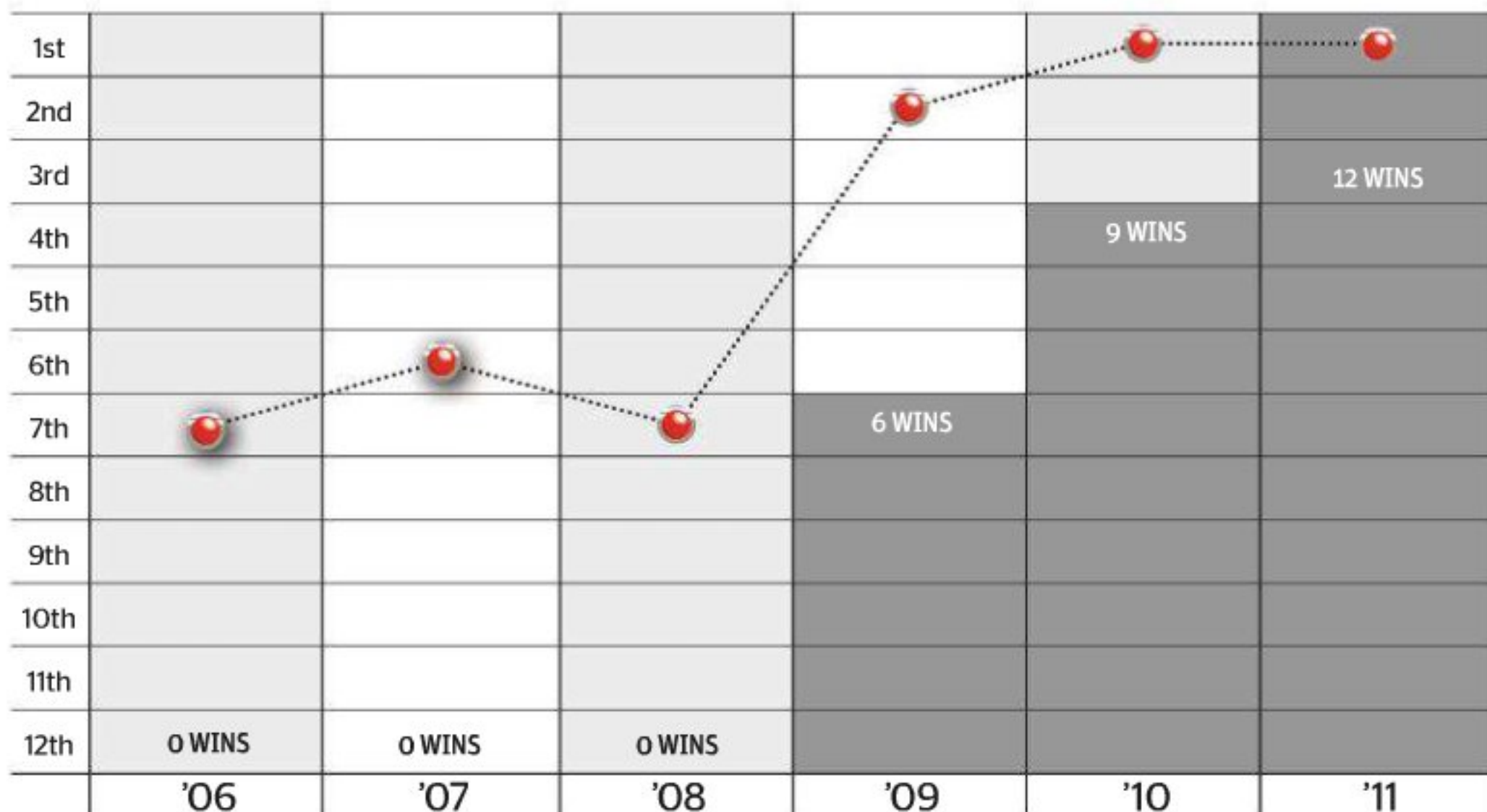


**Christian Horner**  
Team principal



**Helmut Marko**  
Driver development director

## CONSTRUCTORS' CHAMPIONSHIP POSITION 2006-2011



## TEAM STATS

Starts  
126  
First GP  
Australia 2005  
Wins  
27  
Poles  
38  
Fastest laps  
22  
2011  
1st



**JONATHAN NOBLE**  
Group F1 editor

**RED BULL RACING MIGHT** have been as nervous as the rest of them in the build-up to launch season, but ultimately it had little to fear when the RB8 hit the track for the first time.

With a well-oiled base back at Milton Keynes, and pretty stable regulations in the main, it was always going to be a case of just

carrying on doing what it has been doing brilliantly for the past few seasons. Little wonder then that team boss Christian Horner called it the best winter the outfit had ever enjoyed.

The RB8 instantly appeared at home on the track in testing at Jerez and Barcelona – and early glimpses of Sebastian Vettel in action showed the car to be on-the-rails just as much as its predecessors. If its pace trackside

looked ominous, the data of its long runs has been as impressive. The team appears to have brushed off the loss of blown diffusers, and maintained that long-run consistency that was a hallmark of Vettel's supremely dominant 2011.

Expect nothing less than ongoing strong form from Red Bull this year; the only thing we don't know is just how close its rivals are going to get.





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“Vettel’s F1 learning curve has been impressively sustained year-on-year, to the point that last year he really did look like the best guy out there”

**KEY  
STAT**

**27**

Since 2009, the team has won 27 grands prix, which puts it eighth on the all-time winners’ list



**1**

**Sebastian  
VETTEL  
(D)**



Starts	81
First GP	USA 2007
Wins	21
Poles	30
Fastest laps	9
2011 position	1st



**SURELY HE CAN'T GET ANY**

better than he was last year, can he? Vettel’s F1 learning curve has been impressively sustained year-on-year to the point that last season he really did look like the best guy out there. But although he was extremely adept at nailing a quite tricky combination of requirements – set pole position, get ahead at the start, pull out of DRS range in the first three laps, measure out tyre performance carefully thereafter – his challenge was much the same at every race. It would be fascinating now to see him back in the pack, in the thick of the frontrunning action and having

to fight his way to the front. That prospect is in the hands of McLaren, Mercedes, Ferrari and the rest as much as anything else.

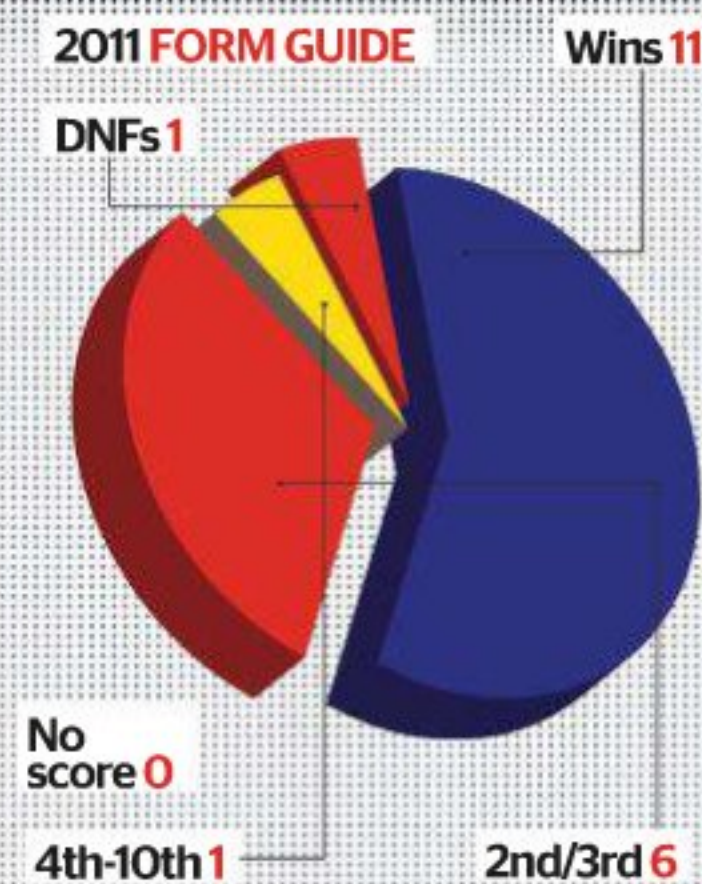
From an external perspective, his challenge is no longer about continuing to win races – that can surely be taken as read – but more about his place in the history books.

Vettel’s currently on course to be challenging Schumacher’s records if he stays around that long – and the stats book is something the 24-year-old German is acutely aware of. On the one hand he’s doing it without a contractually subservient team-mate, but on

the other he’s doing it working with Adrian Newey rather than against him.

In the course of time it will be Newey who is looked upon as the overriding genius and crucial element of success in the past two decades rather than any of the drivers, no matter how brilliant they are. As the faster driver in the team with the Newey cars, and with time on his side, everything is aligning in Vettel’s favour. Lewis Hamilton and even Fernando Alonso are seriously up against it in their current circumstances if they are to match his likely achievements.

**2011 FORM GUIDE**



**2**

**Mark  
WEBBER  
(AUS)**



Starts	176
First GP	Australia '02
Wins	7
Poles	9
Fastest laps	13
2011 position	3rd



**FOR SOMEONE OF WEBBER'S**

disposition, last year’s annihilation by Vettel will have hurt like hell. Because of the traits of the RB7, the numbers – a record-breaking number of wins for Vettel and just one for Webber – make it look worse than it really was. If you started that car from anything other than pole, its lack of straightline speed, its weak KERS and its tyre usage meant you really were up against it.

The improvement to your race prospects that pole gave was much more marked with this car than any other. That said, Mark three times failed to

convert pole into victory last year. He was definitely not performing to as high a standard as he was in 2010 and Vettel’s continued development just made that even more apparent.

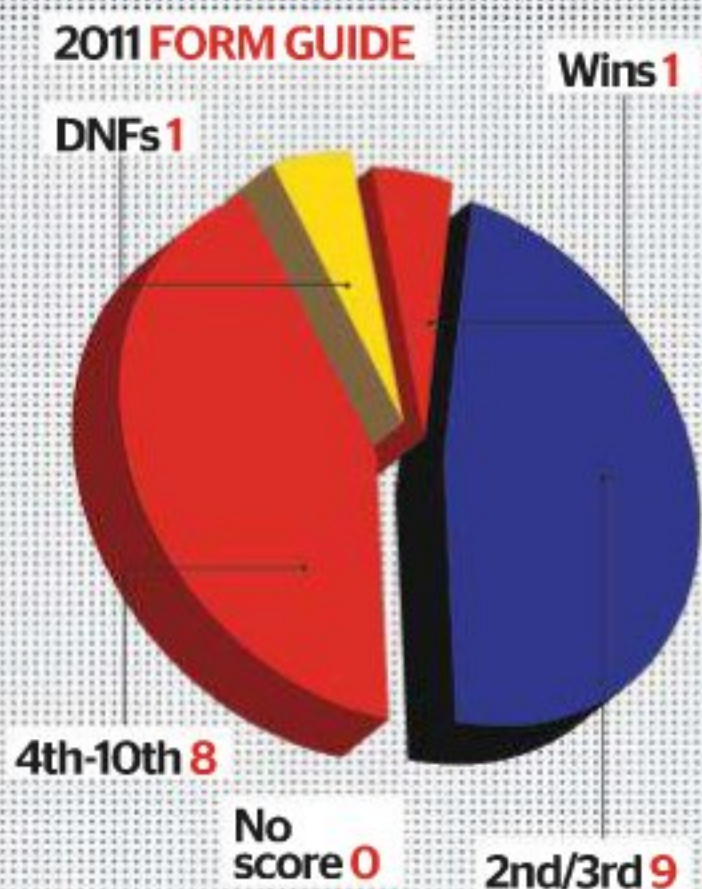
One of Webber’s key problems last year was getting along with the new Pirellis. The way they had a very narrow peak in qualifying and how they needed to be nursed in the races was something he found difficult to nail. The more marginal the compound, the more acute his problems were.

This year’s new construction might just conceivably move things in his favour; its greater

footprint should make it less prone to heat degradation, its more flexible structure may make it less sensitive in qualifying. That, and a year’s experience on the Italian rubber, may well give Mark a stronger 2012 relative to Vettel than 2011. But to prevail over him? That’s a massive ask. And, of course, the clock keeps ticking, with the new crop of young Toro Rosso guys waiting in the wings.

Webber’s challenge is obvious and yet his route to meeting that challenge – cutting the gap down to Vettel, challenging him, even beating him now and again – is incredibly demanding.

**2011 FORM GUIDE**







“Occasional overlaps with the Red Bull RB8 suggest the McLaren may retain its tyre performance for longer”

**Mark Hughes**

AUTOSPORT RATING 2ND	Drivers	● ● ● ● ● ●
	Engine	● ● ● ● ● ●
	Chassis	● ● ● ● ● ●
	Budget	● ● ● ● ● ●
	Tactics	● ● ● ● ● ●

# McLaren

If this British F1 colossus is to get on terms with chief rival Red Bull and land its first constructors' title since 1998, it must kick its habit of starting the season on the back foot in the development race



**T**

he last time McLaren won the constructors' world championship was too long ago. The last drivers' title came in 2008

courtesy of Lewis Hamilton, but you have to go all the way back to 1998 for the last time McLaren won the makes' race. You can guarantee that statistic eats away at the likes of Ron Dennis and Martin Whitmarsh. After having to get used to being beaten by Red Bull, now is the time that McLaren must react.

While Ferrari has made big changes in pursuit of a title-winning car, nothing

major has changed at McLaren, save for the ongoing tweaking of the technical organisation under Paddy Lowe in the hope of matching the frenzied pace of development set by Red Bull.

The key will be where McLaren starts. Last year, its experiments with the so-called 'octopus' exhaust system, a design far less complex than some claimed at the time but that ultimately did not work, blighted pre-season testing. A comprehensive redesign of the exhaust-blown diffuser set-up, modeled on Red Bull's approach, got it into the game for the Australian Grand Prix.

From there, McLaren's development pace was strong. What it needs to do is start ahead or on a par with Red Bull. If it does that, history shows that it has the capacity to stay there all season.

The team's driver line-up is strong, even though Lewis Hamilton proved unreliable at times last year. It's hard to see McLaren getting too far ahead of Red Bull whatever happens, so its title hopes may depend on Lewis or Jenson Button excelling.

Only then will the long constructors' title drought be quenched and McLaren's on-track achievements match up to its self-styled status as F1's powerhouse.



## KEY STAT

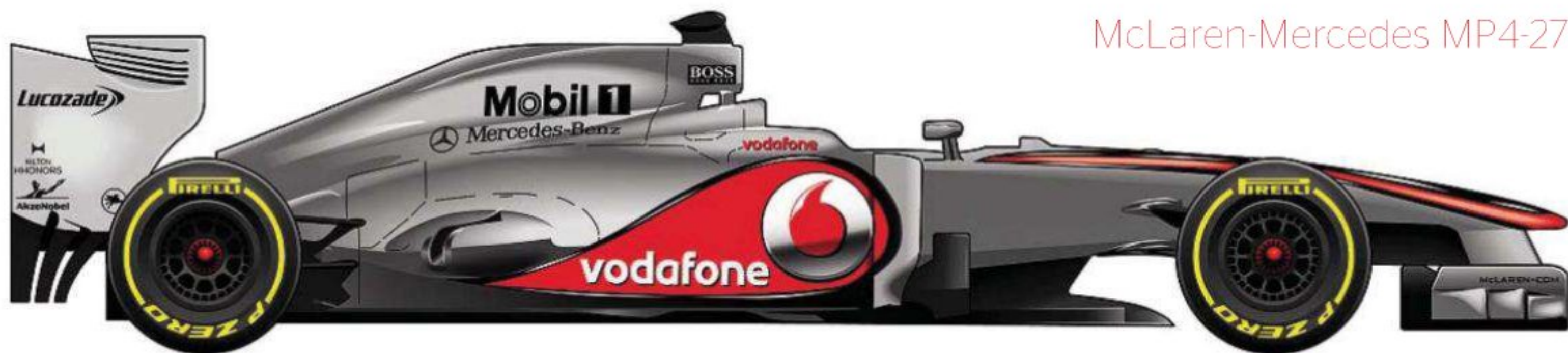
208

Jenson Button is the most experienced British driver in F1 history. He has started 208 races

## KEY STAT

1968

McLaren's first F1 win came in the 1968 Belgian Grand Prix courtesy of team founder Bruce McLaren



McLaren-Mercedes MP4-27



### GARY ANDERSON Technical consultant

**INITIALLY IT LOOKED AS IF** McLaren was missing something, but at the first Barcelona test it seemed to find its feet. The car

looks very similar to last year's in that it's running fairly stiff. This will be to optimise the car's aero map but it also makes it more difficult to the working window at a new circuit. It can also lead to locked inside-front wheels on corner entry,

which damages tyres very easily. I've been criticised for being too hard on McLaren but the team has the best F1 facilities and two very hungry ex-world champions as its driving force so it should be leading the pack by some margin.

### KEY STAFF



Martin WHITMARSH  
Team principal



Paddy LOWE  
Technical director



Jonathan NEALE  
Managing director

### CONSTRUCTORS' CHAMPIONSHIP POSITION 2006-2011

	'06	'07	'08	'09	'10	'11
1st						
2nd						
3rd						
4th						
5th		*8 WINS				
6th						
7th			6 WINS			6 WINS
8th					5 WINS	
9th						
10th						
11th				2 WINS		
12th	0 WINS					

\*Before exclusion due to spy scandal

### TEAM STATS

Starts  
703  
First GP  
Monaco 1966  
Wins  
175  
Poles  
147  
Fastest laps  
148  
2011 position  
2nd



### MARK HUGHES Grand prix editor

**THIS HAS BEEN McLAREN'S** best pre-season since 2008 - but that's hardly saying much as pre-season '09 and '11 were disastrous! At the time of writing the car looked to be Red Bull's closest challenger, thereby taking over where the team left off last year. The squad was among the last to try for any realistic low-fuel

qualifying-style laps, concentrating instead on improving the car's race-stint performance. The MP4-27 is reportedly particularly quick in the fast corners, though perhaps lacking the Red Bull's alacrity of direction change in the slower ones. Jenson Button and Lewis Hamilton have been cautiously optimistic rather than glowing in their impressions. There has been little opportunity for direct back-to-back comparison

with the RB8, but occasional overlaps suggest that it might retain its tyre performance for longer. If this can be combined with last year's ability to switch the tyres on very quickly, it could be very good news for the team. Despite the change in the Pirelli tyres' construction, there were suggestions from Barcelona that Button was able to contain tyre wear better than Hamilton, as often happened last year.



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“Button’s effortless, relaxed demeanour belies his intense competitive edge and, as 2011 went on, he became McLaren’s go-to guy”

**KEY  
STAT**

**2006**

Only once in the past 15 seasons has McLaren not won a race – its lean year coming in 2006



**3**

**Jenson  
BUTTON  
(GB)**



Starts	208
First GP	Australia '00
Wins	12
Poles	7
Fastest laps	6
2011 position	2nd



#### IN MANY WAYS, BUTTON'S 2011

season was even better than his world championship campaign two years earlier. His stunning last-to-first victory in Montreal grabbed the headlines, but arguably his win at Suzuka in the Japanese Grand Prix impressed more as he defeated Sebastian Vettel in a straight fight.

Two years ago, most were scratching their heads wondering what on earth Button was doing taking on Hamilton in a team that had been built around the 2008 world champion. Yet after proving his worth with two wins in his first four McLaren starts, last year he made the team his own. His

effortless, relaxed demeanour belies his intense competitive edge and, as 2011 went on, he became McLaren's go-to guy, the man who could be relied upon to deliver.

In many ways, the sport has come to Button. Silky smooth and with a Prost-like capacity for analysis, Button is made for the current era of Pirelli tyre management and KERS/DRS strategising. Team principal Martin Whitmarsh describes his capacities best.

"In the car, Jenson will watch the race on the [trackside] TV screens and tell you what is going on to an extraordinary extent," says Whitmarsh. "Racing drivers have a

lot of adrenaline, they view the world through the letterbox of the visor and it's not always clear to them how the race is unfolding unless they have remarkable awareness of how to model it in their head. Some don't get an understanding of the race until long after it has finished, but Jenson knows as he crosses the line."

Compare that description with how you might chronicle team-mate Hamilton and you have a very clear picture of where Button's advantage lay last year. Again, in 2012, those qualities should keep Button right and, if the car is quick, he could easily emerge as a title threat.

#### 2011 FORM GUIDE



**4**

**Lewis  
HAMILTON  
(GB)**



Starts	90
First GP	Australia '07
Wins	17
Poles	19
Fastest laps	11
2011 position	5th



#### LAST SEASON WAS

unquestionably the most challenging of the 27-year-old's career, with incidents, accidents and misplaced comments putting him under intense scrutiny. Add to that, for the first time, he was outscored by a team-mate and languished fifth in the drivers' championship, and you have a pretty tough year. What Hamilton now needs to do is show that his strong finish to 2011, which included a measured victory in Abu Dhabi, can be sustained in the new campaign.

It's vital not to underestimate just how good Hamilton was at

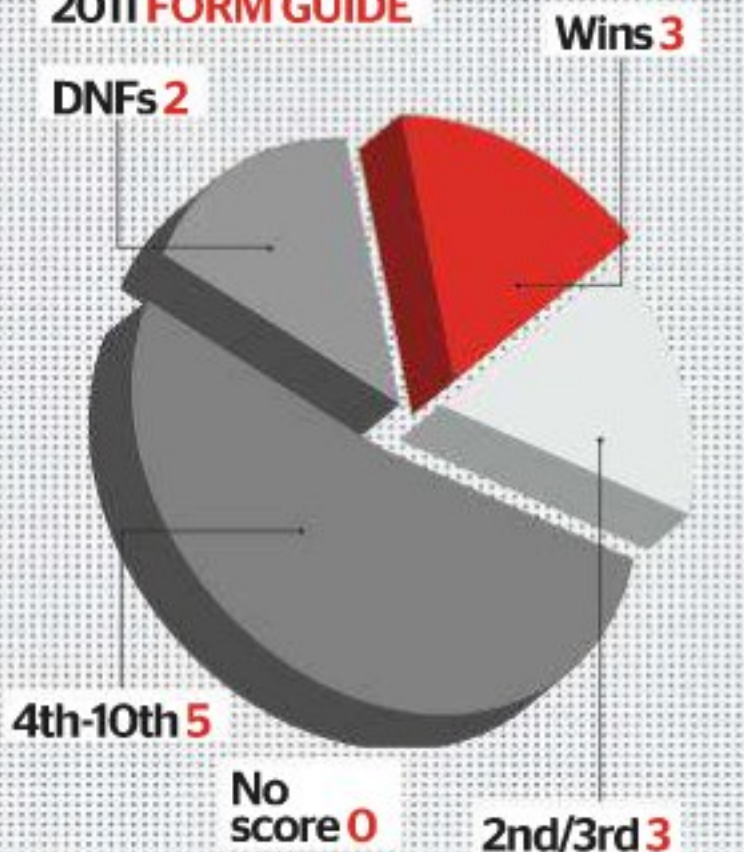
times last year. Most drivers would sell their souls for as bad a season as Hamilton had with three victories, but then again this isn't just another driver. Hamilton is a talent who once appeared to be on the fast-track to all-time-great status and he could be again, but it's essential that he maintains the kind of absolute focus that rivals Sebastian Vettel and Fernando Alonso exemplify.

In the closing stages of last season, Hamilton himself admitted to off-track problems clouding his thinking a little. Inevitably, the rumour mill went into overdrive but sources continue to indicate that there are very real concerns about

the distractions of his jaunts to Los Angeles and his on-again, off-again relationship with Pussycat Doll Nicole Scherzinger.

Add to the mix the fact that he's out-of-contract at the end of the season and you have the ingredients for another Hamilton soap opera. What he needs to do is prove he can focus. On track, he can still do it. The McLaren at least looks competitive and he can answer all of the questions being asked of him by delivering the kind of performances that made him a superstar. If he does that, he will be regarded as championship material once again.

#### 2011 FORM GUIDE







“There’s no question Ferrari has the resources and the people to bounce back, but a title push seems a long way off”

**Edd Straw**

AUTOSPORT RATING <b>3RD</b>	Drivers	● ● ● ● ●
	Engine	● ● ● ● ●
	Chassis	● ● ● ● ●
	Budget	● ● ● ● ●
	Tactics	● ● ● ● ●

# Ferrari

Formula 1’s longest-standing and most successful team has always been under immense pressure to succeed. Never more so than in 2012 – a season in which its technical reshuffle must pay dividends



**F**errari has forever faced pressure to succeed in Formula 1, but heading into 2012 it has increased to such an extent that victory is almost demanded.

Having faced the reality 12 months ago that its organisation had become too conservative in its approach to winning – as it received a drubbing from Red Bull Racing – Ferrari ditched its approach and opted to go radical. Gone was the Italian technical leadership under Aldo Costa, and in came the increased British influence of Pat Fry to try to engineer

Ferrari back to the front of F1.

The result was a decision to be much more aggressive with the 2012 car design; plus a push to bring in staff – such as Steve Clark and Hirohide Hamashima – with strengths where perhaps the Scuderia was previously lacking.

The product of this effort is the F2012, a Ferrari that will never go down as one of the most beautiful of the cars produced from the Prancing Horse stable – even if it does bring the world title back home. But if the team, and more importantly Fernando Alonso, had hoped that the F2012 would deliver it the platform to

start the season from the front, its earth came crashing down as soon as the new car hit the track. With a radical pullrod front suspension layout, Ferrari has struggled to get a grip on how to eke out what it feels is good potential in the car.

With Ferrari’s mighty resources, and Alonso, means that there is little doubt it will overcome any issues it may be facing – perhaps even in time for Australia – but just getting there won’t be enough in 2012.

This is the year Ferrari has to deliver. It had total faith that the 2011 shake-up would deliver results. If it doesn’t, does it have a Plan B?





## KEY STAT

**COSTA**

Aldo Costa, Ferrari's former technical director, has been snapped up by rival squad Mercedes

## KEY STAT

**PULLROD**

Ferrari has switched to a front- and rear-pullrod suspension layout - the only team to do so in 2012



Ferrari F2012



### GARY ANDERSON Technical consultant

**I THINK FERRARI IS THE MOST** difficult team to try to understand where it stands in the pecking order. With the facilities it has at its

disposal, a team like this should not be scratching its head at the circuit trying to find a set-up that works. Around 90 per cent of this work should be done back at base, with circuit testing being about working through the different set-up

packages to optimise tyre usage and fine-tuning. Ferrari said its new car would be aggressive, but it's one thing to go off and design a car with loads of different ideas and hope it works to actually focusing on design innovation to achieve the goals.

## KEY STAFF



Stefano Domenicali  
Team principal

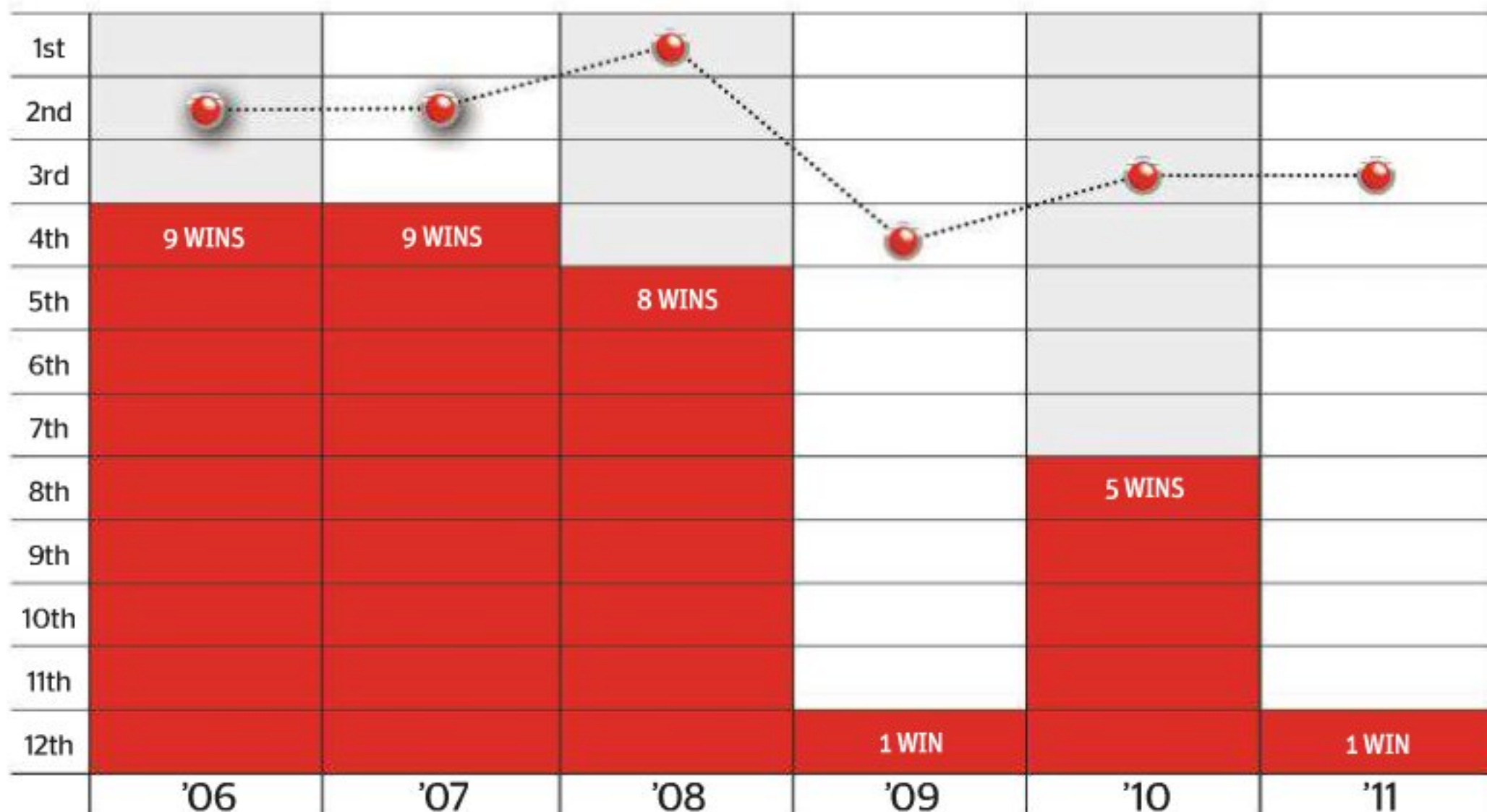


Pat Fry  
Director, chassis



Nikolas Tombazis  
Chief designer

## CONSTRUCTORS' CHAMPIONSHIP POSITION 2006-2011



## TEAM STATS

Starts  
831  
First GP  
Monaco 1950  
Wins  
216  
Poles  
205  
Fastest laps  
227  
2011 position  
3rd



### EDD STRAW F1 editor

#### CHATting TO A TECHNICAL

director at one of Ferrari's rival teams at the Jerez test, the conversation turned to Ferrari's struggles. "It looks like they have gone radical for the sake of it," said the expert witness. In one sentence, he had summed up Ferrari's plight. The reasoning for this new, but risky, approach was

sound. Last year's Ferrari was too conservative a step over its title-chasing predecessor so it lagged way behind Red Bull's RB7.

Pat Fry took over as de facto technical director charged with overhauling the technical approach. But no matter how much Luca di Montezemolo wants it to be so, Maranello was not built in a day and by throwing the kitchen sink at an innovative car, it seems Ferrari might have

put itself on the back foot.

There's no question that Ferrari has the resources and the people to bounce back and it would be a surprise if Fernando Alonso didn't get onto the top step of the podium this season despite its pre-season travails. But a title push seems a long way off. Critical to Ferrari's hopes will be a sensible response. It's too early to judge the Fry technical revolution, but does di Montezemolo realise that?



*Swiss movement, English heart*



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“Alonso’s commitment to Ferrari is unwavering, yet such loyalty may well be put to the test if the F2012 does not deliver”

**KEY  
STAT**

**10**

Fernando Alonso is bidding to become the 10th Ferrari man to win the drivers’ world championship title



**5**

**Fernando  
ALONSO  
(E)**



Starts	176
First GP	Australia '01
Wins	27
Poles	20
Fastest laps	19
2011 position	4th



#### FEW WOULD ARGUE AGAINST

Fernando Alonso being singled out as Formula 1’s most complete racing driver at the moment. He may not have Sebastian Vettel’s out-and-out speed, nor Lewis Hamilton’s exemplary overtaking instinct, yet as the all-round package he is the man.

But in Formula 1, a driver can only ever produce what his car is capable of delivering – so Alonso’s results are wholly dependent on the job that his Ferrari designers are doing back at Maranello.

Last year, that job proved not to be good enough, as the Spaniard was left with just a single grand

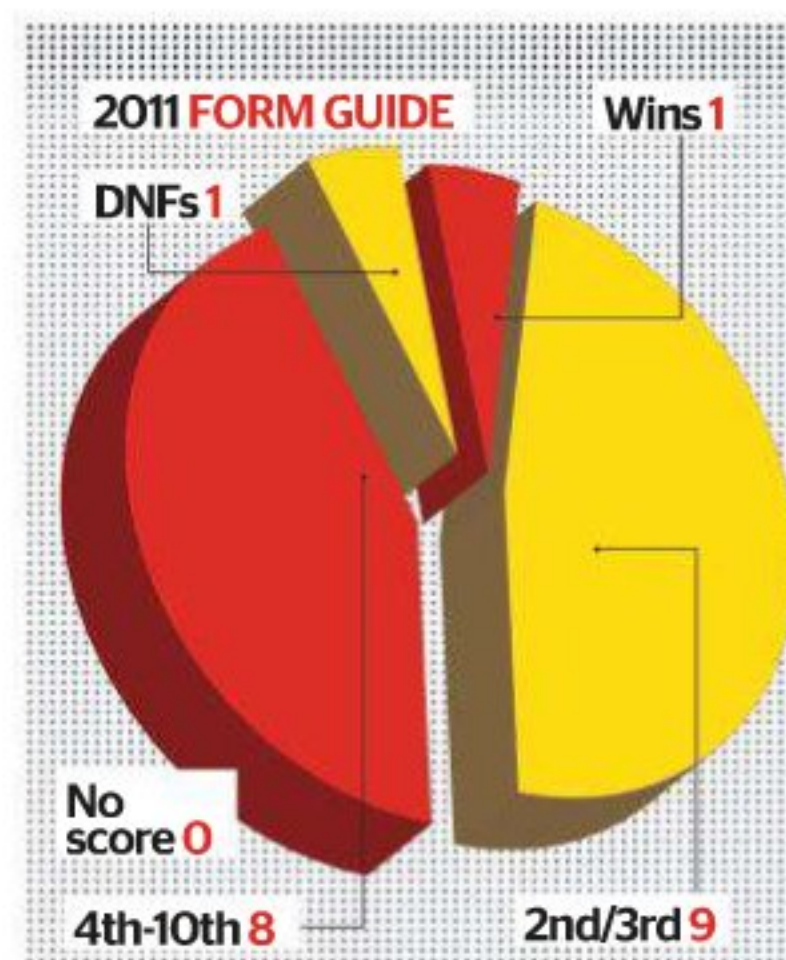
prix victory to his name. That tally fell way short of what he expected, after coming so close to the title back in 2010.

For 2012, Ferrari has thrown caution to the wind and embarked on a radical strategy to try to deliver Alonso the machinery that he will need to overhaul the rampant Red Bull Racing team. At least in him, Ferrari knows that it has a driver who will deliver a title if the car is good enough. Yes, there are times when Alonso can let his head drop, and perhaps not deliver the on-the-edge laps that are the hallmark of a champion, but that is often when he knows the car is

not good enough to go for a decent result.

Like Ferrari, Alonso is only concerned with winning – and it’s that single-minded desire to win, irrespective of what the outside world says or thinks, that means he has found his comfort zone in Maranello. He may remain a political animal, especially if he is ever trapped behind a team-mate on track, but that’s what makes him the ferocious weapon on track that Ferrari loves.

Alonso’s commitment to Ferrari is unwavering; yet such loyalty may well be put to the test if the F2012 does not deliver.



**6**

**Felipe  
MASSA  
(BR)**



Starts	152
First GP	Australia '02
Wins	11
Poles	15
Fastest laps	14
2011 position	6th



#### JUST AS 2012 IS A BIG YEAR

for Ferrari, so too is it a vital campaign for Felipe Massa. The Brazilian endured a troubled 2011. He failed to get the most out of Pirelli’s tyres, struggled to find consistency in races, and ended the campaign without a single podium finish to his name.

It was all a fry cry from the title near-miss of 2008 and, were it not for the ongoing absence of Robert Kubica leaving Ferrari without any other frontline options, Massa would almost certainly be playing his trade elsewhere in 2012.

Yet Massa did keep his seat,

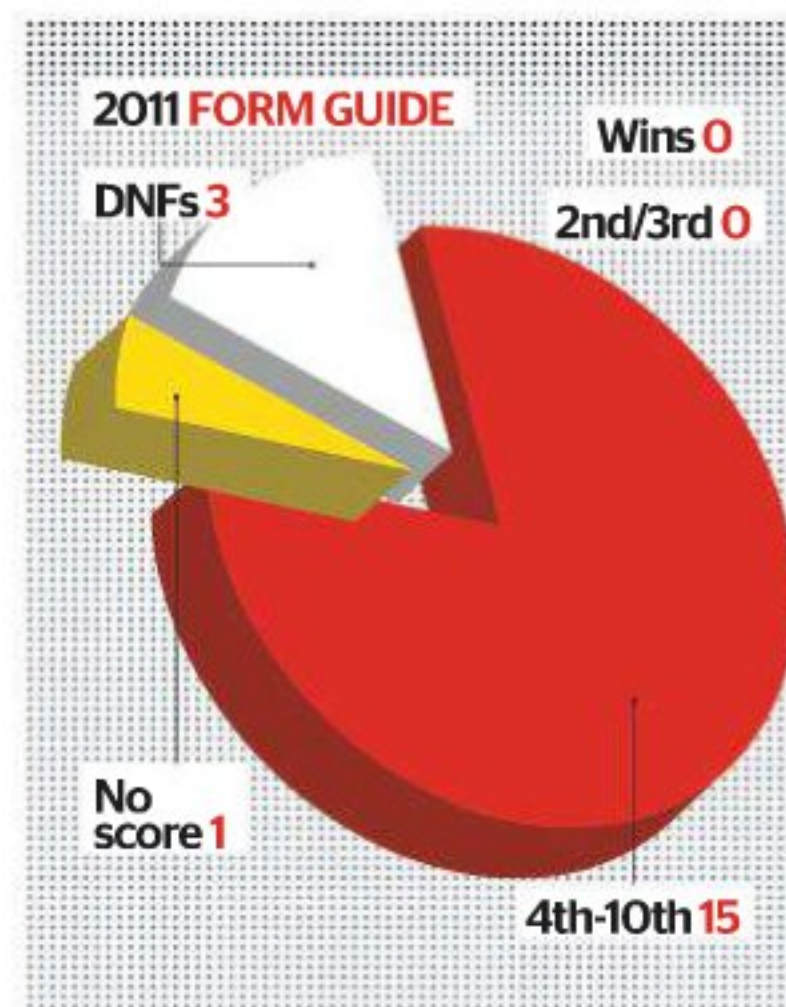
and he knows full well that time is running out for him to prove that he can step up to the game and rediscover the form that helped him become a multiple winner for F1’s most famous team.

Of course, Massa’s biggest problem is that he is going up against the mega fast Fernando Alonso. That’s not to say Massa has not shown in the past that he can’t mix it with the big boys – having beaten Michael Schumacher and Kimi Raikkonen on his day. But outfoxing Alonso is going to be such a tough task this time around because of the mounting pressure on

Ferrari to deliver in 2012.

Alonso is desperate for that Ferrari crown, and he will not let anything stand in his way – especially a Brazilian team-mate – to ensure that he is the one who gets backed all the way.

We saw flashes of what the 11-time grand prix winner could do last year – especially that run towards the end of the campaign where he outqualified Alonso. What Massa needs to do this year is produce swift laps consistently on Sunday afternoons. Only then will he secure his place for what would be an eighth straight season at Maranello for 2013.





**KEY  
STAT****1950s**

In its 1954-1955 guise, Mercedes only lost three of the 12 world championship GPs it entered - all to Ferrari


**AUTOSPORT**  
**RATING**  
**=4TH**

Drivers	●●●●●●
Engine	●●●●●●
Chassis	●●●●●●
Budget	●●●●●●
Tactics	●●●●●●

# Mercedes

The British-based team is desperate to join Red Bull, McLaren and Ferrari in Formula 1's top set in 2012, and early indications are that the W03 could just be the car to help it do exactly that



# A

fter two years as the closest challenger to the Red Bull-McLaren-Ferrari 'Big Three', Mercedes thinks it

essential that it breaks into that group this season on the back of the efforts it has made to ramp up its organisation.

While its performances on track could not match the lofty ambitions it set for itself in the immediate takeover of Brawn GP, the team has been quietly undertaking an investment programme to improve facilities, improve integration between team and car-maker, and recruit more key staff.

The end result is an outfit that senior figures - and drivers - believe has never been stronger. The sceptics may scoff at having so many big-name technical stars - with Geoff Willis, Bob Bell and Aldo Costa all providing input - but you have to say that Ross Brawn has a good record of superteam success.

The full fruit of this structure may not blossom for another 12 months yet - with Costa in particular having only joined at the tail-end of 2011 - but already there appear signs that the Brackley-based outfit is ready to flex its muscles.

The new W03 is a better-prepared package than its predecessor - with the

team stepping back from the too-radical elements that did not produce the performance it hoped last year.

But all was not in vain because some of the lessons of last year's car - including the compact packaging of the radiators - have been put to good effect this time.

All the elements for the team appear to be clicking in to place - look at how last season it delivered the best average pitstop time on the grid. But getting to the front in F1 is a long process. Even with Adrian Newey on board, Red Bull took time to get there - and so will Mercedes.

The final leap to the top may not happen just yet, but its journey has begun.

## TEAM STATS

Starts

50

First GP

France 1954

Wins

9

Poles

8

Fastest laps

9

2011 position

4th



**THE MERCEDES NAME, AN ALL-STAR** technical department, a great team principal and one of the finest Formula 1 drivers of all time... All of that adds up to a recipe for success and the three-pointed

star needs to show real progress this season. The past two years haven't been good enough, with relatively pedestrian fourth places in the constructors' standings, and the stated aim for this

year is to break into the top three.

The ingredients are all there to thrive but if things don't improve after all of this investment, surely serious questions will be asked in Stuttgart.



Mercedes F1 W03



**GARY ANDERSON**  
Technical consultant

**FOR THE FIRST TIME SINCE** Mercedes took over Brawn its new car is right up there with the latest design trends. Both drivers are

confident the package is a major step forward and they are happy working through the set-up options. If the drivers are happy doing this, an air of confidence filters through the whole team. At last it has gone back to a multi-element front wing and

the car has some innovative design features around the central section of the diffuser that should boost rear stability under braking. This area benefitted most from exhaust-blown diffusers in 2011 so anything that replicates it will be beneficial.

## KEY STAFF



**Ross Brawn**  
Team principal

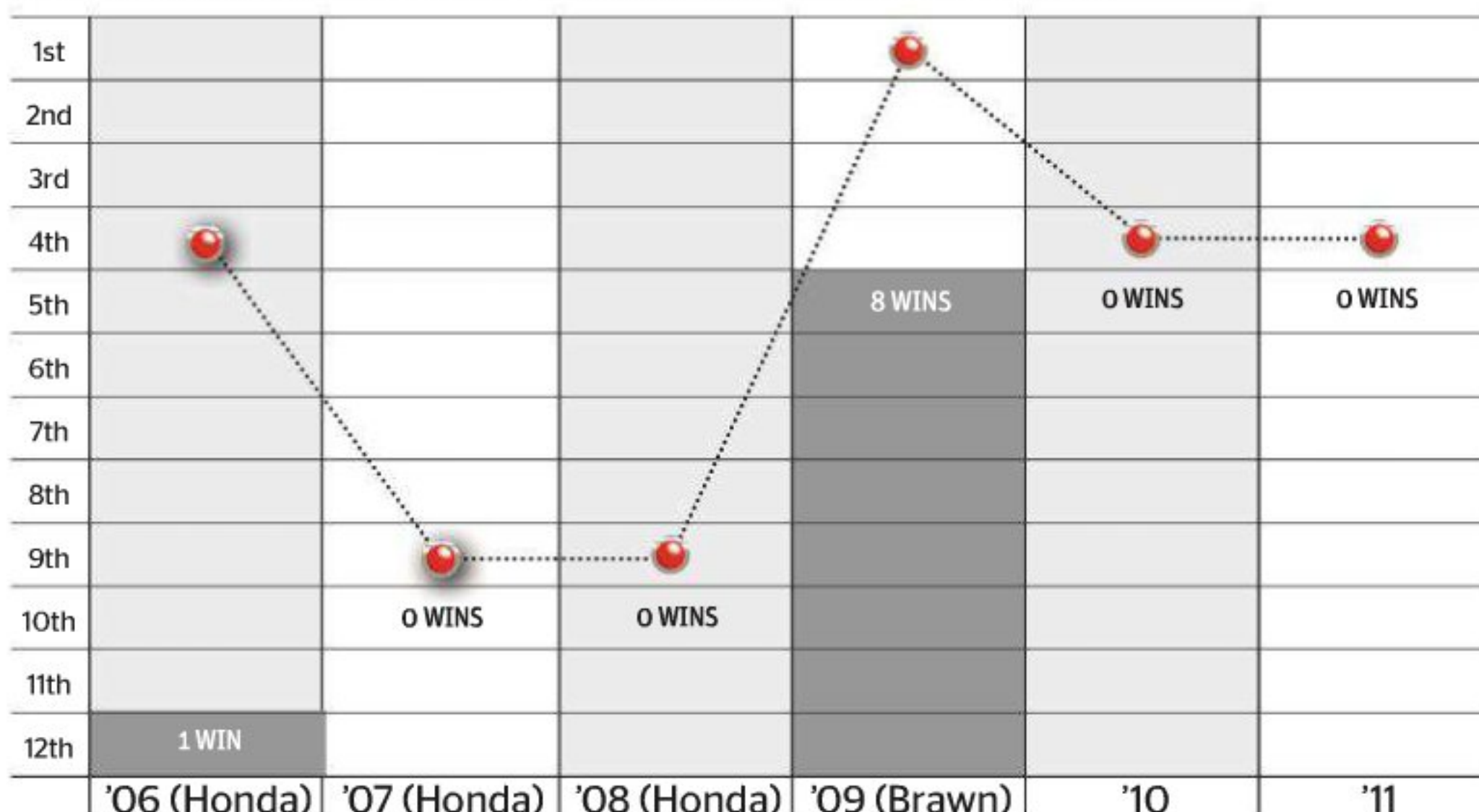


**Norbert Haug**  
Vice-president



**Bob Bell**  
Technical director

## CONSTRUCTORS' CHAMPIONSHIP POSITION 2006-2011



2007 position is prior to McLaren's penalties

7

**Michael SCHUMACHER**  
(D)



Starts 286  
First GP Belgium 1991  
Wins 91  
Poles 68  
Fastest laps 76  
2011 position 8th

**MICHAEL SCHUMACHER** enters the final year of this three-year commitment to coming back, and it is one that will fully define our verdict of that return. Should he build on the upward trend he showed last season, and Mercedes provide him with the

necessary machinery, then success will follow - and he will sign a new deal to keep on racing.

If, however, it's another season in Rosberg's shadows, and no sniff of a podium, then retirement may beckon once and for all.

8

**Nico ROSBERG**  
(D)



Starts 108  
First GP Bahrain 2006  
Best finish 2nd  
Best grid slot 2nd  
Fastest laps 2  
2011 position 7th

**NICO ROSBERG'S REPUTATION** has been enhanced hugely since he joined Mercedes, but even he will accept he's not done what he wanted to do: win a race for the Silver Arrows. The German has his best chance to do that this year, with the

strengthened outfit confident it has learned lessons and produced a car to fight at the front. Rosberg has shown he is quicker than Schuey over a single lap, now he needs to turn that form into a race-winning performance on Sundays.



**KEY  
STAT****1981**

The current Lotus team started life as Toleman in 1981. Since then it has raced as Benetton and Renault


**AUTOSPORT**  
**RATING**  
**=4TH**

Drivers	●●●●●●●●
Engine	●●●●●●●●
Chassis	●●●●●●●●
Budget	●●●●●●●●
Tactics	●●●●●●●●

# Lotus

The rebranded Renault team has recruited former world champion Kimi Raikkonen and returning talent Romain Grosjean. If they gel with the E20, following its testing blemish, there could be surprises



**T**he team formerly known as Renault (not to mention Benetton and Toleman) morphs into Lotus this year, but otherwise remains largely uncharged and still under the stewardship of owner Genii Capital and team principal Eric Boullier.

Last year was something of a disaster for the Enstone-based team and it's testament to its strength that it still emerged from the 2011 season with a couple of podium finishes and fifth in the constructors' standings. That came despite losing Robert Kubica's services after the Pole shunted a Skoda in an

Italian rally after the first pre-season test and a bold, but doomed, decision to run innovative front-exit exhausts.

This year, those weaknesses have been eliminated. The recruitment of 2007 world champion Kimi Raikkonen is unquestionably a gamble, but it may pay out in spades. In the other car is a driver who could just prove to be the breakout star of 2012. Romain Grosjean returns to F1 having rehabilitated himself via GT racing and winning the GP2 crown. As for the car itself, despite a pre-season blunder when it was discovered that the carbonfibre front suspension mountings weren't strong enough, forcing a rapid redesign

of them in aluminium, it looks very promising. Extremely driveable straight out of the box, the Lotus E20 is in the mix to run in the top half-dozen.

It's difficult to say what Lotus should be achieving this season. Retaining fifth is the minimum, but it will take a lot to break into the top four given that McLaren, Red Bull, Ferrari and Mercedes are all slightly larger teams. What Lotus needs to do is notch up some podium finishes. If it can do that, then it will lay the foundations for a return to title contention in a few years.

But the story of Lotus in 2012 will likely be, for good or for bad, all about Kimi. A lot depends on the Finn's performances...

## TEAM STATS

Starts	495
First GP	Italy 1981
Wins	47
Poles	35
Fastest laps	49
2011 position	5th (as Renault)



## A HUGE CONTRAST IN FORTUNES

between the Jerez and Barcelona tests for Lotus. At Jerez, Kimi Raikkonen and Romain Grosjean were consistently quick, visibly able to lean hard on a car that was well-balanced

and driveable, if not perhaps quite Red Bull-grippy. At Barcelona it had to pull out of the whole second week's testing after just a few laps revealed a serious problem in the manufacture of the chassis. The failure was

safety-related so valuable days of info gathering were lost as upgrades were made. The car's form since suggests that when it's working it may be genuinely competitive, which is an exciting prospect.



Lotus-Renault E20



### GARY ANDERSON Technical consultant

**I THINK THAT WHEN LOTUS** recovers from its testing setback it will slot into fifth. In Raikkonen it has a driver, like Robert Kubica, that it

believes in and with Grosjean the potential of young, up-and-coming star. The car has all the bits in the right places so, unlike last year, when it was hampered during the second half of the season by the forward exhaust system, it now has a car

that will respond better to a normal development direction. If Lotus can get the season off to as good a start as last year then the second half should be much stronger and it would be good to see Kimi wringing the E20's neck.

### KEY STAFF



**Eric Boullier**  
Team principal

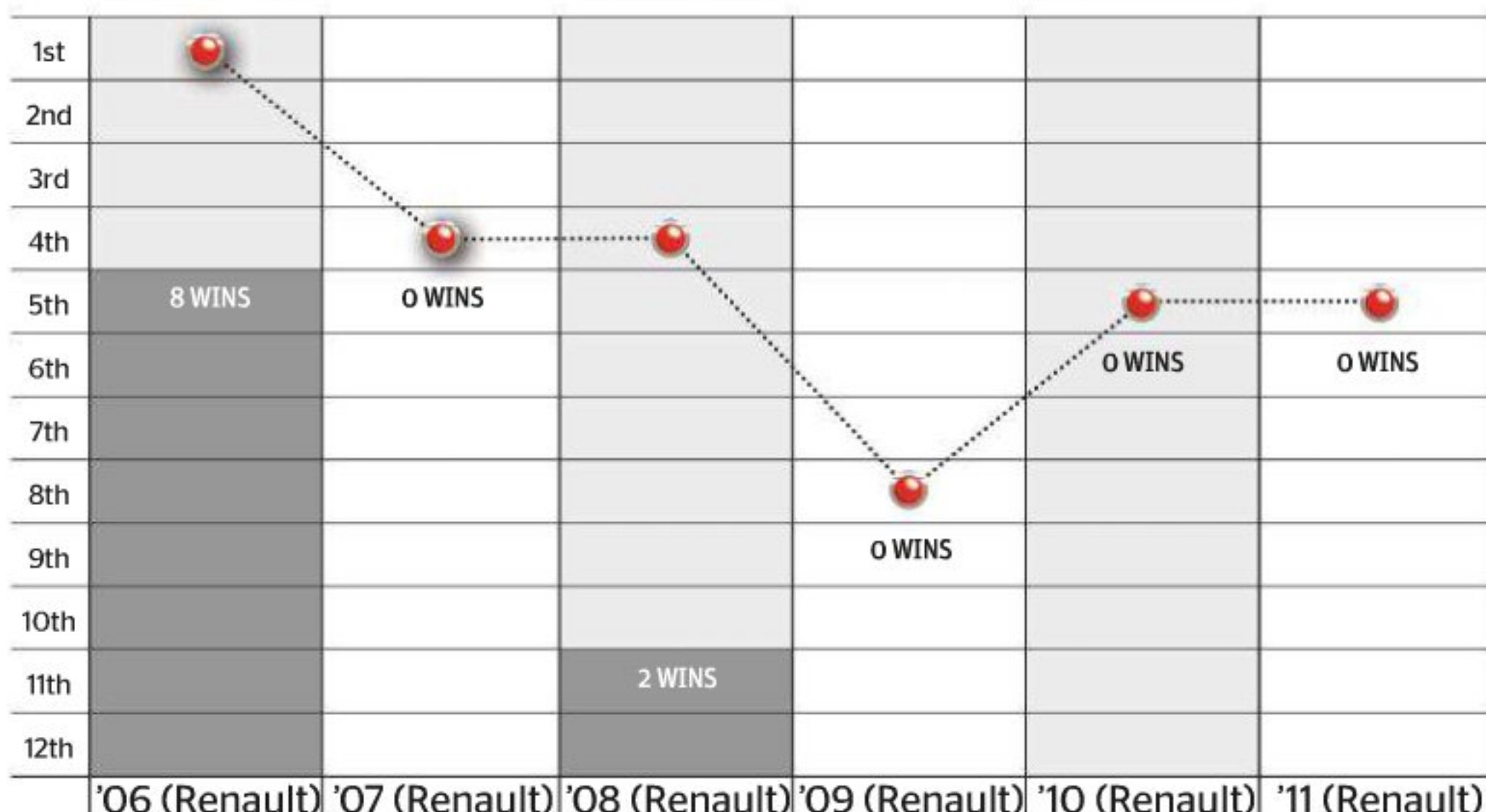


**James Allison**  
Technical director



**Gerard Lopez**  
Team co-owner

### CONSTRUCTORS' CHAMPIONSHIP POSITION 2006-2011



2007 position is prior to McLaren's penalties

9

### KIMI RAIKKONEN (FIN)



Starts 155  
First GP Australia 2001  
Wins 18  
Poles 16  
Fastest laps 35  
2011 position 10th in WRC

**THE ICEMAN IS BACK AND,** judging by the gusto with which he returned to the F1 cockpit earlier in the year, he's determined to make a go of his comeback after two years campaigning a privateer Citroen in the World Rally Championship.

But while the 2007 world champion appears to have lost none of the speed that netted 18 wins for McLaren and Ferrari, the question is whether he has the focus to deliver his best over a season. If he does, he's going to be spectacular.

10

### ROMAIN GROSJEAN (F)



Starts 7  
First GP Europe 2009  
Best finish 13th  
Best grid slot 12th  
Fastest laps 0  
2011 position 1st in GP2

**FORGET THE FRANCO-SWISS** driver's brief dalliance with F1 in 2009, when he didn't catch the eye despite showing well relative to Fernando Alonso. Grosjean is very fast - he always has been - but he's added maturity to his armoury. He has the

potential to be a top-drawer driver and could definitely cause an upset against his former world champion team-mate, particularly after driving in free practice in the final two races of last season and getting to know the Pirelli tyres.



**KEY  
STAT****1991**

Silverstone-based Force India can trace its ancestry back to the Jordan GP team of 1991


**AUTOSPORT**  
**RATING**  
**6TH**

Drivers	●●●●●●●●
Engine	●●●●●●●●
Chassis	●●●●●●●●
Budget	●●●●●●●●
Tactics	●●●●●●●●

# Force India

Recent investment from Sahara, a strong technical team devoid of any ego issue, as well as a young and gifted driver line-up, should help the team begin to bother the big boys further up the grid



**T**here's a bit of a new-broom technical approach for 2012 here, a new car that owes very little to its predecessors, a clear aspiration to begin bridging the gap between the frontrunners and the upper-midfield place it's been stuck in recently. For a team of this size, that's an ambitious leap and it's one that will require the owners of the team to buy into, literally. Whether Vijay Mallya or new co-owner Subrata Roy share the technical team's ambitions - at the price it would cost in expansion - is another matter.

Under Mallya's stewardship the team

has progressed well during the past few years. There's a strong, well-oiled, ego-free bunch of guys at its core who are bright, work well together and fully understand the foibles of their facilities and tools. With a measure of financial stability and the freeing up of resource that has been made possible by the association with McLaren and Mercedes, it's progressed from near the back of the grid to the upper half in a relatively short space of time. But to get from there to being able to produce a car that can take on the giants above them calls for greater financial commitment.

At present the best the team can realistically hope for in 2012 is for its

impressive-looking new car to be a thorn in the side of the lower-performing big teams in the early part of the season. It has an aggressive young driver line-up to help it do this, both highly motivated to mark themselves out as the obvious candidates when any of those big teams - specifically McLaren or Mercedes - decide it's time to change their driver line-ups. Ferrari's junior driver Jules Bianchi will increase his F1 experience as Force India's Friday driver in at least nine events and it will be interesting to monitor his efforts alongside Paul di Resta and Nico Hulkenberg, his earlier meteoric career trajectory having lost momentum recently.

## TEAM STATS

Starts

73

First GP

Australia '08

Wins

0

Poles

1

Fastest laps

1

2011 position

6th



**JONATHAN NOBLE**  
Group F1 editor

**FORMULA 1 TESTING MAY NEVER** be able to give you a definitive picture of the pecking order, but it does provide a pretty good indication of the haves and the have-nots in the build-up to the campaign.

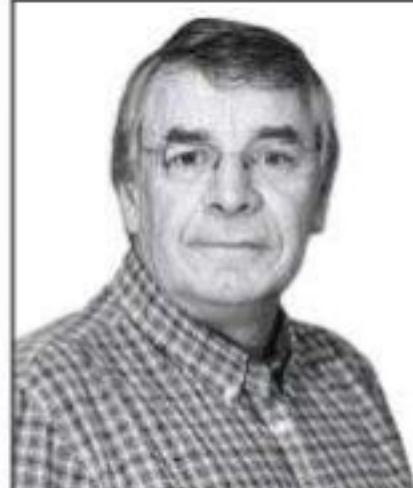
Force India falls into the haves category, after a pretty solid winter programme that looks set to help edge it closer the big teams ahead of it. The VJM05 has been solid from the off, with its biggest drama being self-

inflicted at Jerez when it lost a day's running after reserve Jules Bianchi put it in the wall.

Expect Paul di Resta and Nico Hulkenberg to be keeping the big teams on their toes in 2012.



Force India-Mercedes VJM05



**GARY ANDERSON**  
Technical consultant

**IT'S EASY TO SAY THIS SMALL** team is punching above its weight, but with the stability of Mercedes engines, McLaren transmission

systems and a technical tie-up with McLaren Technology, it's no longer a small team. With Andrew Green as technical director it has experienced leadership, and with a good bunch of guys at its Silverstone base it has the potential to be a pain in

the side of the top five teams. The car looks good and a big step forward from 2011, and it has a solid, if a little inexperienced, driver line-up. Development as the season progresses will be crucial; with it comes the real possibility of podiums.

#### KEY STAFF



**Vijay Mallya**  
Team principal

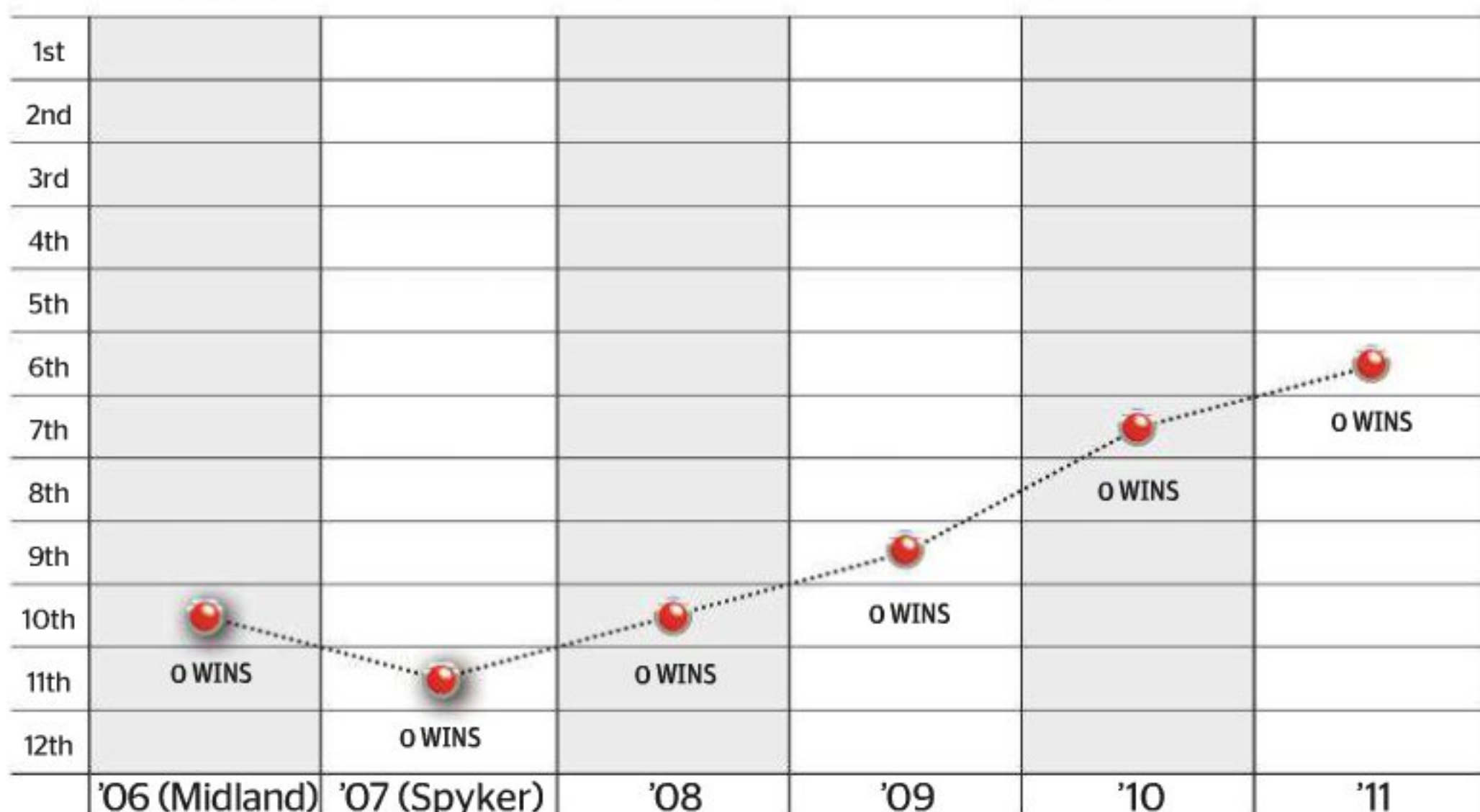


**Andrew Green**  
Technical director



**Andy Stevenson**  
Sporting director

#### CONSTRUCTORS' CHAMPIONSHIP POSITION 2006-2011



**11**

**Paul DI RESTA**  
(GB)



Starts 19  
First GP Australia 2011  
Best finish 6th  
Best grid slot 6th  
Fastest laps 0  
2011 position 13th

**THE SCOT'S SOPHOMORE** season will be a big challenge. Last year he made the sort of instant impression you'd expect of someone with such a hugely impressive CV. This year di Resta has a team-mate with an aggressive style and a lot of

raw speed at just the time he needs to be establishing himself as the team's lead driver. What you can be sure about is that he won't be overawed by that challenge. His self-belief is total and his calm, rational analysis will serve him well.

**12**

**Nico HULKENBERG**  
(D)



Starts 19  
First GP Bahrain 2010  
Best finish 6th  
Poles 1  
Fastest laps 0  
2011 position N/A

**IT WAS A TRAVESTY THAT NICO** Hulkenberg was left on the sidelines in 2011 as only a third driver after some terrific rookie performances at Williams in 2010. His pole at Interlagos was as one of the most spectacular pieces of driving in recent memory.

Hulkenberg is more motivated and confident than ever, with what seems a well-balanced car beneath him, and plenty of experience just bursting to be put to use. The intra-team struggle at Force India will be one of the season's more fascinating subplots.



**KEY  
STAT****KEY**

James Key, Sauber's technical director who oversaw the C31, left at the start of the year


**AUTOSPORT**  
**RATING**  
**7TH**

Drivers	●●●●●●●●
Engine	●●●●●●●●
Chassis	●●●●●●●●
Budget	●●●●●●●●
Tactics	●●●●●●●●

# Sauber

Despite the loss of technical chief James Key just before 2012 winter testing got underway, Peter Sauber's lean team is targeting the competitive midfield with the competent Kobayashi and Perez



**F**rom the day that BMW decided to turn its back on Formula 1, Sauber's fortunes were always going to be dependent on the budget that the team was able to secure for itself.

And no matter how shrewd an operator Peter Sauber is, times are tough out there in the business world and trying to put together the astronomical budgets that are now demanded of even midfield teams in F1 is no mean feat.

The era of the Hinwil-based team setting its sights on victories and even a championship challenge are gone for

now - as it simply doesn't have the budget or resources to do that - but that's not to say Sauber does not have ambitions.

Last season it suffered badly because it lacked in exhaust-blown diffuser development, and this year has not exactly got off to the best start with technical director James Key leaving the outfit on the eve of the new-car launch.

But for all its challenges, Sauber has a history of producing pretty solid F1 machinery; its historical problem has always been in developing the car over the campaign to match the progress of its rivals. Again, that comes down to budget and resources.

The 2012 season looks like being another holding pattern for the team. In Kamui Kobayashi and Sergio Perez it has two exciting young talents, and if the Mexican in particular can keep up the rate of improvement he showed last year then there could be reason to believe the team could nudge its way towards the front of the midfield gaggle.

Sauber's biggest target this year isn't really about achieving another place or two in the constructors' championship; it will be in securing the financial package - either through sponsorship or partnership - to give it a solid platform going forward.

## TEAM STATS

Starts

323

First GP

South Africa

1993

Wins

1

Poles

1

Fastest laps

2

2011 position

7th



**THE RESIGNATION OF TECHNICAL** director James Key on the Wednesday before pre-season testing started tells you everything you need to know about Sauber. Key was frustrated by the lack of funds

available to pursue development and his departure is a sign of the tough financial times ahead. Inevitably, Sauber's ultra-cautious and frugal approach will ensure the team weathers the troubled financial

waters, but it's hard to see the Swiss outfit being anything other than a dependable midfielder until serious investment comes in. It's not a criticism - just the stark reality of the situation Peter Sauber's squad finds itself in.



Sauber-Ferrari C31



**GARY ANDERSON**  
Technical consultant

**THE CAR LOOKS LIKE IT HAS THE** potential to mix it consistently in the midfield but with the loss of James Key at such a critical time it will be

very difficult for anyone to pick up and agree on the design philosophy behind their new car. Everyone always wants to go down a slightly different path, whether it is under-floor aerodynamic characteristics or how the front wing reacts in ground-

effect to suspension set-up and stiffness. All I know is that a change of personnel at this level will always stall the progression of a small team. Sauber was left with the aftermath of BMW's pull-out and has done very well to be able to pick up the pieces.

#### KEY STAFF



**Peter Sauber**  
Team principal

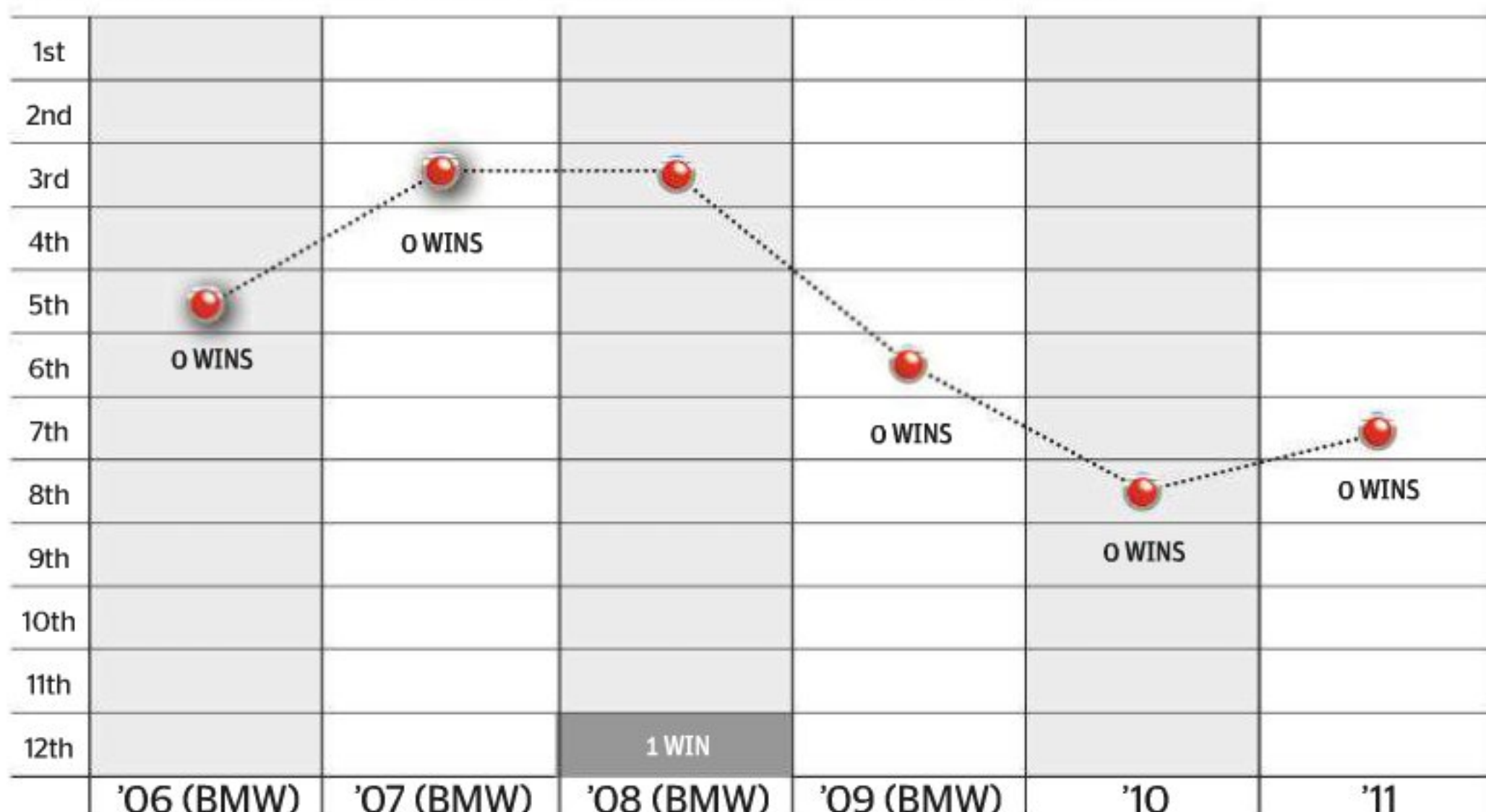


**Monisha Kaltenborn**  
Chief executive



**Matt Morris**  
Chief designer

#### CONSTRUCTORS' CHAMPIONSHIP POSITION 2006-2011



2007 position is prior to McLaren's penalties

**14**

**KAMUI KOBAYASHI**  
(J)



Starts 40  
First GP Brazil 2009  
Best finish 5th  
Best grid slot 7th  
Fastest laps 0  
2011 position 12th

**ONCE TAGGED AS FORMULA 1'S** most exciting overtaker, Japanese racer Kamui Kobayashi was probably hurt the most by the introduction of last season's drag-reduction rear-wing system. Gone was any advantage he had over his rivals, for now the push

of a button is enough to help you get past another car.

Even so, Kobayashi retains his aggression and enthusiasm ahead of his third year with Sauber - but now you sense some maturity has been added to the mix, too.

**15**

**SERGIO PEREZ**  
(MEX)



Starts 17  
First GP Australia 2011  
Best finish 7th  
Best grid slot 9th  
Fastest laps 0  
2011 position 16th

**ALTHOUGH HE ARRIVED AT** Sauber at the start of last season with the help of some Mexican backing, Perez swiftly proved that his position in Formula 1 was more than justified in speed. His driving style proved well-suited

to Pirelli's degrading rubber, and his progress through the season - aided in part by being taken under the wing of Ferrari's young-driver development programme - should make him an even stronger driver in 2012.

Watch out Felipe Massa...



**KEY  
STAT****1993**

Technical director Giorgio  
Ascanelli was Ayrton  
Senna's race engineer  
at McLaren during 1993



**AUTOSPORT**  
**RATING**  
**=8TH**

Drivers	● ● ● ● ●
Engine	● ● ● ● ●
Chassis	● ● ● ● ●
Budget	● ● ● ● ●
Tactics	● ● ● ● ●

# Toro Rosso

Out go Sebastien Buemi and Jaime Alguersuari, in come Daniel Ricciardo and Jean-Eric Vergne to lead Toro Rosso's midfield charge, with both drivers bidding to move up to Red Bull Racing in 2013



**T**he glory days of autumn 2008, when the ex-Minardi team sensationally won the Italian GP with one Sebastian Vettel, are now long in the past. But the Faenza-based team has been slowly rebuilding over the past few years since the rule change to prevent it running Red Bull-designed machinery and forcing it to become a constructor.

Last year was a big step forward. Under the leadership of the charismatic Giorgio Ascanelli, Toro Rosso climbed to eighth in the constructors' championship and wasn't far off Sauber, a decent return for the small team. But as Ascanelli always says, there's

no reason to expect a small midfield team to be climbing too high up the order: "When a man with a rifle meets a man with a pistol, the man with the pistol is a dead man".

What we can expect this year is another season of consolidation. Over the winter, the decision was made to flick Sebastien Buemi, regarded as strong technically and good in qualifying but not quite there in the races, and Jaime Alguersuari, seen as strong in the races but not so good in qualifying and lacking in application. In their place come the vibrant pairing of Daniel Ricciardo and Jean-Eric Vergne, both drivers gunning for Mark Webber's Red Bull seat in the next couple of years.

In a midfield that looks very tight, the performance of the drivers could make a huge difference to Toro Rosso's points haul over the year. Testing suggests that the car is brisk enough to mix it with Sauber and Williams, although it did have a nasty tendency towards oversteer, which could lead to plenty of lairy moments.

Inevitably, as a team with a pistol at a rifle fight, it's going to be a question of small victories for Toro Rosso. If it can climb a place to seventh in the makes' race that would be regarded as a successful season, especially if Ricciardo and Vergne can use their weaponry to inflict a few flesh wounds on more fancied teams in races.

## TEAM STATS

Starts	108
First GP	Bahrain 2006
Wins	1
Poles	1
Fastest laps	0
2011 position	8th



**MARK HUGHES**  
Grand prix  
editor

**AT THE TIME OF WRITING, THE FORM** of the STR7 was difficult to read. It appears, just like last year, to be on a similar pace to Sauber and Williams but lagging behind Force India. But the team was one of the last to begin any

serious long runs, fine tuning the set-up and understanding the car taking some time.

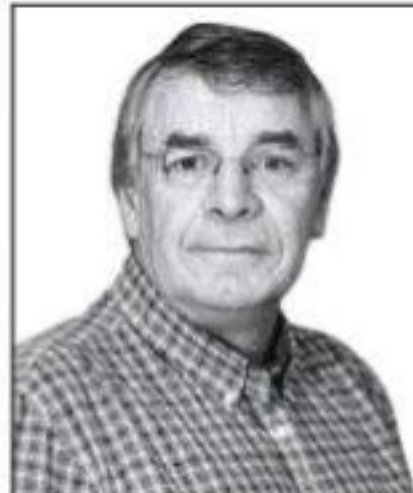
It was the final day of the first week of Barcelona testing before the car did its first serious long run but, at 20 laps, it was way

short of the full race distances being covered by Red Bull, McLaren and Mercedes.

We await further running before we can take a reasonably educated guess on the car's natural place in the order.



Toro Rosso-Ferrari STR7



**GARY ANDERSON**  
Technical consultant

**IT'S ALWAYS EASY TO THINK OF** this team as the Red Bull junior team and in some way it still is, but it's also now a standalone squad. Gone are

the days of the cars being designed and built in Milton Keynes. Last year was the first time that we could really see it going its own way and for 2012 it's taken another step. The car has some innovative ideas and the twin-floor sidepods are a

concept that will be difficult for others to copy. As far as testing is concerned everything looks good and it has two new young and hungry drivers. If either of them impresses the boss they have a Red Bull seat waiting for them.

#### KEY STAFF



**Franz Tost**  
Team principal

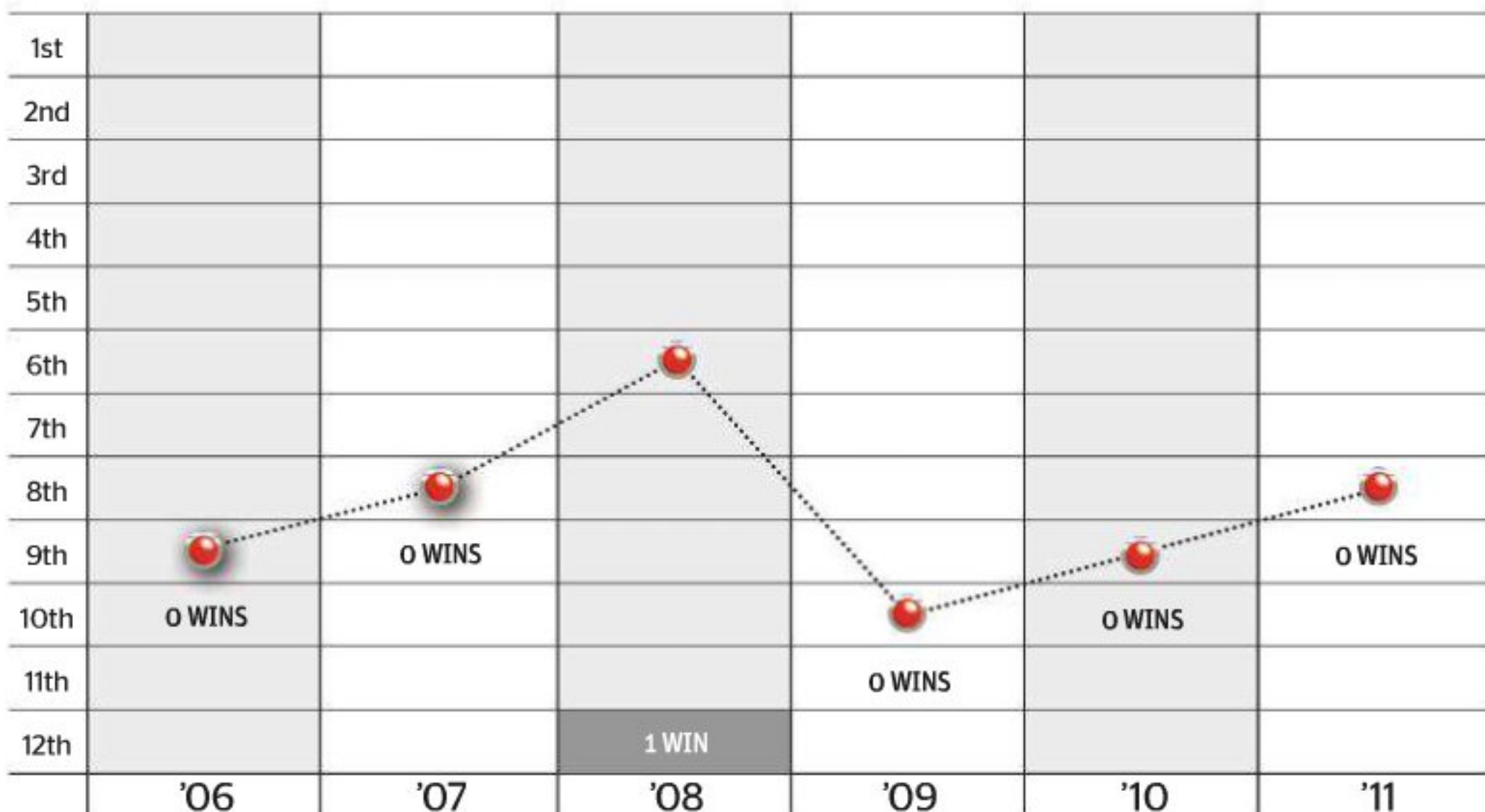


**Giorgio Ascanelli**  
Technical director



**Luca Furbatto**  
Chief designer

#### CONSTRUCTORS' CHAMPIONSHIP POSITION 2006-2011



**16**

**DANIEL RICCIARDO (AUS)**



Starts 11  
First GP Britain 2011  
Best finish 18th  
Best grid slot 20th  
Fastest laps 0  
2011 position 27th

#### THE ETERNALLY-GRINNING

Aussie has the air of a laid-back surfer out of the car, but tempers that with a very serious attitude inside it. During his half-season with HRT last year he showed not only good speed but, more

impressively, the ability to string together consistent race performances late in the year. He needs to ensure that 11-race headstart counts in what is likely to be an intense intra-team battle with Jean-Eric Vergne this year.

**17**

**JEAN-ERIC VERGNE (F)**



Starts 0  
First GP -  
Wins -  
Poles -  
Fastest laps -  
2011 position 2nd in FRenault 3.5

#### THE POLAR OPPOSITE OF

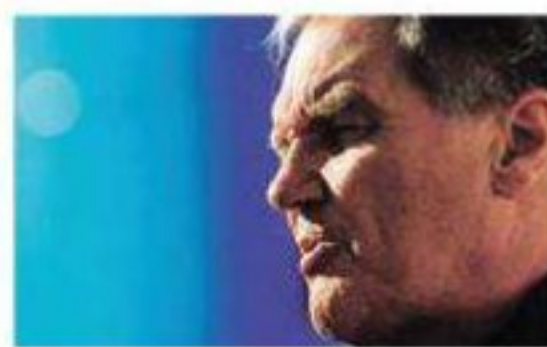
Daniel Ricciardo out of the car, the intense Frenchman is also a formidable competitor inside it. Another long-time Red Bull protege, he clearly fancies himself as an A-team driver in 2013.

But he faces a tough battle to assert himself over Ricciardo, who has half a season's head start on him. He has already shown Red Bull he's quick, so the key now is to deliver strong all-round race performances this year.



**KEY  
STAT****HEAD**

This season will be the squad's first season without the involvement of co-founder Patrick Head


**AUTOSPORT**  
**RATING**  
**=8TH**

Drivers	●●●●●●●●
Engine	●●●●●●●●
Chassis	●●●●●●●●
Budget	●●●●●●●●
Tactics	●●●●●●●●

# Williams

Former titan of the sport is undergoing immense restructuring as it bids to climb back up the order. But at this point mid-table respectability is probably the most realistic target



**T**his has to be the season in which Williams begins the climb back to respectability, for last year was little short of a disaster, with just five points on the board.

The disappointing performance of the FW33 triggered the resignation of technical director Sam Michael and aero chief Jon Tomlinson, and in their places have come Mike Coughlan and Jason Somerville respectively, with Mark Gillan as chief of engineering. They took up their roles early enough into last season to have a good input on the FW34, which continues with the miniature gearbox that was such

an intrinsic part of the old car's concept.

The hoped-for aerodynamic benefits of that were thwarted by the contours of an engine cover squeezed around the homologated layout of the Cosworth. A return to Renault power should not only boost engine performance, but also give access to more of the aero benefits from the tiny gearbox. The different placement of the engine's ancillaries has allowed a visibly more tightly-contoured cover.

A reasonably promising Barcelona test suggests that respectability should be achievable, and certainly the team is one of the better placed of the mid-grid pack to have an effective

development programme in terms of the technical resources.

But it's not only in the technical department that Williams is in a transitional period. It's true of the management too, with Patrick Head leaving F1 to concentrate on the company's hybrid-technology business and more of team founder Frank Williams's responsibilities being assumed by commercial director Adam Parr and significant shareholder Toto Wolff.

Long term, how effectively they steer the ship will be of more import to the team's future even than the performance of the FW34 this season.

## TEAM STATS

Starts	572
First GP	Argentina
	1978
Wins	113
Poles	126
Fastest laps	130
2011 position	9th



**JONATHAN NOBLE**  
Group F1 editor

**WILLIAMS'S MISSION STATEMENT**  
for 2012 is simply to do better than last season, not actually that difficult when you think it has come off the back of its worst ever season in Formula 1.

The new FW34 certainly appears to have moved it in the right direction - but slow-corner struggles are something the team is going to have to get a grip on if it's really going to close the gap to the next team up

in last year's points table, Toro Rosso. More worrying is that Caterham behind appears to have made some progress, so this could be the battleground of old/new teams.



Williams-Renault FW34



**GARY ANDERSON**  
Technical consultant

**AFTER A VERY DIFFICULT 2011,** this year must be a step forward, but we should not underestimate the teams in front. Williams is not

the team it was when Patrick Head was leading the ship or during the glory years when he was joined by Adrian Newey. Now they are just another squad like Force India, Sauber or Toro Rosso - and I'm not trying to be disrespectful of a team

that during my years in car design I idolised. It was a company born and bred in engineering, as opposed to a marketing company that happened to run a race team, but others have moved forward as Williams stood still. At best it'll be a midfield fighter.

#### KEY STAFF



**Sir Frank WILLIAMS**  
Team principal

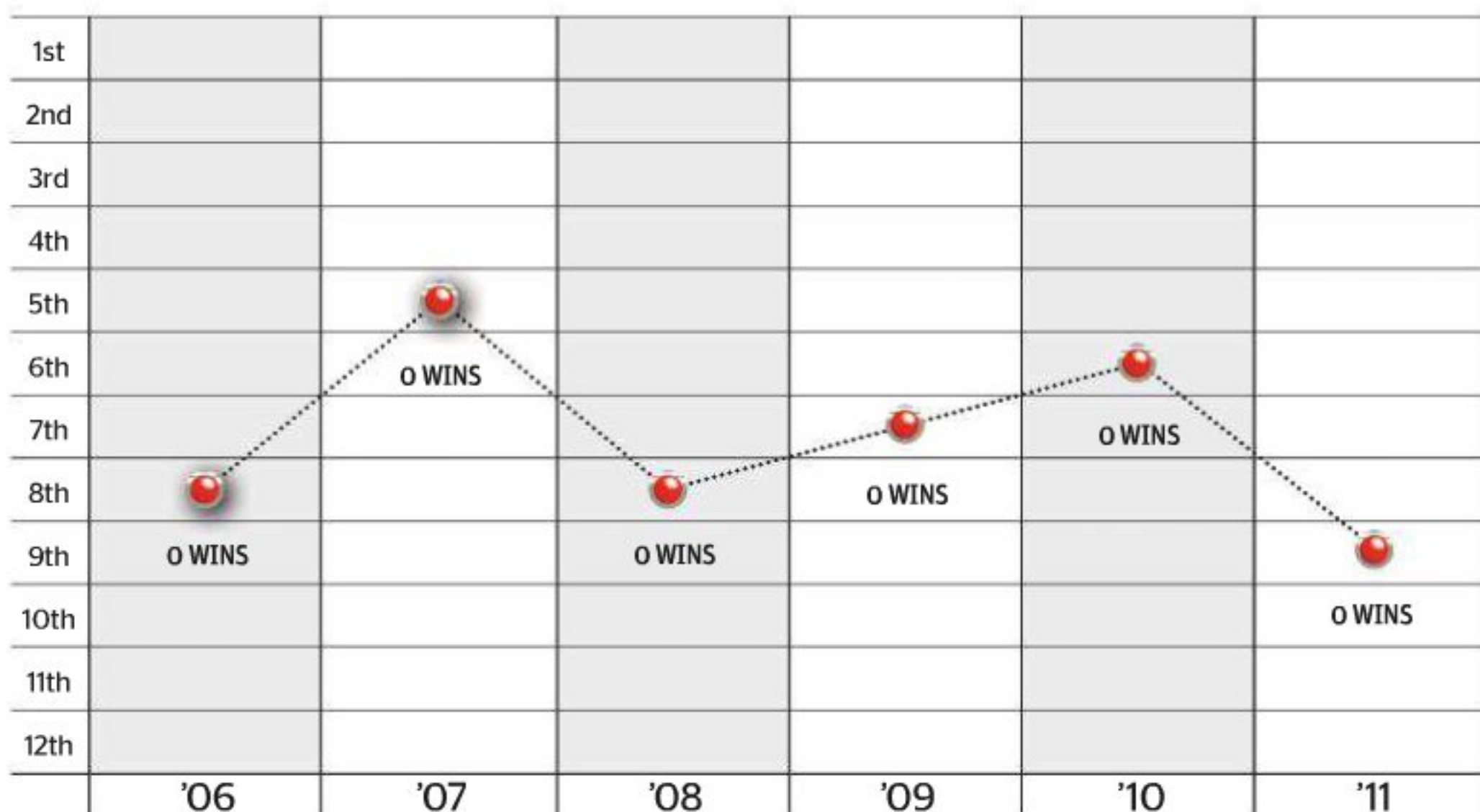


**Mark GILLAN**  
Chief operations engineer



**Adam PARR**  
Commercial director

#### CONSTRUCTORS' CHAMPIONSHIP POSITION 2006-2011



2007 position is prior to McLaren's penalties

**18**

**Pastor MALDONADO**  
(VY)



Starts 19  
First GP Australia '11  
Best finish 10th  
Best grid slot 7th  
Fastest laps 0  
'11 position 19th

**THE GUY'S STYLE MAY BE** unconventional - he always looks ragged and inconsistent - but the lap times say he's quick. The pay-driver tag will surely begin to fade soon, as it should have from the moment the Venezuelan secured the 2010

GP2 championship in such fine style. Maldonado's big challenge in 2012 therefore is to establish himself without question as a driver good enough to be in F1 demand - even if the backing from his South American homeland were to dry up.

**19**

**Bruno SENNA**  
(BR)



Starts 26  
First GP Bahrain '10  
Best finish 9th  
Best grid slot 7th  
Fastest laps 0  
'11 position 18th

**IT LOOKED FOR A WHILE** during the off-season that Bruno's F1 career might have been over before it had really had a chance to get into gear. Senna's mid-season opportunity at Renault last year, with no testing and on tyres with which he was not

familiar, did not go as well as it might have, even though there were flashes of potential. With the security of a permanent drive, he now has the chance to properly harness his ability - and show the world what he's made of.



**KEY  
STAT****LOTUS**

The team has now  
changed its name  
from its previous  
Team Lotus moniker


**AUTOSPORT**  
**RATING**  
**10TH**

Drivers	● ● ● ● ● ●
Engine	● ● ● ● ● ●
Chassis	● ● ● ● ● ●
Budget	● ● ● ● ● ●
Tactics	● ● ● ● ● ●

# Caterham

The former Lotus squad heads into 2012 with a Renault engine, plus transmission and KERS supplied by Red Bull Racing. Can it make use of this top-drawer technology to get closer to the midfield pack?



**T**his is definitely the most highly evolved of the three teams that entered F1 two years ago. In renamed form, Caterham goes into 2012 further expanded and with a windtunnel-sharing agreement with Williams and a new base in Leaffield, in the nub of F1's silicon valley. The next logical step would be to get in among the smaller established teams such as Toro Rosso, Williams and Sauber, and that indeed is the stated aim.

But aiming at it is one thing, hitting it quite something else. The performance gap even to the slowest of those

established teams last year was big and it remains to be seen just how feasible are its aims.

Continuing with Renault engines and Red Bull gearboxes should help, but the potential for such a small team to do the number crunching necessary for an effective aerodynamic programme is questionable, even though the Williams agreement should give the team around 40 per cent more tunnel time than it enjoyed last year. Meanwhile, the pressure on the technical management from the owner, impatient for progress, progressively builds. Mike Gascoyne's responsibilities have been re-arranged

(he's now technical officer for the whole Caterham group) and Mark Smith takes over as technical director of the F1 team.

There is reason to believe it will be more competitive. Not only was the design team much more established at the time of the new car's conception, but the car incorporates a KERS system for the first time, worth around 0.4s per lap. But to put that in perspective, that still leaves the aero department needing to find over 1s per lap relative to the back of the Q2 part of the grid. If the KERS was the only improvement made relative to everyone else, that would still leave it around 4s adrift of the front.

## TEAM STATS

Starts  
38  
First GP  
Bahrain 2010  
Wins  
0  
Poles  
0  
Fastest laps  
0  
2011 position  
10th



**JONATHAN NOBLE**  
F1 editor

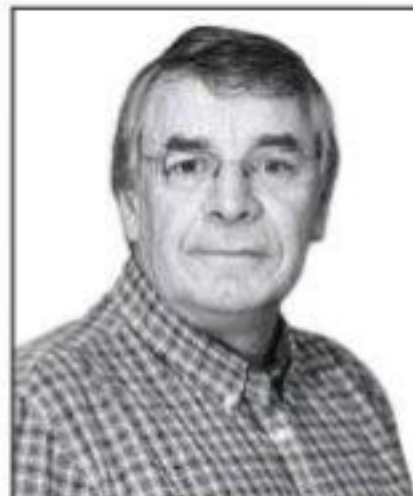
**IT HAS HAD ITS NIGGLES - INCLUDING** a fairly basic issue with a starter motor in the first test at Jerez - but Caterham has had its best winter preparation yet. The new CT01 has been labelled

within the team as a step forward, and with a Renault engine and Red Bull's KERS and gearbox it has the package in place to start challenging the established outfits.

Aerodynamics are king in Formula 1, however, and pushing harder in that area is going to be key to whether or not this team can make the leap forward it needs.



Caterham-Renault CT01



**GARY ANDERSON**  
Technical consultant

**THIS IS THE OUTFIT'S THIRD** year and it should have lost the new-team label. It's still a small team but it has the luxury of the Renault engine

coupled with Red Bull transmission, hydraulics and KERS package. This amount of supplied components makes any small outfit into a fairly large organisation so it can focus its energies on the rest of the car. I haven't seen anything during

testing that says it has joined the midfield bunch. The gap looks a little smaller but I think this will be the case right through the grid. Kovalainen is what the team needs: he will always wring the car's neck and get noticed by a big team.

#### KEY STAFF



**Tony Fernandes**  
Team principal



**Mark Smith**  
Technical director



**Riad Asmat**  
Chief executive officer

	'06	'07	'08	'09	'10 (Lotus)	'11 (Lotus)
1st						
2nd						
3rd						
4th						
5th						
6th						
7th						
8th						
9th						
10th					0 WINS	0 WINS
11th						
12th	N/A	N/A	N/A	N/A		

## 20 Heikki KOVALAINEN (FIN)



Starts 89  
First GP Australia 2007  
Wins 1  
Poles 1  
Fastest laps 2  
2011 position 22nd

**WHATEVER THE LIMITATIONS** of the car, Kovalainen can be relied upon to push it to the limit. But Heikki doesn't plan hanging around here if the team cannot make the progression to the next level. Even so, if the car

does not show regular Q2 capability, it's difficult to see what his alternative prospects might be beyond 2012. All he can do is hope that the Caterham CT01 can score points. If it can, then Kovalainen will.

## 21 Vitaly PETROV (RUS)



Starts 38  
First GP Bahrain 2010  
Best finish 3rd  
Best grid slot 6th  
Fastest laps 1  
2011 position 10th

**VITALY PETROV IS ANOTHER** of those drivers bringing money but who is not without ability. He has a foot-down bravery that often trumps the last little bit of finesse, but even by the end of his second year in F1 he didn't seem able to

consistently access his full potential. If the Caterham can become a mid-grid team then Petrov has the opportunity to continue to develop, but to enhance his reputation he would need to match Kovalainen, which will be quite an undertaking.



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# HRT

Despite new backers and experienced hand Pedro de la Rosa on the driving strength, HRT faces another tough season as it builds up to some sort of established respectability in the F1 paddock



HRT-Cosworth F112

**22** Pedro  
DE LA ROSA  
(E)



Starts	85
First GP	<b>Australia '99</b>
Best finish	<b>2nd</b>
Best grid slot	<b>4th</b>
Fastest laps	<b>1</b>
2011 position	<b>20th</b>



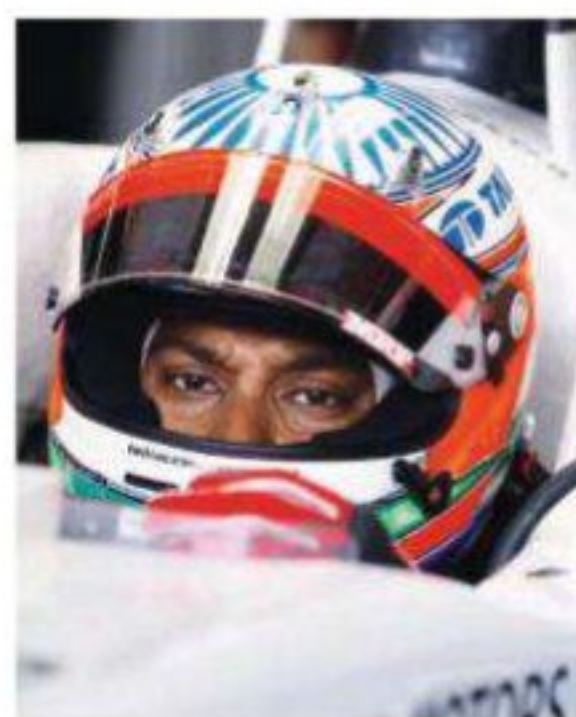
**PEDRO DE LA ROSA** is something of F1's comeback kid - this is his third. After returning to the sport with McLaren, then Sauber, the Spaniard is trying it again

with HRT. Of course, this time won't be about chasing podiums – but in trying to build up a team from scratch and taking satisfaction from seeing that progress.

**23** Narain  
**KARTHIKEYAN**  
**(IND)**



Starts	27
First GP	<b>Australia '05</b>
Best finish	<b>4th</b>
Best grid slot	<b>11th</b>
Fastest laps	<b>0</b>
2011 position	<b>26th</b>



**NARAIN KARTHIKEYAN**

does not shy away from the fact that his place in F1 owes much to his sponsorship backing, but he has some pretty good natural talent to boot. Although super-relaxed off-track, Karthikeyan can deliver blinding laps – and remains sublime in the wet. Yet 2012 could be another challenging campaign as HRT rebuilds itself.

## KEY STAFF



Luis Perez Sala  
Team principal



**Toni Cuquerella**  
Chief race  
engineer



**D**espite new owners and new management, for the third year running HRT has faced an uncertain build-up to the new campaign.

This time, despite seemingly having its plans in better shape than ever, failed crash tests delayed the launch of its 2012 challenger, which again means the team is on the back foot as it prepares for the Australian Grand Prix.

This is the start of a new chapter for the team, though, which owes its very

existence to Colin Kolles - who helped keep it alive through its most difficult times. Now there are plans for a new base in Madrid, and a desire for the team to lay down the kind of foundations that fellow 'new teams' Caterham and Marussia have managed over their first two campaigns in F1.

Yet keeping the show on the road until it has everything under one roof will not be the work of the moment. Having its design office, team base and administration buildings scattered around Europe makes things tricky.

## TEAM STATS

Starts	37
First GP	Bahrain 2010
Wins	0
Poles	0
Fastest laps	0
2011 position	11th

Former Minardi racer Luis Perez Sala has taken over at the helm and, although well versed in the motor racing business, he does not have the nous that Kolles put to such good effect to keep HRT a going concern.

At least in Pedro de la Rosa and Narain Karthikeyan it has two solid, albeit unspectacular, drivers that it can rely upon, and both are going to be happy going the extra mile just to get that car on to the grid.

Anything beyond that remains just a dream right now.





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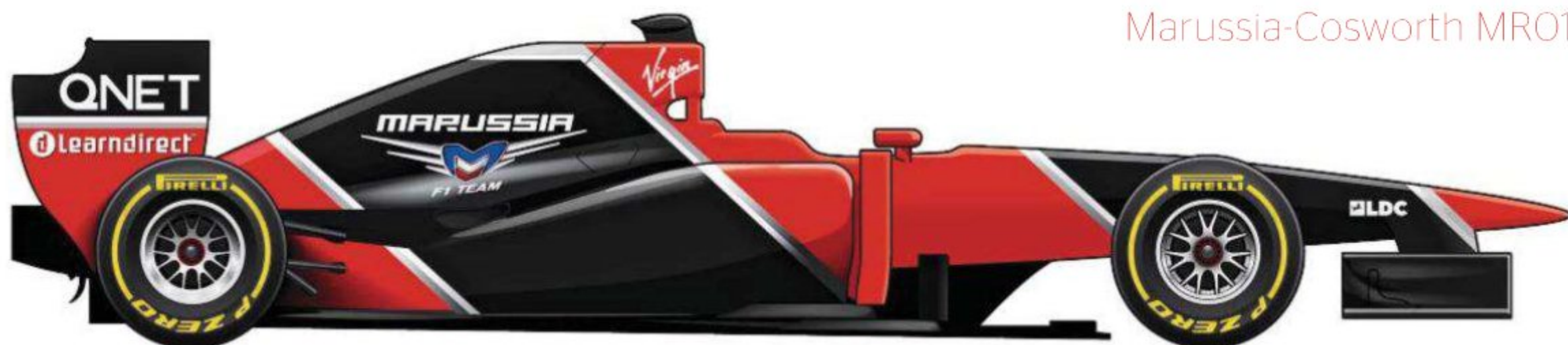
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# Marussia

You'd think things would be running more smoothly as the team enters its third season, but firefighting over a failed crash test means it's the same old story: no running and limited prospects



Marussia-Cosworth MRO1

**24**

**Timo  
GLOCK**  
(D)



Starts	72
First GP	Canada '04
Best finish	2nd
Best grid slot	2nd
Fastest laps	1
2011 position	25th

#### THE DAYS WHEN THE

German was a race leader and podium finisher for Toyota are long gone and he faces another hard year with Marussia. Mighty on slow circuits, Glock has proved himself worthy of better machinery than is currently at his disposal, and his biggest challenge will likely be putting up with a third consecutive season in

a car that won't allow him to score a point without the aid of some extraordinary luck.



**25**

**Charles  
PIC**  
(F)



Starts	0
First GP	-
Wins	-
Poles	-
Fastest laps	-
2011 position	4th in GP2

#### THE FRENCHMAN

hasn't got a single-seater championship on his CV and has been tarred with the pay-driver brush. But he's won races at every level, including GP2, in which he had the best qualifying average of any driver last year. He's quick, unquestionably, but a maiden season with Marussia is a tough ask and



his main challenge is to prove his undoubted pace by getting as close as possible to Glock on the timesheets.

#### KEY STAFF



**John BOOTH**  
Team principal



**Graeme LOWDON**  
Sporting director



**Pat SYMONDS**  
Technical consultant

**T**

he ex-Virgin team has a new name in 2012, taking on the identity of Russian sportscar producer Marussia in deference to what is now its major shareholder. Change of clothes notwithstanding, it seems that another tough year lies ahead for the team that has finished last in the constructors' championship in its two campaigns to date.

Ex-Benetton/Renault man Pat Symonds has overseen the creation of a new technical department in the

ex-Nick Wirth facility in Banbury that now hosts the whole team. As well as the major changes to the squad itself, a technical partnership with McLaren along similar lines to the one Force India established ahead of the 2009 season has boosted the team. As such, this year has to be considered a fresh start.

Unfortunately, it has begun in familiar fashion. The team that made its F1 debut in 2010 with a fuel tank too small to run flat-out in races has once again hit the rocks and heads to Australia having missed pre-season testing. That means

#### TEAM STATS

Starts	38
First GP	Bahrain 2010
Wins	0
Poles	0
Fastest laps	0
2011 position	12th

that the first time the car will turn a wheel in anger will be in free practice.

Already on the back foot, Marussia is also battling the problem of being one of the lowest-resourced F1 teams. This means that making up for a bad start will be almost impossible.

For Marussia, the target of breaking into the top 10 teams seems more distant than ever, and a more realistic focus would be on beating fellow straggler HRT. Doing so would be a triumph after failing for the past two years, while stealing a point would be a miracle.



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**2011 POLESITTER** Sebastian Vettel, 1m23.529s  
**LAP RECORD** Michael Schumacher, 1m24.125s (2004)  
**UK START TIME** 0600



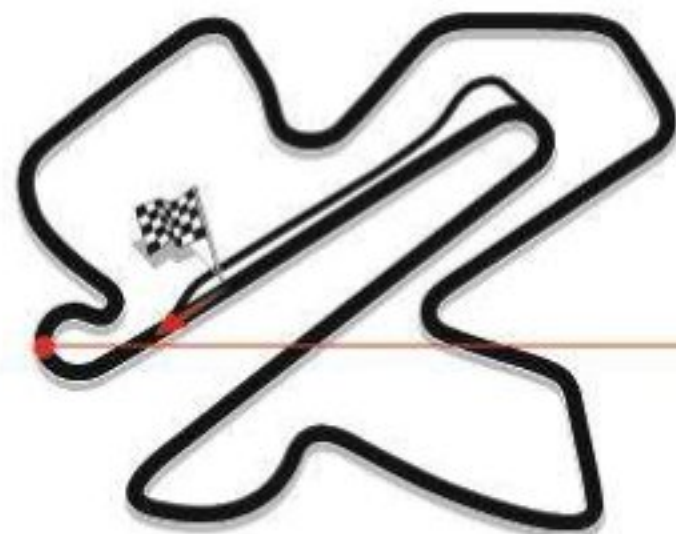
The second-gear Turn 3 has produced plenty of drama – as TV men Martin Brundle and David Coulthard will attest!

**OVERTAKING POINT**

The Melbourne parkland circuit has produced some classic season openers over the years, with its challenging range of medium-speed corners demanding precision and commitment. Not a street circuit in the classical sense, there is nonetheless little margin for error in some areas, with walls in close proximity, while the Australian autumn has been known to throw some rain into the mix over the previous 16 F1 races held here. The track requires relatively high levels of downforce and offers few overtaking opportunities. Despite that, Albert Park has a long history of producing the unexpected on race day.

## **MALAYSIA** Sepang, March 25

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●



Turn 1 is a second-gear right-hander that produced a huge number of overtaking moves last year, partly thanks to the assistance of DRS.

**OVERTAKING POINT**

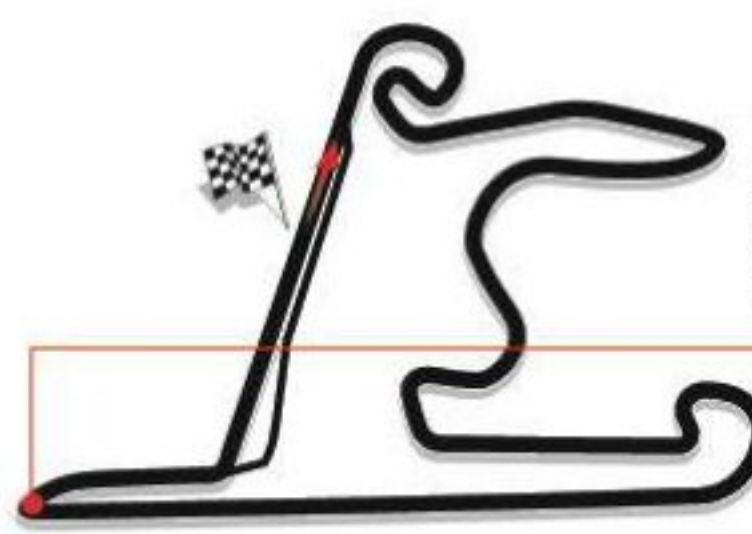


**2011 WINNER** Sebastian Vettel  
**2011 POLESITTER** Sebastian Vettel, 1m34.870s  
**LAP RECORD** Juan Pablo Montoya, 1m34.223s (2004)  
**UK START TIME** 0900

Since coming onto the calendar 13 years ago, this challenging track has established itself as popular with drivers, offering a good mix of corners. The sixth-gear left/right Turns 5/6 show the cars at their most spectacular and are the highlights of a flowing, and rapid, middle sector. The weather is consistently a problem at Sepang, with hot and humid conditions taking their toll on the drivers and the ever-present threat of a deluge in monsoon season.

## **CHINA** Shanghai, April 15

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●



Turn 14 is a second-gear hairpin at the end of what used to be the longest straight in F1. Last year, the DRS ensured there was passing here almost every lap.

**OVERTAKING POINT**

**2011 WINNER** Lewis Hamilton  
**2011 POLESITTER** Sebastian Vettel, 1m33.706s  
**LAP RECORD** Michael Schumacher, 1m32.238s (2004)  
**UK START TIME** 0800

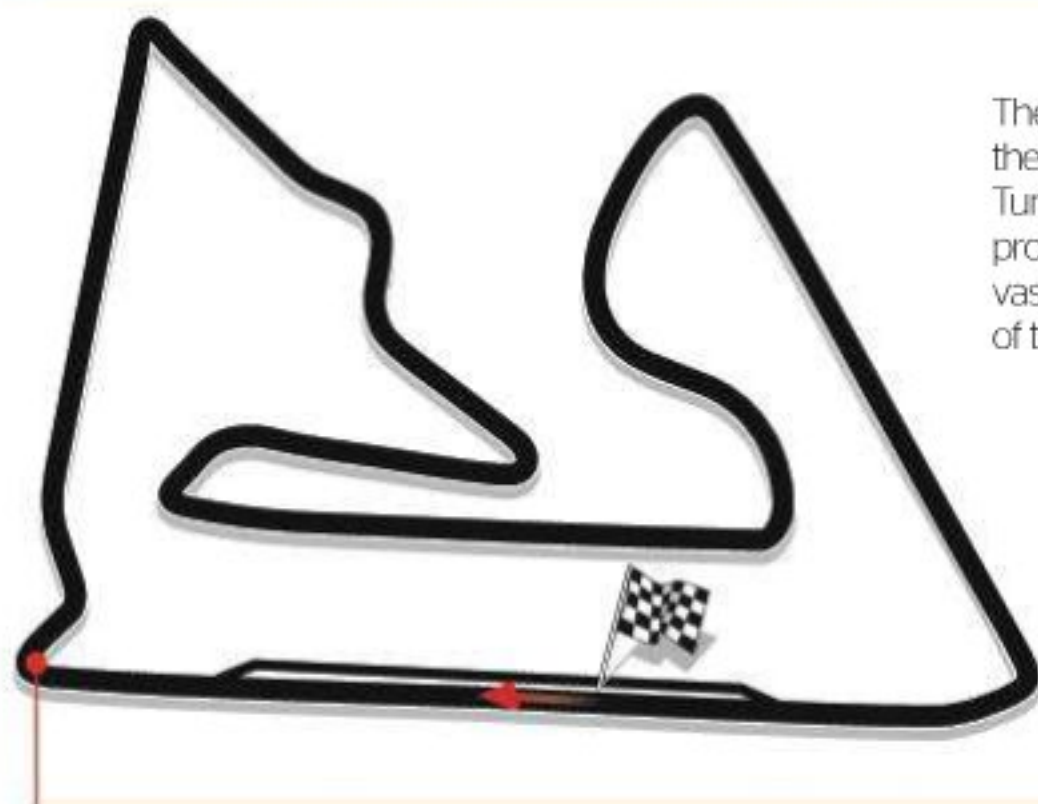


There won't be much of a crowd in the grandstands for the ninth Chinese GP, which is a shame because the track is a good one, with a well-balanced blend of slow and quick corners. The banked Turn 13, which leads onto the back straight, is one of the keys to laptime and it's here that many a passing move is lined up. Three years ago Red Bull claimed its first F1 victory with Sebastian Vettel in wet conditions, and a repeat of that kind of weather is always possible.



## BAHRAIN Sakhir, April 22

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●



### OVERTAKING POINT

The long run to the second-gear Turn 1 should produce the vast majority of the passing.



**2010\* WINNER** Fernando Alonso  
**2010\* POLESITTER** Sebastian Vettel, 1m54.101s (longer track)  
**LAP RECORD** Michael Schumacher, 1m30.252s (2004)  
**UK START TIME** 1300  
 \* no race in 2011

Back on the calendar after a year off (at least, it was on the schedule as AUTOSPORT went to press), the Bahrain Grand Prix will not feature the tortuously twisted loop that was used for the first time in 2010. It's not a track that fires the imagination, but there's enough here to offer a real test to the drivers, including the fast sweepers of Turns 5-7 and plenty of technically demanding corners. Add to the mix the curveball of sand blowing across the track, something that takes its toll on the engines, and you have an interesting combination of challenges.

## SPAIN Barcelona, May 13

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●

### OVERTAKING POINT

Not a track famed for overtaking, but the best chance comes on the brakes for Turn 1.



**2011 WINNER** Sebastian Vettel  
**2011 POLESITTER** Mark Webber, 1m20.981s  
**LAP RECORD** Kimi Raikkonen, 1m21.670s (2008)  
**UK START TIME** 1300

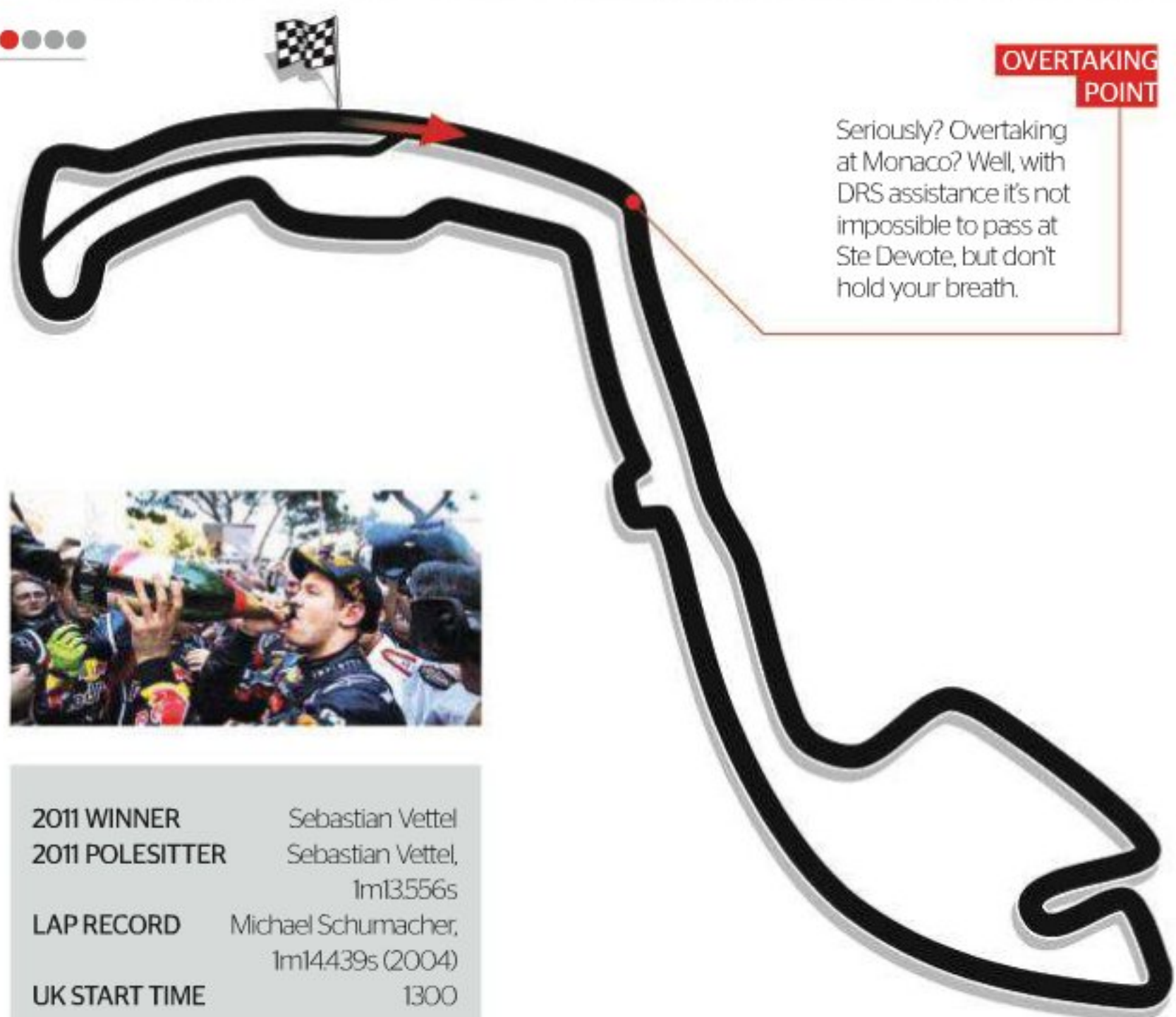


Barcelona is the ultimate F1 test track. Why? Because, more than any other circuit, it is a test of aerodynamic performance. Traditionally, here the best cars have had the biggest advantage, which perhaps explains why Red Bull has won here over the past two seasons. The track features a blend of corners, with the long, fast Turn 3 a stern test of a car's balance and the ultra-fast uphill right-hander at Campsa a real trial of who has the most downforce at high speed. Add to that the slow chicane in sector three and you have a track that asks questions of every aspect of a car's and driver's armoury.

## MONACO Monte Carlo, May 27

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●

Nelson Piquet famously likened driving a grand prix car around Monte Carlo to riding a bicycle around his apartment, but the tight, twisty and hilly Monaco circuit remains a true test of driver skill. While it's the slowest track on the 2012 calendar, it doesn't feel like that for the men in the cockpit, with the barriers only millimetres away and 100 per cent concentration needed to have any chance of the perfect lap. As Fernando Alonso discovered in 2010, when he wrote off his Ferrari chassis in a practice crash at Massenet, it can bite even the best as well.



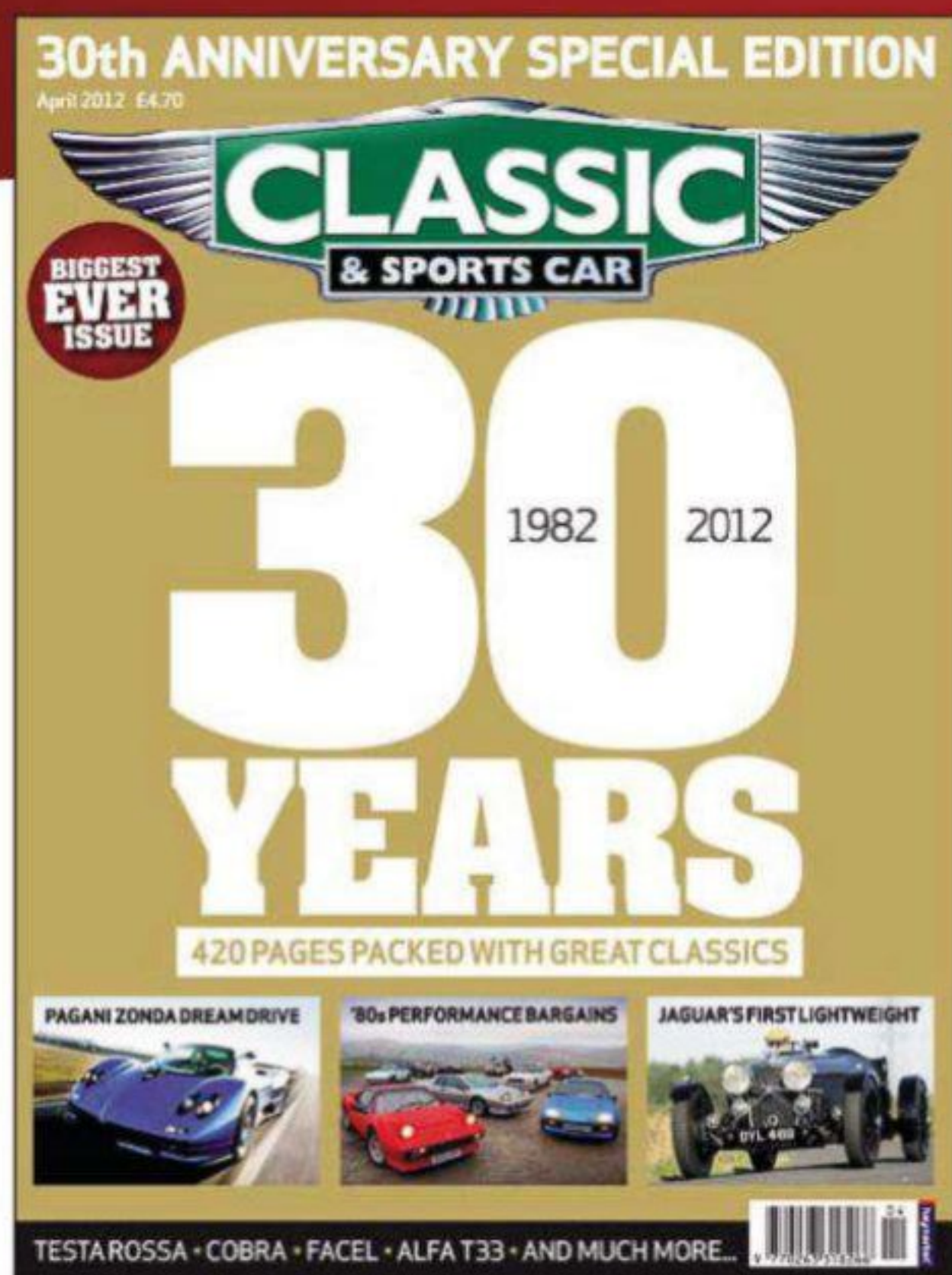
### OVERTAKING POINT

Seriously? Overtaking at Monaco? Well, with DRS assistance it's not impossible to pass at Ste Devote, but don't hold your breath.

**2011 WINNER** Sebastian Vettel  
**2011 POLESITTER** Sebastian Vettel, 1m13.556s  
**LAP RECORD** Michael Schumacher, 1m14.439s (2004)  
**UK START TIME** 1300

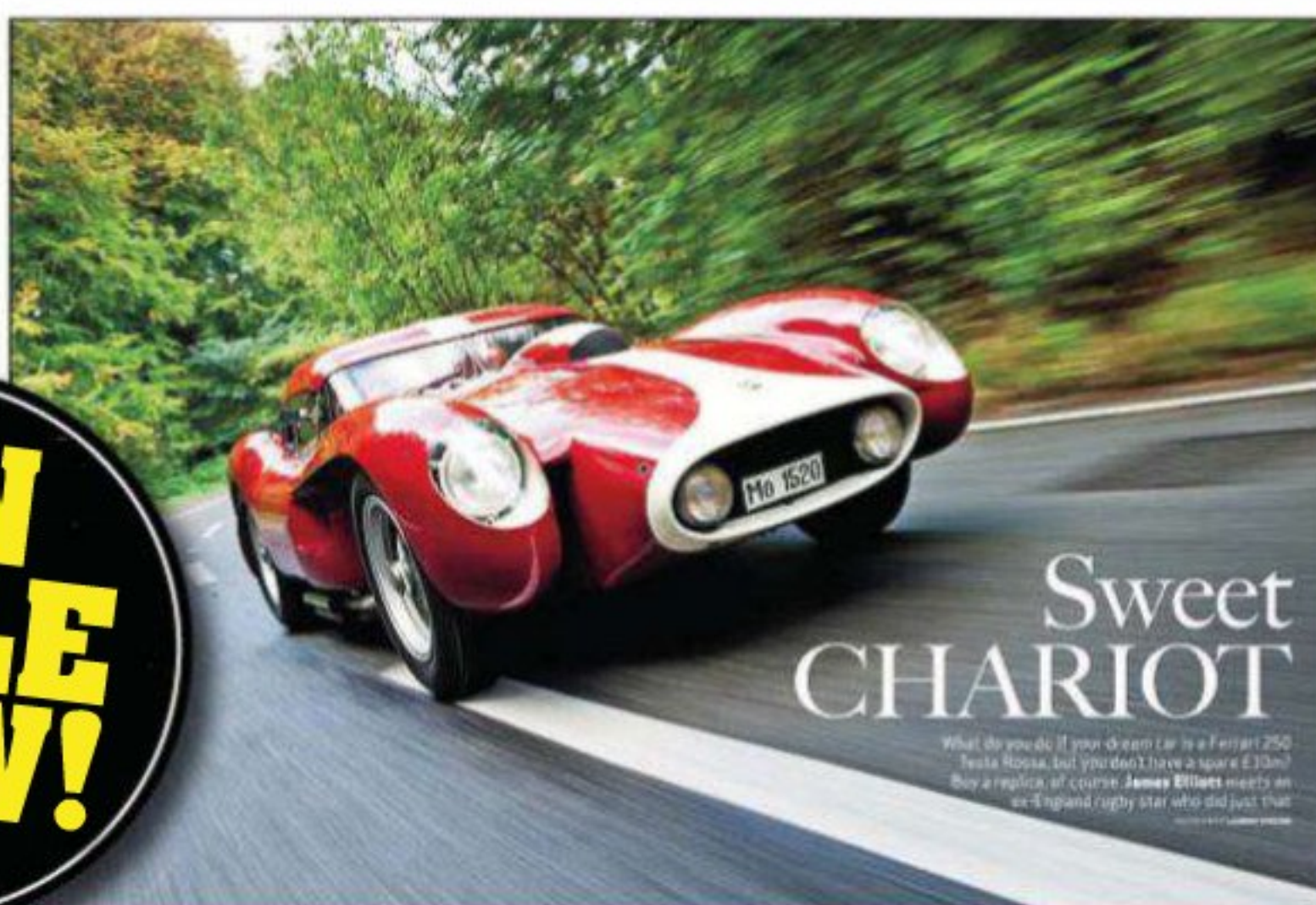


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## CANADA Montreal, June 10

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●

There's no other circuit quite like Montreal's Circuit Gilles Villeneuve on the F1 calendar. It's extremely demanding on brakes and has little margin for error, meaning that this is a circuit that claims more crash victims than perhaps any other on the calendar – last year Sebastian Vettel, Pedro de la Rosa and Jerome d'Ambrosio were all bitten. Built in the St Lawrence Seaway, the track has an illustrious history for producing spectacular racing and unexpected incidents whether wet or dry, and was the scene for Jenson Button's remarkable charge from last place to victory in 2011.

**2011 WINNER** Jenson Button  
**2011 POLESITTER** Sebastian Vettel, 1m13.014s  
**LAP RECORD** Rubens Barrichello, 1m13.622s (2004)  
**UK START TIME** 1900



### OVERTAKING POINT

The long run into the final right/left flick always produces action, and the wall on the exit has caught out many in the past.



## EUROPE Valencia, June 24

### OVERTAKING POINT

The long run down to the second-gear Turn 12 is the best of a bad bunch of opportunities. DRS should help though.



Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●

The Valencia street circuit heads into its fifth year as a grand prix venue, and any pretence that the city in the east of Spain had of being a second Monaco has long since been dropped. With a paddock placed in a fishmarket and skirting the America's Cup Marina, the venue has a certain amount of character, but has failed to capture the imagination. That said, it's a tricky circuit that rapidly rubbers in, creating a moving target for those chasing the set-ups. For a street track it's pretty rapid too.

**2011 WINNER** Sebastian Vettel  
**2011 POLESITTER** Sebastian Vettel, 1m36.975s  
**LAP RECORD** Timo Glock, 1m38.683s (2009)  
**UK START TIME** 1300



## BRITAIN Silverstone, July 8

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●

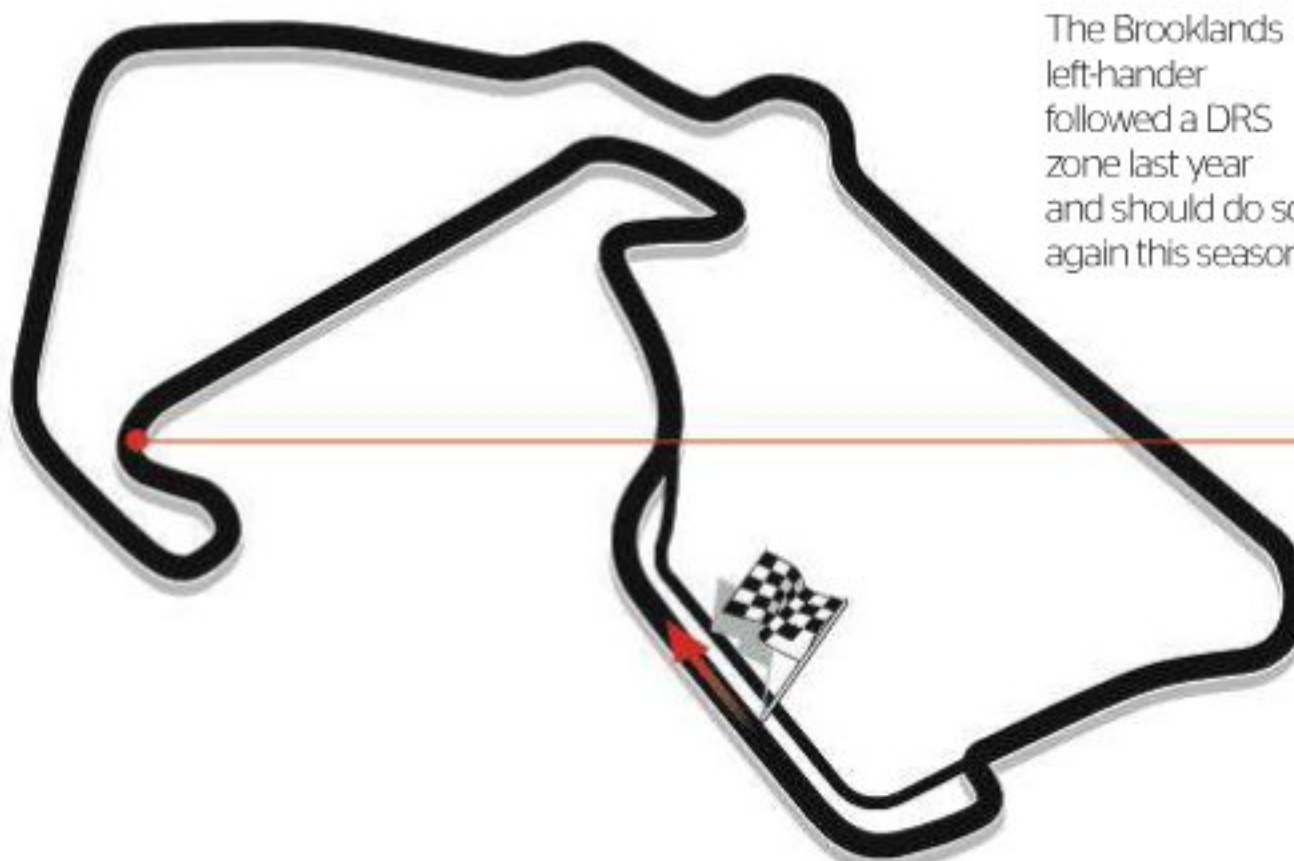
The new-look Silverstone, with the 'Wing' pit-and-paddock complex and relocated start/finish, produced a good race last season, and the consensus is that the Arena section added two years ago has improved the circuit. It remains very quick and popular with the drivers, and the Maggotts/Becketts section remains one of the most spectacular places to watch a grand prix car in qualifying trim. Aside from the uncomfortable feeling of Copse no longer being the first corner, Silverstone remains one of the best circuits on the calendar with a huge crowd guaranteed.

**2011 WINNER** Fernando Alonso  
**2011 POLESITTER** Mark Webber, 1m30.399s  
**LAP RECORD** Fernando Alonso, 1m30.874s (2010)  
**UK START TIME** 1300



### OVERTAKING POINT

The Brooklands left-hander followed a DRS zone last year and should do so again this season.







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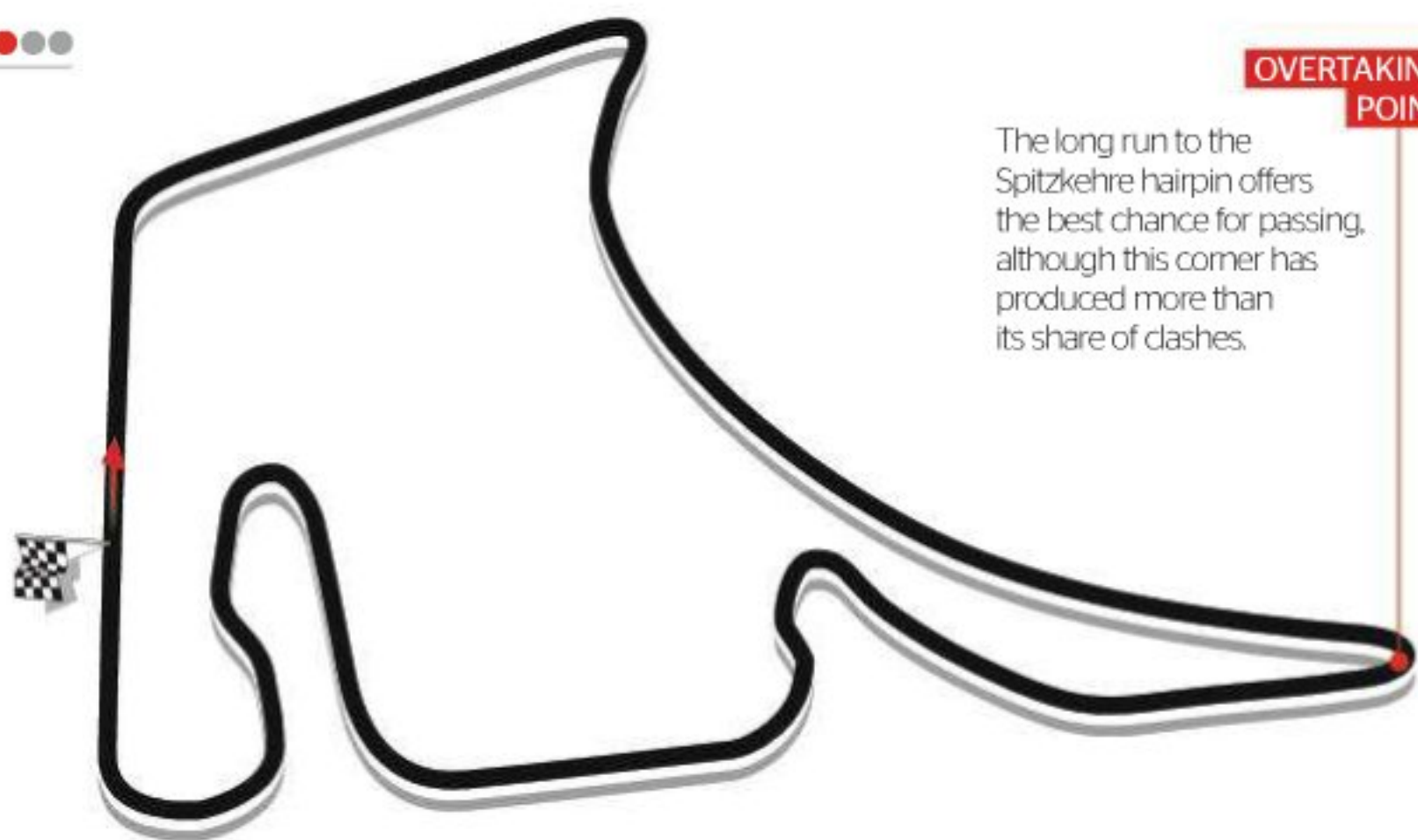


## GERMANY Hockenheim, July 22

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●



The German GP returns to Hockenheim as part of the ongoing race share with the Nurburgring. The most recent event here has gone down in infamy thanks to Ferrari's team orders robbing Felipe Massa of a possible victory, a year to the day since his potentially life-threatening accident in Hungary. Two years earlier, Lewis Hamilton's late-race charge from fifth to first proved that Hockenheim can produce its fair share of great racing. While only a shadow of its ultra-fast former self, it's good to have Hockenheim back.



**OVERTAKING POINT**

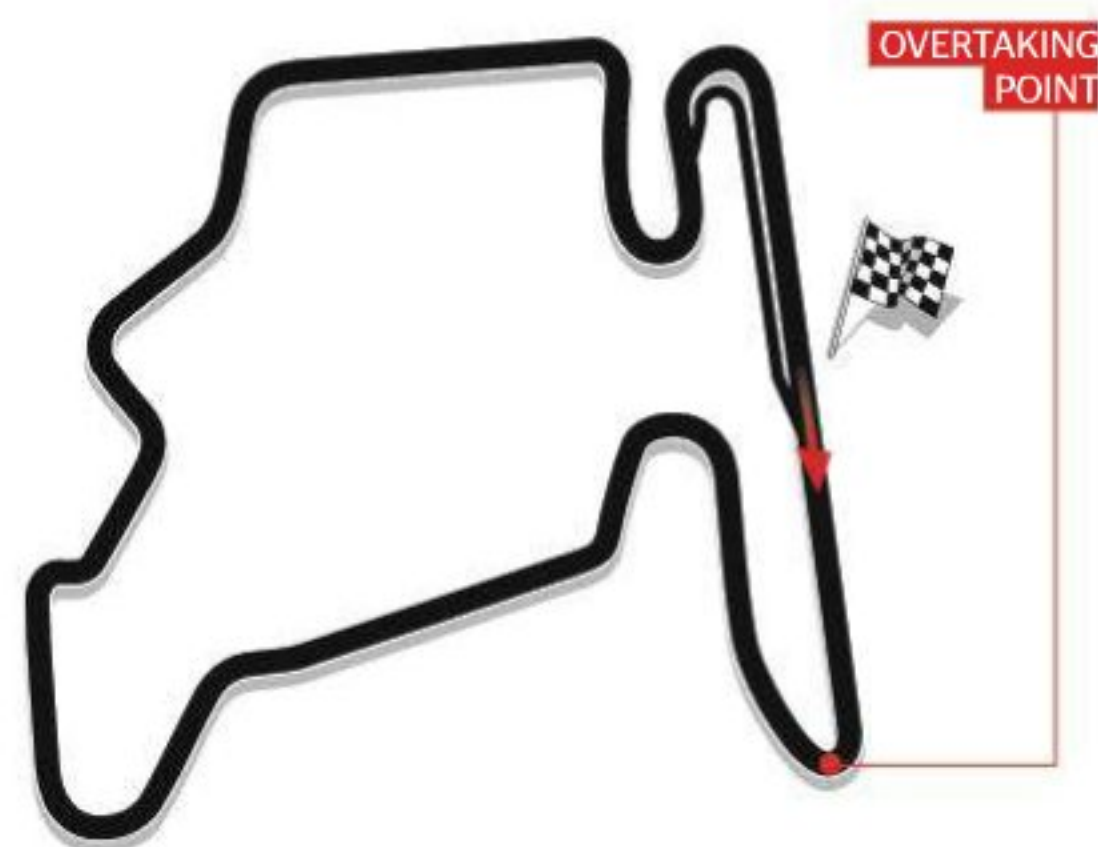
The long run to the Spitzkehre hairpin offers the best chance for passing, although this corner has produced more than its share of clashes.



2011 WINNER	Lewis Hamilton (Nurburgring)
2010* POLESITTER	Sebastian Vettel, 1m13.791s
LAP RECORD	Kimi Raikkonen, 1m13.780s (2004)
UK START TIME	1300
* Last time race held at Hockenheim	

## HUNGARY Hungaroring, July 29

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●



**OVERTAKING POINT**

Not only is Turn 1 the best opportunity, it's pretty much the only one.



2011 WINNER	Jenson Button
2011 POLESITTER	Sebastian Vettel, 1m19.815s
LAP RECORD	Michael Schumacher, 1m19.071s (2004)
UK START TIME	1300

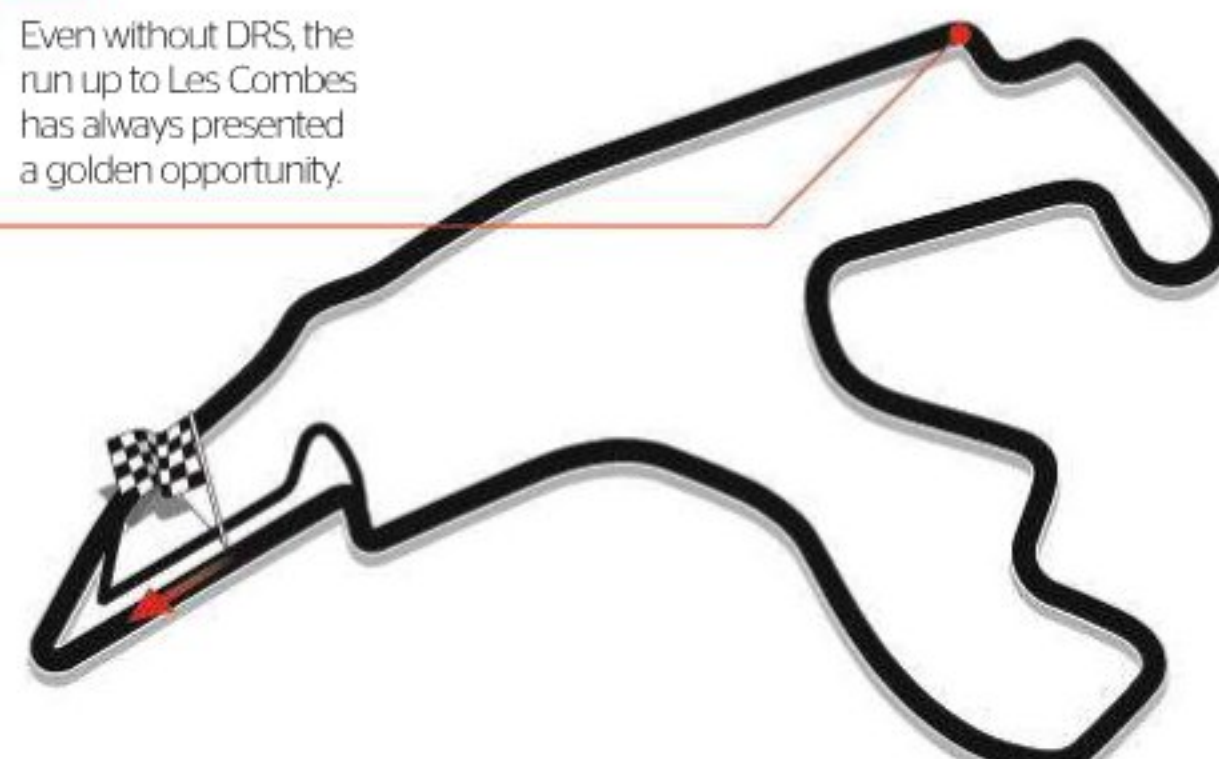
Since its layout was tweaked ahead of 2003, the Hungaroring has gradually shaken off its reputation for dire grands prix, and classic moments such as Nelson Piquet's sideways pass on Ayrton Senna in '86 and Nigel Mansell's opportunist move on the same man three years later will never be forgotten. In its current configuration the track still requires some of the highest downforce levels of the season, but the cars can stretch their legs a bit more. Rain is a rarity, but when it comes (2006, '11) it produces a thriller.

## BELGIUM Spa-Francorchamps, September 2

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●

**OVERTAKING POINT**

Even without DRS, the run up to Les Combes has always presented a golden opportunity.



2011 WINNER	Sebastian Vettel
2011 POLESITTER	Sebastian Vettel, 1m48.298s
LAP RECORD	Sebastian Vettel, 1m47.263s (2009)
UK START TIME	1300



Modern safety requirements mean that Spa is always being gently sedated, but it retains the character and challenge that has made it a favourite with drivers from all eras. The ever-increasing performance of Formula 1 cars is gradually changing the track's signature corner as well. The challenge of Eau Rouge has been reduced, and the double-left Pouhon has come into its own in recent years as the best indicator of a car and driver in the sweet spot. Spa has a great mix of everything around the lap.



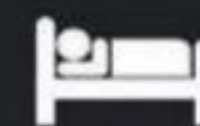
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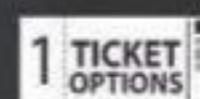
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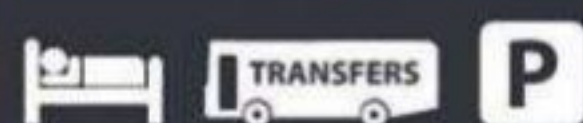
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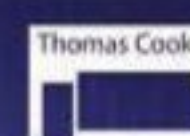
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## ITALY Monza, September 9

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●

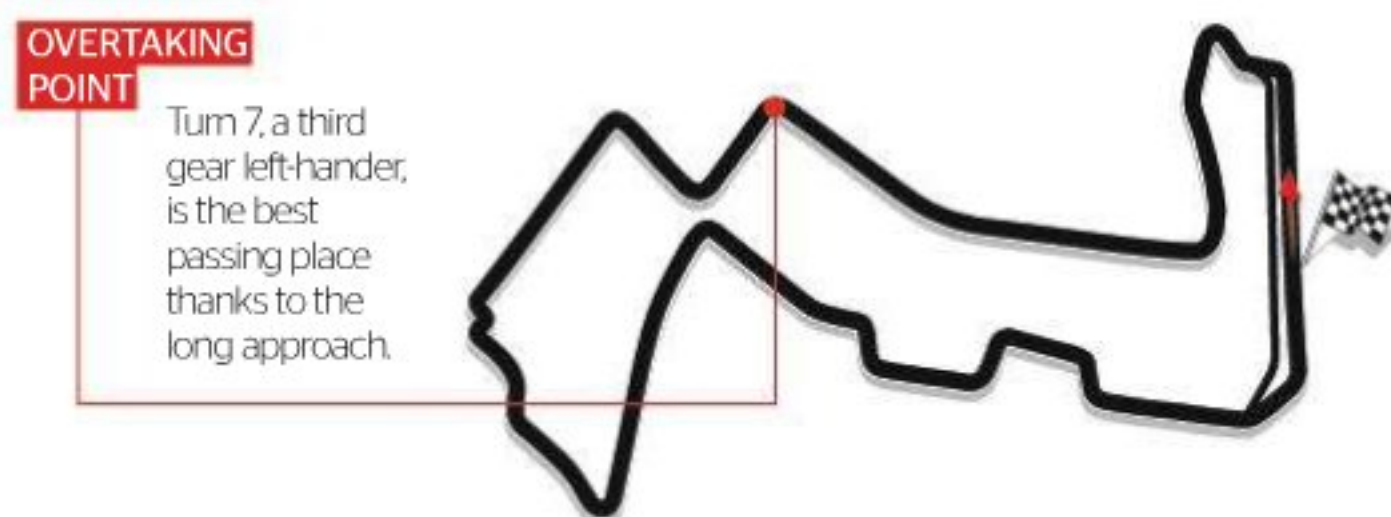


**2011 WINNER** Sebastian Vettel  
**2011 POLESITTER** Sebastian Vettel, 1m22.275s  
**LAP RECORD** Rubens Barrichello, 1m21.046s (2004)  
**UK START TIME** 1300

The Formula 1 calendar wouldn't look right without a trip to Italy for the flat-out blasts through the trees every September. In recent years the once no-brainer decision of tiny downforce levels has been thrown up in the air, with Jenson Button nearly taking victory with what was described as a 'barn-door' rear wing in 2010, and Sebastian Vettel proving in '11 that Red Bull could overcome its supposed Achilles' Heel and conquer the fastest track on the calendar by being quick in the right places. Overtaking should be easy on this layout, but it rarely is.

## SINGAPORE Marina Bay, September 23

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●



**2011 WINNER** Sebastian Vettel  
**2011 POLESITTER** Sebastian Vettel, 1m44.381s  
**LAP RECORD** Kimi Raikkonen, 1m45.599s (2008)  
**UK START TIME** 1300



When Singapore hosted the first floodlit grand prix in 2008, it was hailed as an instant classic of the grand prix calendar. Nothing that has happened since has forced anyone to change that view. Even though overtaking is tough on the twists and turns of the Marina Bay track, it has a tremendous big-race atmosphere whether you're there or watching on television. Bumpy and with a proliferation of slow corners, it's a huge physical test for the drivers courtesy of the challenge of staying on European time, combined with high humidity and a near two-hour race length.

## JAPAN Suzuka, October 7

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●

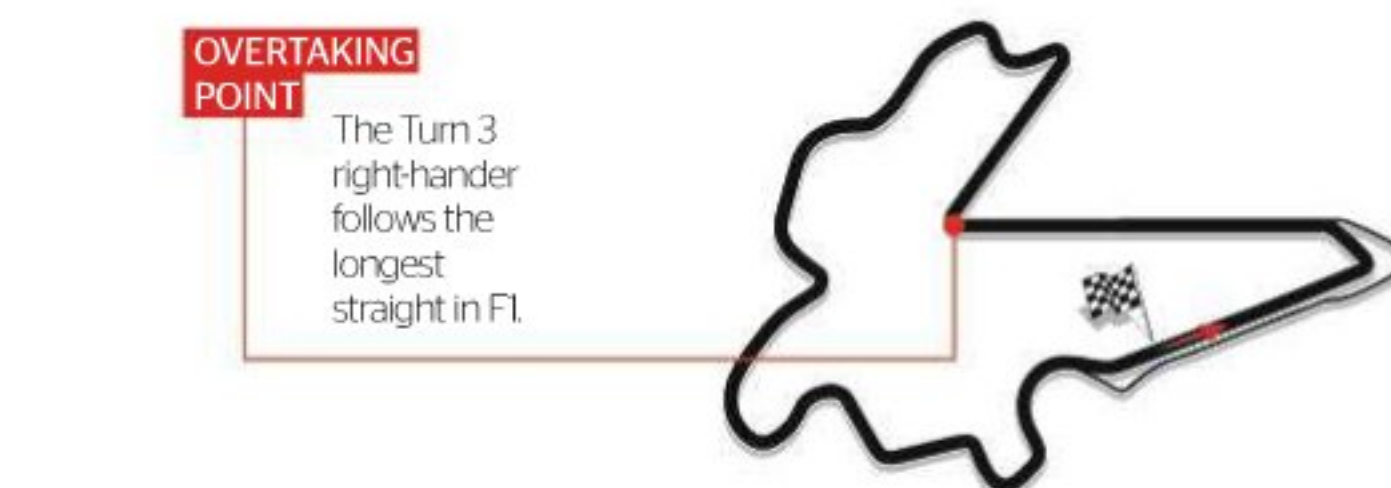


**2011 WINNER** Jenson Button  
**2011 POLESITTER** Sebastian Vettel, 1m30.466s  
**LAP RECORD** Kimi Raikkonen, 1m31.540s (2005)  
**UK START TIME** 0700

Widely hailed as the favourite circuit among drivers, Suzuka first held a world championship race back in 1987, when Nigel Mansell famously crashed out of title contention in practice, and has since produced some classic confrontations. The section from Turns 3-7, dubbed the esses, is one of the most challenging in F1. A rapid blend of fourth and fifth-gear corners, huge amounts of time can be gained or lost here and a small mistake can cost a lot of time. 130R is now straightforward, but the Degners and Spoon Curve more than make up for that.

## KOREA Yeongam, October 14

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●



**2011 WINNER** Sebastian Vettel  
**2011 POLESITTER** Lewis Hamilton, 1m35.820s  
**LAP RECORD** Sebastian Vettel, 1m39.605s (2011)  
**UK START TIME** 0700



The track was completed at half past the eleventh hour ahead of the inaugural Korean Grand Prix in 2010, and when F1 returned there 12 months later it was clear that the place had been locked up and left untouched for the past year. Despite being very rough around the edges, and with some very uneven paving in the paddock, it's a decent track that is a blend of overtaking Tilke-drome (sector 1), Suzuka-esque sweeps (sector 2) and pseudo street circuit (sector 3). It's a reasonably challenging track for the drivers and has produced a couple of interesting races, but this could end up being the track's F1 swansong.



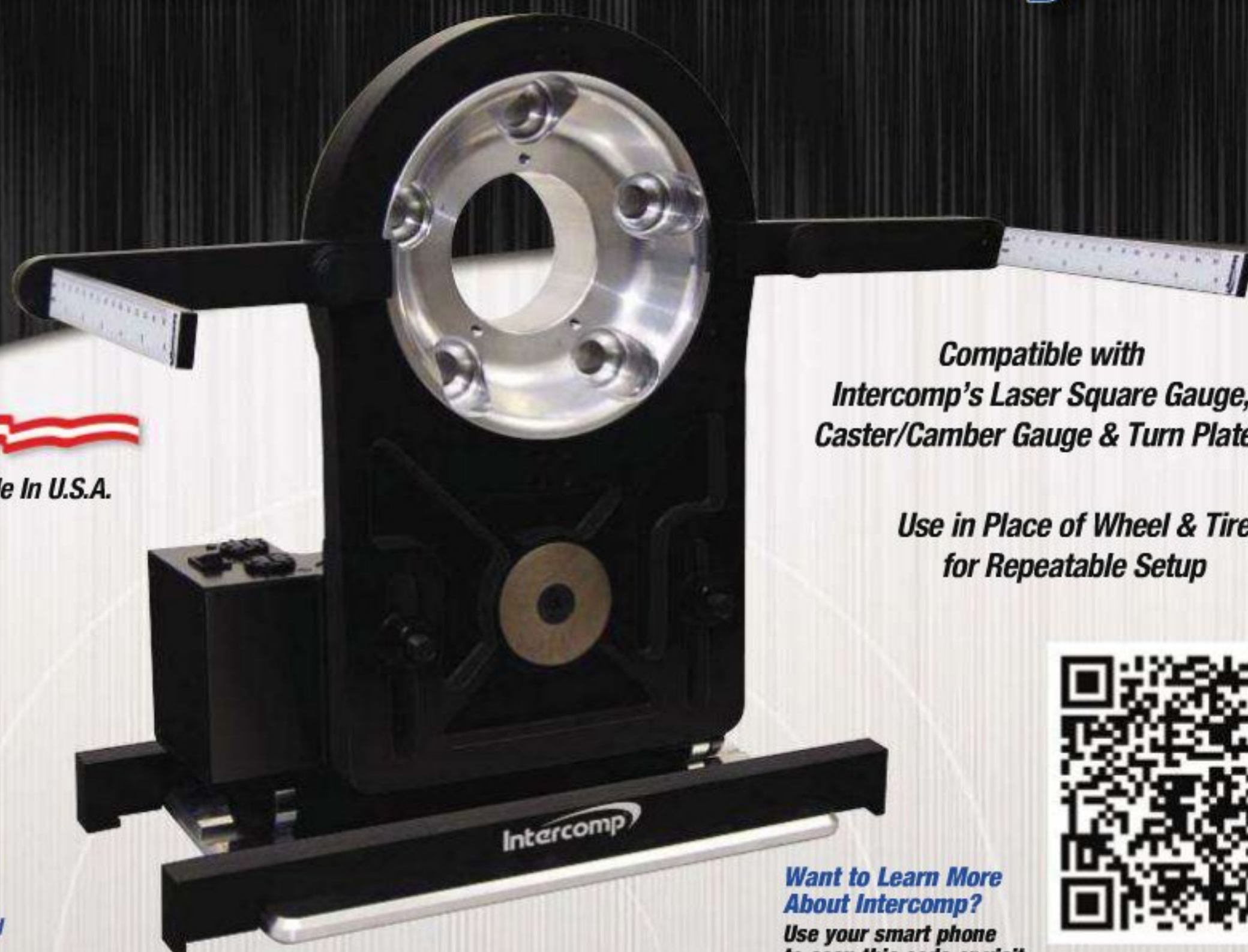
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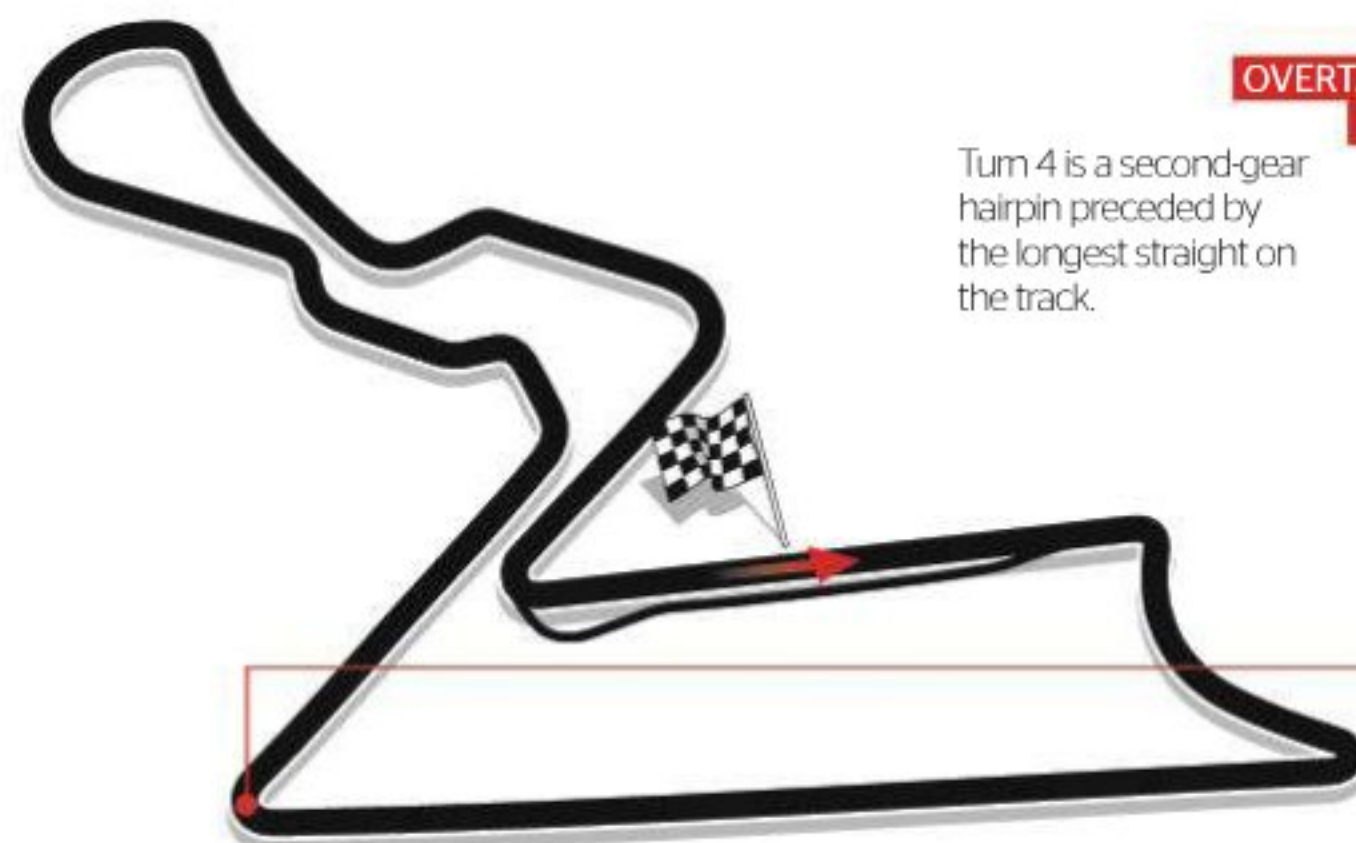
## INDIA Buddh International, October 28

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●

India's first grand prix was hailed as a triumph last year and, given the character of a country that does nothing in a hurry, everyone put up with the incomplete track and iffy paddock services for the first year. While the appearance of sewerage in team kitchens, overland soil pipes and the big hole that appeared in the paddock shortly after the race had finished weren't ideal, the track itself proved to be very popular. Featuring some fast sections, as well as the long and testing Turns 10-11 double, it proved to be a hit with drivers and produced a decent race.



**2011 WINNER** Sebastian Vettel  
**2011 POLESITTER** Sebastian Vettel, 1m24.178s  
**LAP RECORD** Sebastian Vettel, 1m27.249s (2011)  
**UK START TIME** 0930



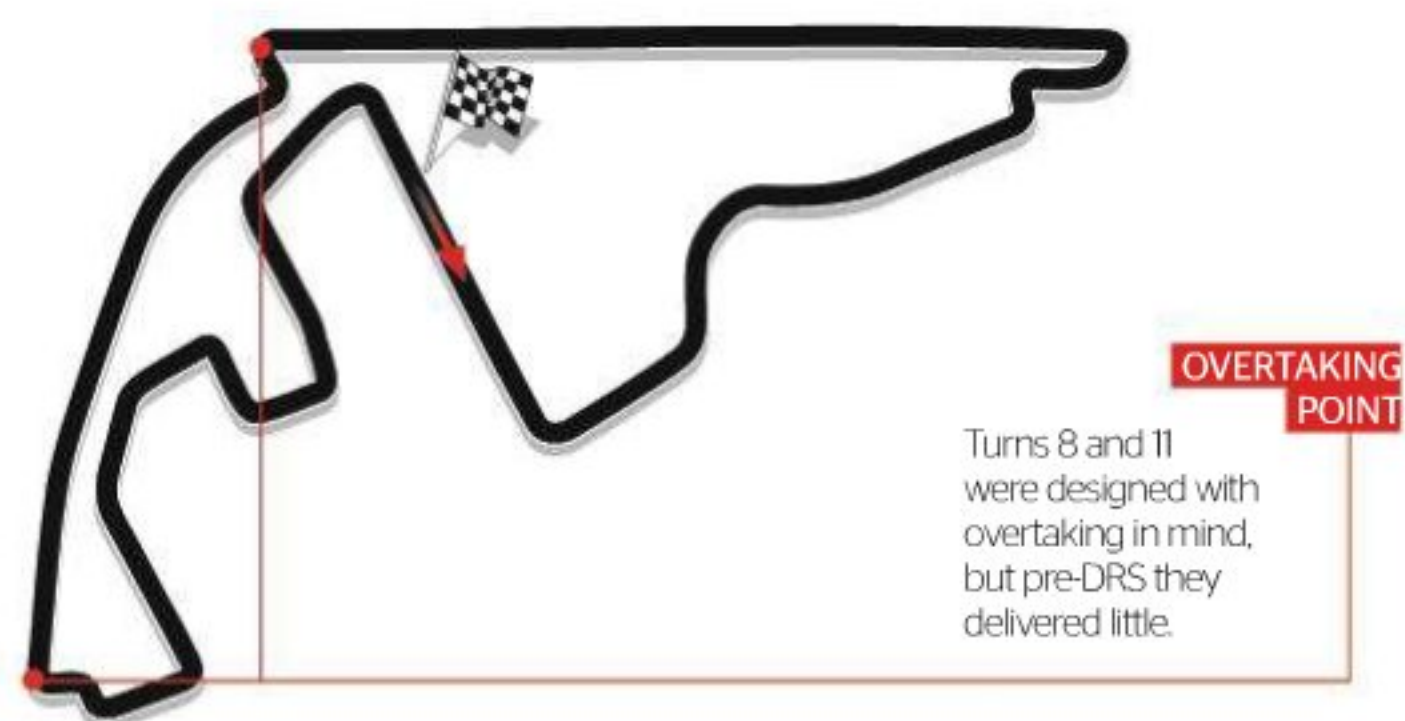
**OVERTAKING POINT**

Turn 4 is a second-gear hairpin preceded by the longest straight on the track.



## ABU DHABI Yas Marina, November 4

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●



**OVERTAKING POINT**

Turns 8 and 11 were designed with overtaking in mind, but pre-DRS they delivered little.



**2011 WINNER** Lewis Hamilton  
**2011 POLESITTER** Sebastian Vettel, 1m38.481s  
**LAP RECORD** Sebastian Vettel, 1m40.279s (2009)  
**UK START TIME** 1300

Kimi Raikkonen summed it up best on his first visit in 2009: "The first few corners are quite good, but the rest of it is shit." As a driver negotiates Turns 1, 2 and 3 he must be expecting the fast, flowing nature of the Abu Dhabi venue to continue from there. He probably even accepts that the two long straights with slow corners at each end deserve their place in hope of spicing up the racing. But from there, it's one meaningless second or third-gear corner after another. Mega facilities and starting the race at dusk often paper over these cracks.

## BRAZIL Interlagos, November 25

Full throttle ●●●●● Braking ●●●●● Downforce ●●●●● Tyre wear ●●●●●

**OVERTAKING POINT**

The Senna S is made for overtaking, with a good exit from Juncao (Turn 12) key to any move.



**2011 WINNER** Mark Webber  
**2011 POLESITTER** Sebastian Vettel, 1m11.918s  
**LAP RECORD** Juan Pablo Montoya, 1m11.473s (2004)  
**UK START TIME** 1600



Interlagos has the most cramped paddock outside Monaco, and crumbling facilities. But it more than makes up for that with the most enthusiastic crowd of the season (forget the tifosi, the Paulistas are the real deal) and a great track. The first sector is ideal for overtaking, the tight-and-twisty second sector is a good test of slow-corner poise, while the final sector features a couple of testing medium-speed turns as well as the long run up the hill to start/finish. Interlagos always produces drama and, with the threat of rain ever-present, produces races that you can't take your eye off for one moment.



# Austin: America's F1 Ambassador



There have been hiccups along the way, but the latest US Grand Prix venue is now back on track, says *ADAM COOPER*

**T**he Circuit of the Americas website features a handy day-by-day countdown to the first US GP in Austin, and it also carries the telling slogan "November will be here faster than you think".

Although that message is aimed at fans, it could just as easily be directed to the management and staff of COTA. Those are the guys who have to turn what is now a construction site into a fully functioning grand prix venue - and not by November, but by August 18, the official deadline for Charlie Whiting's 90-day FIA inspection.

Nobody is more aware of the time pressures than COTA president Steve Sexton. Drafted in just over a year ago, the former boss of the legendary Churchill Downs horse racing venue

has had to steer the project through some choppy waters.

Sexton has had to deal with hurdles such as local politics and the doubts that clouded the whole project when Bernie Ecclestone cancelled the original contract. That happened after event founder Tavo Hellmund failed to fulfil his obligations, but following some debate - conducted partly in the media - a new deal was successfully negotiated between Bernie and the investors behind the project. Hellmund no longer has any direct involvement.

While Sexton's focus was more on getting the venue ready than negotiations with Bernie, the uncertainty didn't make his job any easier. Everything has now been resolved, and it's full steam ahead.

"We have over 500 construction



Sexton: we're on schedule

workers on the site," says Sexton. "We're on schedule in terms of completing the elements necessary for the FIA inspection and to conduct the race.

"The paddock building is almost complete in terms of the frame and the concrete foundation. The infrastructure for the grandstand is in the ground, and that will go vertical this week. The medical building has gone vertical, the media centre ceiling will be going on in the next few weeks - the walls are up on it. We anticipate the concrete pour in the paddock in the next month.

"There has been considerable progress on the track. You can see the outline in aerial views - there's a reddish coloured subgrade below the asphalt. Our circuit has unique topography so it's not like putting in a street course or a flat course,





Will this look like a grand prix venue by August?

**USA**, Austin, November 18



Circuit length	3.427 miles
Number of laps	56
UK race start time	1900



Coulthard tried layout for Red Bull

so it has its challenges. But the team is well engaged and understands the timeframe of the task, and they're doing great."

The last two new F1 venues in Korea and India were both finished very late, and the FIA allowed the promoters some leeway by delaying the final inspections. Sexton is adamant that COTA is not relying on a repeat of that generosity.

"Our target is still August 18, 90 days out. We understand that goalposts have been moved [before], but we're working as if they won't be."

Austin is, of course, a Hermann Tilke project, and five of the German's staff are on site. Their collective experience of building grand prix venues is invaluable.

"It's very important," Sexton concedes. "Tilke not only has a solid working relationship with F1, but his group is also

very experienced and understands the needs of the teams and the needs of the FIA. Their expertise and strive for perfection has been really good for our construction team. They don't accept second best, so they've been a true asset to the project."

Completing the venue on time is one thing, but making it work commercially is another. COTA has to get a full house come November.

"About a month ago we announced the opportunity to buy a seat licence, which is a 'right to buy' a grandstand or public ticket. We've had strong interest in that opportunity. Our ticket sales for the event start in late May/early June, and we're gearing up for that."

"We have about 105,000 people on our database who have enquired about ticket and event information, so we're communicating with them on a regular basis. They'll be the first to know relative to ticket purchases and availability."

"We're planning for 120,000 on that Sunday - we'll be prepared for very large crowds. We don't know exactly what to expect, but the interest has been considerable. We're very hopeful that sales will take off, but until we get into the sales process in the summer we really won't know."

There are plenty of marketing ideas in hand, including a push into Mexico to attract fans of Sauber racer Sergio Perez - last week the venue's website became available in Spanish.

The on/off saga clearly didn't help the process of building momentum in circuit/infrastructure construction and ticket sales, but that's now all history. Sexton is happy with the way things were resolved with Ecclestone.

"He's a very astute businessman, he has an extremely popular worldwide brand, and he negotiates accordingly. It was a business transaction and he handled it in a very professional manner. We were able to reach an agreement and now we can all go forward and hopefully reintroduce F1 to the United States in an extremely positive manner." ❦

## POOR RELATIONS ACROSS THE POND

Since the end of the successful events at Watkins Glen (last used in 1980) and Long Beach (1983) there have been five ultimately unsuccessful attempts to establish F1 in America.



### LAS VEGAS (1981-82)

Built in the car park of Caesar's Palace, the featureless Vegas track was a very poor substitute for Watkins Glen, which it replaced. The city had obvious attractions, but the GP barely raised a ripple locally.



### DETROIT (1982-88)

An F1 race in Motor City seemed like a good idea, and it was more successful than other ventures. The city itself failed to capture the imagination of visitors and, as at Long Beach, F1 was replaced by CART.



### DALLAS (1984)

The fact that the Dallas GP was held only once says everything. In the intense July heat the track crumbled and a near farcical race resulted.



### PHOENIX (1989-91)

The extremely dull city had little to offer visitors but the bland-looking track did at least provide some entertaining races - to sparse crowds - during its three-year existence.



### INDIANAPOLIS (2000-07)

Taking F1 to the home of US motorsport was an inspired move, and by creating a road course IMS attempted to differentiate the race from its other big events. But F1 was always going to be overshadowed by the 500 - and the 2005 tyre debacle didn't help!



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1 59

2 61

3 63

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## INTERNATIONAL RACES & RESULTS

### NASCAR SPRINT CUP

Phoenix (USA), Rd 2/36

## QUICK RESULTS

- Winner **Denny Hamlin**
- Pole **Mark Martin**
- Most laps led **Kevin Harvick**
- Points leader **Denny Hamlin**

## RACE RATING

★★★★☆

Outcome decided by fuel mileage, not outright pace

## REPORTS

### WORLD OF SPORT



Hamlin pulls clear of Keselowski

NASCAR SPRINT CUP PHOENIX (USA), MARCH 4, RD 2/36

# Hamlin sees them off as Harvick runs dry

WITH FIVE MILES OF LAST weekend's Phoenix race to run, leader Denny Hamlin came up to lap the Penske Dodge of AJ Allmendinger. There was brief hesitation as he tucked his Joe Gibbs Racing Toyota under the

bright-yellow backmarker, but that was enough to allow the pursuing Kevin Harvick onto his tail.

Harvick's Richard Childress Racing Chevrolet had been the class of the field. In a race that featured

a record number of leaders on the one-mile oval, he'd been the most consistent driver. But he was running out of time to deny Hamlin.

He was harder on his brakes and slid the car more on the exits as he closed but, just when Hamlin's resolve was about to be tested, Harvick's Impala slowed, out of fuel.

Hamlin was clear and claimed his first win since new crew chief Darian Grubb — the man who oversaw Tony Stewart's title charge in 2011 — joined JGR.

Such was the lead pair's advantage over the rest, Harvick was able to coast over the line in second. Ford's Greg Biffle took his second top-three finish in as many races to sit right behind Hamlin in the points table for Roush Fenway

Racing, while Jimmie Johnson made up for his terrible Daytona 500 with a solid run to fourth.

Polesitter Mark Martin (Michael Waltrip Toyota) led the first lap, but dropped back. He finished ninth, helped by Roush's Carl Edwards running dry.

● Connell Sanders Jr

## RESULTS

**1 Denny Hamlin (Toyota Camry)**, 312 laps in 2h50m35s; 2 Kevin Harvick (Chevrolet Impala), +7.315s; 3 Greg Biffle (Ford Fusion); 4 Jimmie Johnson (Chevy); 5 Brad Keselowski (Dodge Charger); 6 Kyle Busch (Toyota); 7 Martin Truex Jr (Toyota); 8 Jeff Gordon (Chevy); 9 Mark Martin (Toyota); 10 Joey Logano (Toyota). **Points** 1 Hamlin, 89; 2 Biffle, 83; 3 Harvick, 81; 4 Matt Kenseth, 79; 5 Dale Earnhardt Jr, 72; 6 Truex, 71; 7 Martin, 71; 8 Logano, 70; 9 Kyle Busch, 66; 10 Carl Edwards, 63.

V8 SUPERCARS ADELAIDE (AUS), MARCH 3-4, RD 1/15

# Davison fights back after last-lap defeat

SURELY EVEN THE MOST ARDENT of Ford fans would have applauded the winners of both V8 Supercar races at the Adelaide 500.

Will Davison took his first win since switching to Ford Performance Racing in Sunday's 250-kilometre race, but the man who ran him down on Saturday, Jamie Whincup, brought tears to many an eye. From a seemingly impossible position, the Triple 8 Holden man chased down his best friend, grabbed the lead on the last lap and took his 53rd V8 win — six days after his father David had lost his battle with cancer.

Strategy played a part in

both races. Davison conserved fuel in race one after pitting twice, while three-stopping Whincup was forced into the role of chaser. On Sunday, with no safety cars during 78 laps, the Fords seemed to have a slight edge on fuel mileage, Davison taking the points lead after heading Mark Winterbottom in an FPR one-two ahead of Holden Racing Team's Garth Tander, Whincup and his team-mate, Craig Lowndes.

James Courtney looks to have a lot of work in front of him. The HRT man crashed on Saturday and broke a tailshaft on Sunday after an overnight rebuild.



Davison leads Lowndes in race two

Meanwhile, Jonathon Webb and Greg Murphy tangled at Turn 12 in Sunday qualifying and missed the race.

● Phil Branagan

## RESULTS

**Race 1** 1 Jamie Whincup (Holden Commodore VE II), 78 laps in 1h56m34.2914s; 2 Will Davison (Ford Falcon FG), +5.5249s; 3 Garth Tander

(Holden); 4 Craig Lowndes (Holden); 5 Lee Holdsworth (Ford); 6 Fabian Coulthard (Holden). **Race 2**

**1 Davison**, 78 laps in 1h48m31.4231s; 2 Mark Winterbottom (Ford), +4.8453s; 3 Tander; 4 Whincup; 5 Lowndes; 6 Shane van Gisbergen (Ford). **Points** 1 Davison, 288; 2 Whincup, 270; 3 Tander, 258; 4 Winterbottom, 222; 5 Lowndes, 206; 6 Holdsworth, 201.

## IN BRIEF

Sadler triumphed



## NASCAR NATIONWIDE

Elliott Sadler took his first series win since 1998 at Phoenix, taking the lead with 26 laps to go and beating Brad Keselowski. Sadler's RCR Chevy team-mate Kevin Harvick dominated, but fell back due to his strategy late on.

## V8 DEVELOPMENT SERIES

Ford Performance Racing's teenaged sensation Chaz Mostert won both races at Adelaide, with Scott McLaughlin and Nick Percat trading seconds and thirds. Ex-British F3 racer Scott Pye was fifth and seventh on his series debut in a Triple 8 Holden.

## EURO F3 OPEN WINTER CUP

Lebanese F3 veteran Noel Jammal and Swede Mans Grenhagen (on his category debut) were the winners at Paul Ricard. Briton Alex Lynn showed well in his maiden F3 races, bagging second and third spots with Team West-Tec.

## AUSTRALIAN F3

Britain's James Winslow was called up only four days before the meeting but took a triple win in an R-Tek Dallara-Mercedes. Mat Sofi and Chris Gilmour were second and third each time.

More wins for Winslow



Castrol **EDGE** Rankings

CURRENT STANDINGS

- |   |                  |    |        |
|---|------------------|----|--------|
| 1 | Sebastian Vettel | <> | 31,442 |
| 2 | Mark Webber      | <> | 21,777 |
| 3 | Jenson Button    | <> | 19,745 |
| 4 | Lewis Hamilton   | <> | 19,305 |
| 5 | Fernando Alonso  | <> | 18,663 |

## Ranking the world's best drivers

### WHAT HAPPENED THIS WEEK

Matt Kenseth moves to 12th — an all-time high — following his victory in the rain-delayed Daytona 500. In the same Rankings week Denny Hamlin (25) won at Phoenix, boosting him two spots. Joey Logano leaps 12 spots to 41st as a result of top-10 finishes in both races.

To see the full list, visit [castroldriverrankings.com](http://castroldriverrankings.com)



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To participate in the build of Formula One cars, often working across multiple functions. This will involve the assembly of new car parts and sub assemblies, servicing car components and systems, rig testing of car parts and assemblies and providing support as required which may be at races, test, demos or other such events.

For further information on the above roles and details of how to apply, please visit [www.mclaren-jobs.com](http://www.mclaren-jobs.com)

The closing date for these roles is Monday 19th March 2012



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- sound mechanical / technical knowledge and a scientific approach combined with hand-on attitude?
- experience in manufacturing process in composite and metal environments?
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- strong stress analysis skills in composite and metal environments?

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## Inspectors – various shifts

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**Closing date: 23 March 2012.**





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You will be responsible for the development of our test and calibration rigs for sensors, actuators, etc and for supporting the instrumentation and data acquisition requirements of the team. You should have a good degree in a relevant engineering discipline, have proven experience in a similar role and be a practical engineer who is prepared to take a hands-on approach. The successful candidate will have extensive experience in the specification, design, manufacture and programming (using LabVIEW) of data acquisition systems and automated test and calibration equipment.

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You will be involved in the development & track support of the electronic control systems used by the team & their associated support tools. This will include developing software for these systems as well as carrying out system testing & calibration. At the track you will be involved in configuring the systems, monitoring their operation, optimising their set up and carrying out any necessary fault diagnosis. The successful candidate will have a strong academic background with a good degree in a relevant engineering discipline. They will also have significant experience in the development of software & support tools for real-time control, simulation & hardware-in-the-loop systems using C/C#/Simulink/dSPACE, etc.

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## AUTOSPORT SAYS...

**BEN ANDERSON**  
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### WHEN NEWS BROKE THAT CROFT

had lost its battle to overturn a High Court ruling in 2008 that it should pay damages to local residents who complained about noise, British motorsport felt a collective shudder.

There is no guarantee that the recent ruling of London's Court of Appeal to overturn a decision to award damages to a couple that moved into a house near an established Norfolk motocross track, then complained about the noise, could have helped save Croft from a debilitating legal bill, but it surely couldn't have hurt had it come sooner.

Specific family feuding aside, the additional problem Croft faced was a fluctuation in its use over time, which allowed the litigants to argue that an increase in noise from a more recent rise in tests and track days had created a nuisance.

But there's every chance that the recent judgment in the case of the Mildenhall motocross track could have bolstered Croft's defence - perhaps by allowing it to call on this case law when arguing that it had a right to make noise because it had operated to some significant degree in its current form for many years, and thus could say its activities (and the noise associated with them) were "an established part of the character of the locality".

Whatever, the point is that the Court has this time sided with a long-established motorsport venue, run responsibly, lawfully and within the terms of its planning agreement, rather than a couple of residents who moved into a location and then decided the surrounding community should change to suit them.

Motorsport isn't everyone's cup of tea - it never will be - and it will need to face far greater challenges than this if it is to secure its long-term future. But at its core, this seems like a significant victory for common sense over NIMBYism. Whether you're a fan of motorsport or not, that's something to be celebrated.

### Extra contact details

**Kevin Turner**, features editor  
kevin.turner@haymarket.com

## Legal boost for circuit noise

Court of Appeal ruling on motocross venue nuisance claim may set precedent

» **BRITISH RACE CIRCUITS** have received a boost in their on-going battle with noise nuisance thanks to a "significant" judgment in London's Court of Appeal at the end of last month.

Three judges recently overturned the decision to award £20,000 in damages to a Norfolk couple, who claimed noise nuisance from the nearby Mildenhall Stadium and motocross track near Bury St Edmunds was ruining their lives.

The judges ruled that the noise of motorsports emanating from the track and stadium were "an established part of the character of the locality" and did not constitute a nuisance in law.

The judgment may set a significant precedent for other motorsport venues when facing legal challenges over noise.

### THE LEGAL VIEW

North Yorkshire circuit Croft suffered badly when local residents were awarded damages for noise nuisance in 2009, sparking fears it would lead to raft of complaints against other venues.

Leading motorsports commentator and qualified lawyer Ian Titchmarsh is not certain the Mildenhall judgment would have changed the outcome of the Croft case, had it come beforehand, but believes this latest ruling may help circuits that come up against noise litigation in future.

Titchmarsh said: "I see this as a very significant, rather than a landmark case, in that it does not change the law. What it does is demonstrate that race circuits and other motorsports venues will not be seen by the courts as an anti-social activity to which local residents can readily object and always be supported by the courts."

"Circuits that have been operating in much the same way for many years, and within the conditions of their planning permissions, should be reasonably safe from attack by local NIMBYs [Not In My Back Yard]. Hopefully, the outcome of the Mildenhall case will deter future NIMBYs who will have to have very deep pockets to risk the considerable costs of losing."

### COMMON SENSE PREVAILS

The UK motorsport governing body, the Motor Sports Association, welcomed the Appeal Court's judgment as "a triumph for common sense".

MSA chief executive Colin Hilton said: "It does not seem right that a long-standing motorsport facility that is operating within the terms of its planning permission can be adversely affected by the complaints of someone who moves into the area and then objects to the noise."

"On the other hand, motorsport does not wish to be a bad neighbour and the sport and the venues will continue to take proactive steps to ensure that noise levels

are reduced as far as possible. Sadly, this judgment has come too late for Croft, but it should provide a very important precedent for future cases."

Jonathan Palmer, whose MotorSport Vision concern operates four race circuits in the UK, also welcomed the judgment.

"It is right for the Court to recognise that long-standing motorsport use, often spanning many decades, together with the clear benefits generated for the local communities and economy, should not be killed off by the complaints of a tiny minority who will never be prepared to accept that some noise from their nearby race circuit forms an intrinsic part of the environment they live in."

Hilton says ruling is "triumph for common sense"







# Motorbase and Caine to British GT

Experienced GT racer and BTCC team to launch joint assault in new Porsche 911 GT3 R

Motorbase last raced in British GT in 2006

**LEADING TOURING CAR** and sportscar squad Motorbase Performance will contest the British GT Championship this year with Michael Caine as part of its line-up.

Motorbase pulled out of the Porsche Carrera Cup last month, but has now confirmed it will run a new 911 GT3 R in British GT.

Former Carrera Cup runner-up Caine last contested the series in 2005 and

will share with Swiss lollipop magnate Daniele Perfetti, who was 18th in the Carrera Cup last season with Motorbase.

Former Le Mans and BTCC racer Caine, who hopes to test the car for the first time next week, said: "It'll be different to the Carrera Cup car. That's one of the reasons for doing it – it's a new challenge."

"I think British GT want you to come racing – they try to help everyone and it's going back to something I know."

"It's a great opportunity to drive with Daniele. Working with a co-driver brings a bit more to the challenge and we're going there to win races."

Team boss David Bartrum, who last ran cars in British GT in 2006, added: "I've always loved GTs and I think GT3 is on the up. Some of the machines are spectacular and we want to be part of it."

He believes Motorbase should be competitive with the likes of established

Porsche outfit Trackspeed. "Michael's got the experience and I think the car will suit Daniele – the combo is good," said Bartrum. "We've won in everything we've been in and that's our aim."

## MICHAEL CAINE'S GT PEDIGREE

Porsche Carrera Cup wins	14
British GT wins	3
TV Tuscan Challenge wins	6

## British GT

# Bell, Bateman in Audi GT assault

## BRITISH GT RACE WINNERS MATT

Bell and Charles Bateman will pair up for a return to the category this season in a United Autosports Audi R8 LMS.

Bell, 22, won the Snetterton round and finished sixth in British GT last year sharing a UA Audi R8 with Mike Guasch.

He will dovetail his return to British GT with a campaign in the Blancpain Endurance Series with UA – sharing a McLaren MP4-12C with former Le Mans winner David Brabham and ex-British F3 champion Alvaro Parente.

Bell said: "I'm very excited to be back in British GT for a second year. It's the first time I've done a series two years running with all the same circuits."

"We had some good results last year

but missed out on the championship, so I'm hoping to rectify that. In Charles I think I've got the best possible team-mate to do that with."

Former Porsche Carrera Cup racer Bateman, 25, has jumped ship from Scuderia Vittoria, where he took two wins and finished third in the points last season, sharing a Ferrari 458 Italia with

historic F5000 ace Michael Lyons.

Bateman said: "I think the Audi is the GT3 car to be driving this year. Matt knows it inside out and that should help me get up to speed quickly."

Team boss Richard Dean added: "British GT has professional teams and competitive drivers. This line-up gives us every chance to go for the title."



UA Audi was on the pace last year

## MSV F3 Cup

# Ford winner to race in MSV F3

## EX-BRITISH FORMULA FORD

race winner Linton Stuteley will contest selected MSV F3 Cup races this season.

The Enigma Motorsport boss will drive an ex-Zsolt Baumgartner Dallara F399 and plans to test it at Snetterton this week.

"I drove it at Donington Park in December," said Stuteley. "I think my times were competitive and that was before the car was rebuilt, so it should be even better now."

Former British GT4 champion Jamie Stanley will also join the F3 Cup field this season, driving a Lanar Racing-run machine.

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Formula Renault BARC

## Fletcher, Epps and Tiffin latest to join growing Renault BARC field

FORMULA JEDI RACE WINNER

James Fletcher will graduate to Formula Renault BARC full-time this season with MGR Motorsport.

Fletcher won four races and finished runner-up to Richard Mitcham in last year's FJedi championship, before joining up with MGR for the Finals Series, in which he took two class victories and finished third in the BARC points table.

He will rejoin Mark Godwin's and Kelvin Burt's squad for an assault on the 2011 FR BARC title, alongside Scot David Wagner and former British Junior karting frontrunner Jake Dalton.

Matt Mason won 2011 FR BARC finale for MGR



Meanwhile, rival squad JWA has recruited ex-Formula Vee racers Michael Epps and Matt Tiffin for an expanded two-car attack in FR BARC.

Epps finished second in Formula Vee last season with two race wins, while Tiffin was 18th in the standings but scored two poles at Pembrey.

The pair tested for their new team - which helped Tom Walker to 17th in FR BARC last year and will also run a Porsche 997 RSR in the GTE Am section of the World Endurance Championship this year - at Rockingham last week.

Reigning Ginetta Junior champion Seb Morris has also confirmed his

switch to single-seaters as part of Fortec Motorsport's FR BARC line-up. He will also contest the UK Cup within Formula Renault UK and test for the squad's Eurocup and F3 teams.

Porsche GT3 Cup

## Birch makes Porsche GT switch

SINGLE-SEATER RACER

James Birch will contest the Porsche GT3 Cup Challenge this season with IN2 Racing.

Birch, 22, who won the European Formula Vee title in 2009 before racing in FR BARC and Radicals, hopes to use the now manufacturer-backed series as a springboard into the 2013 Carrera Cup GB.

Birch said: "The support that Porsche is putting behind the GT3 Cup Challenge this year makes it a great

way to make the move to sportscars.

"Hopefully, it will be a logical step into the Carrera Cup GB and then GT racing in the future. It will be the first time I

have raced with a roof over my head but I'm sure I will quickly adapt to the new environment."

IN2 boss Nick Dudfield said the team is hoping to run a second car.



Birch will make switch from single-seaters

British GT

## Christodoulou to WFR in GT attack

BRITISH FORMULA 3 RACE

winner Riki Christodoulou will race in British GT this season with former GT4 champion squad Team WFR.

Christodoulou, 23, who has not competed regularly since his second

British F3 campaign ran dry of funds in 2011, will join Ginetta G50 Cup graduate Jody Fannin and reigning SPEED EuroSeries champions Warren Hughes and Jody Firth at the team.

WFR will run the latest Ginetta G55 in the GT3 class and a G50 in GT4, but has yet to decide its driver pairings.

WFR managing director Myles Schofield said: "We've taken our time to find the drivers that we think will develop the two cars into winners and give us our best chance of success."

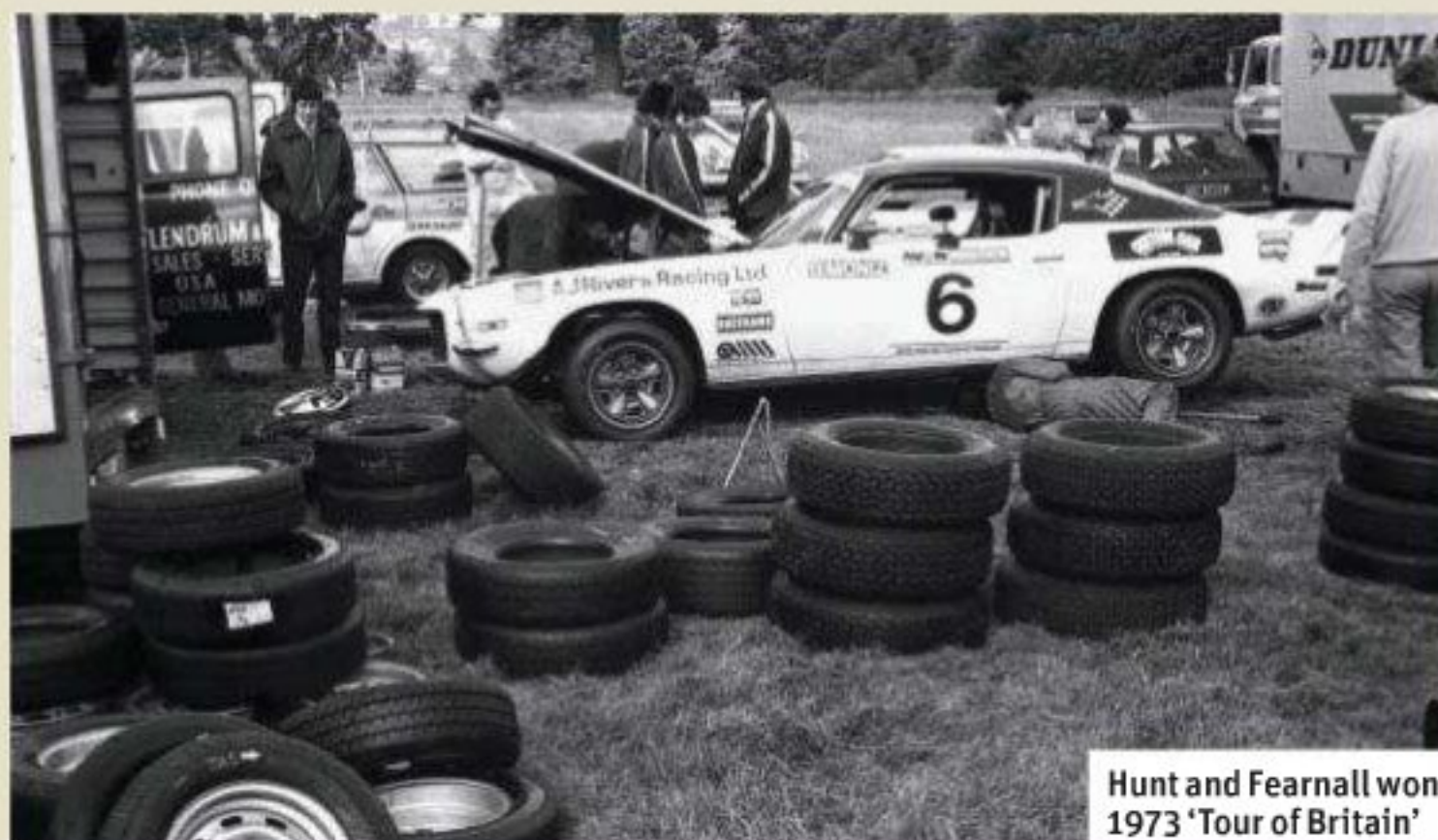


'Christo' raced F3 for part of '11

MARCUS PYE

## HUMBLE PYE

The voice of club motor racing



Hunt and Fearnall won 1973 'Tour of Britain'

Robert Fearnall, who died last Friday, was a lifelong scholar of - and friend to - motor racing. His influences as journalist, press officer and, later, management professional at Donington Park helped shape the sport, perhaps even define it, for generations of fellow enthusiasts. Myself among them.

Well I recall as a teenager devouring Fearnall's reports of race meetings (AUTOSPORT secreted under my desk on Thursday mornings, when French lessons assumed lesser importance) and particularly tucking into his detailed and incisive seasonal reviews. I look back still at his assessment of everything from club racing to Formula 5000 and smile.

While all was by no means rosy, we were privileged to witness an unparalleled variety of classes in the early 1970s. And the broadest spectrum of racecar manufacturers, many now long extinct without epitaph outside the specialist periodicals. It was that arena in which he thrived as a writer.

His understanding of the needs of scribes on events found widespread approval when Robert moved to Silverstone to head its press office. His easy manner and ever-helpful attitude forged strong relationships with dailies, the racing titles and local rags alike, ensuring the column inches fed fans and kept

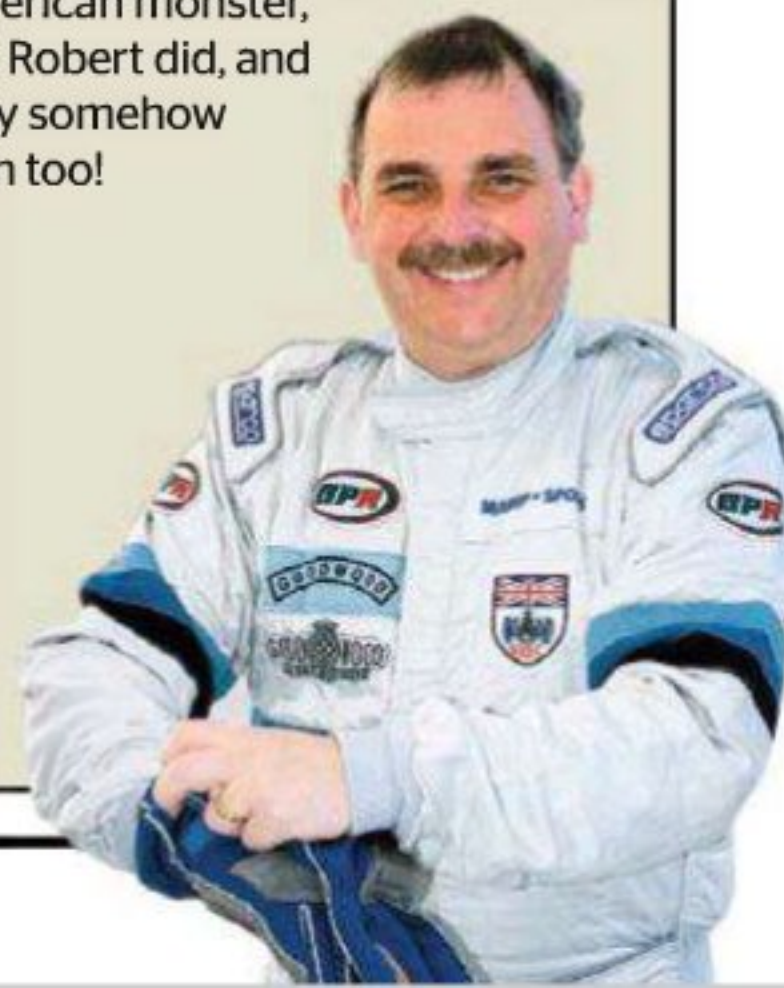
them coming through the gates.

Switching to Donington Park in 1979, Fearnall changed up a gear to become a promoter in the real sense of the word. Backed to the hilt by circuit owner Tom Wheatcroft, who loved to be different, he developed the circuit's own championships and brought the best Europe could offer to the venue. Who can forget the domestic Special GT series - with its heroes like Mick Hill and Jeff Wilson - or F2, F3 and German Group 5 races there, often eagerly backed by businesses based nearby.

Robert was a principal at Donington for its only Formula 1 Grand Prix in 1993 and countless motorcycle world championship events, yet he also remained true to his roots as a Cheshire lad besotted by two, three and four-wheeled disciplines at entry level. Many times in recent years he appeared in the commentary box where I was working, offering words of wisdom about a place he adored.

Those with longer memories will also remember 'No Fearnall' riding shotgun to F1 hotshoe James Hunt in a Chevrolet Camaro on the '73 Avon Tour of Britain. Few would have enjoyed slithering round special stages in the bucking American monster, but Robert did, and they somehow won too!

Robert Fearnall remained true to his roots, besotted by all racing disciplines at entry level"





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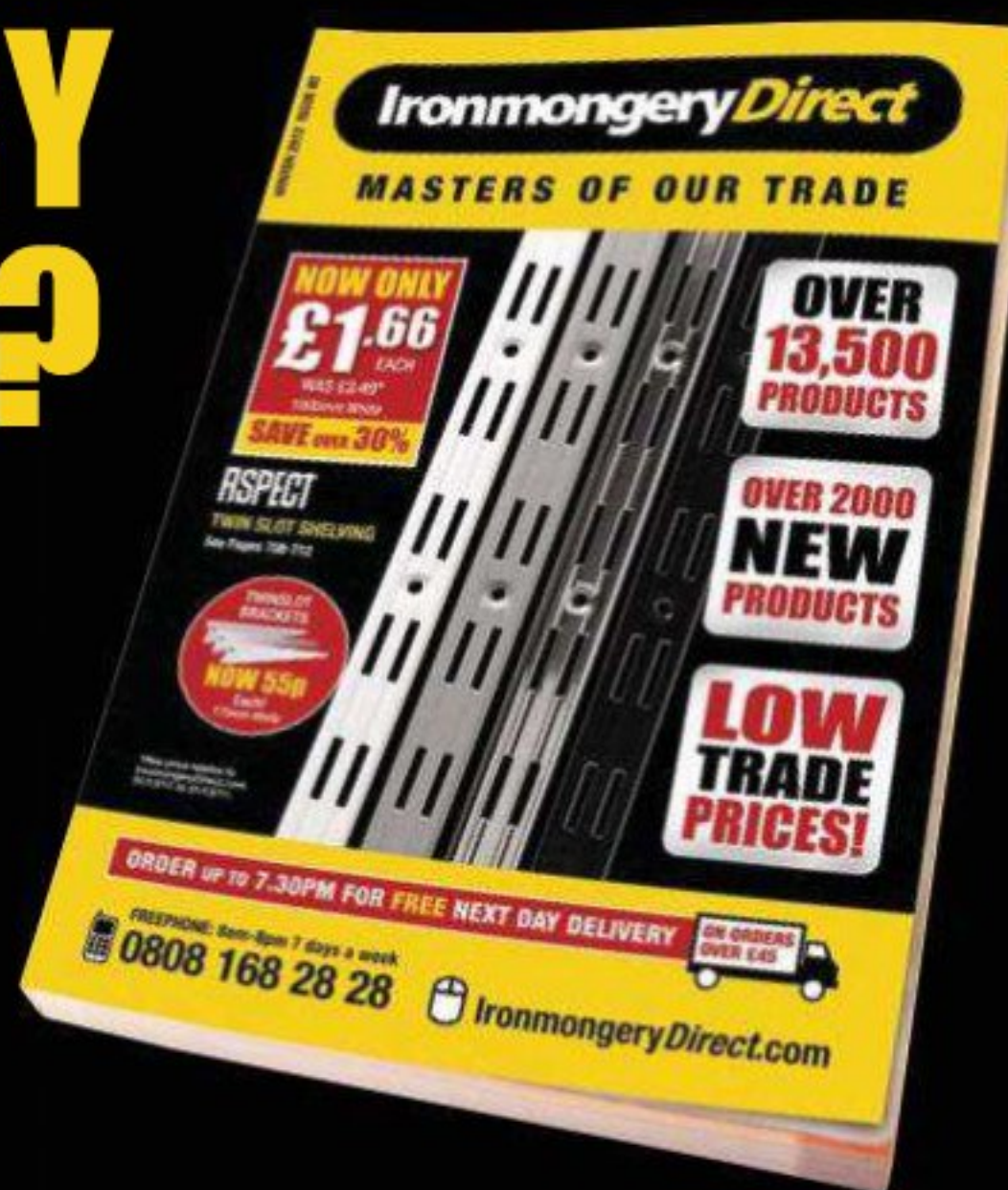
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## IN BRIEF



SV will run G40 for Uruguayan

### SOUTH AMERICAN RACER DIEGO

Guggiari will race for successful Clio Cup and British GT squad Scuderia Vittoria as it expands into the Ginetta G40 Challenge this season. The Uruguayan, 24, finished 19th in last year's Argentinian Formula Metropolitana single-seater series.

### VW CUP RACER ZOE WENHAM WILL

graduate to the GT4 class of the British GT Championship this season. Wenham, 17, who was eighth in the VW rankings last year, will share a Century Motorsport Ginetta G50 with reigning Welsh Sports and Saloons champion Dominic Evans.

### FORMULA RENAULT BARC

frontrunner Archie Hamilton will contest the International GT Open series this season. Hamilton, 20, who finished fifth in FR BARC last season with Fortec Motorsports, will race a GTS-class Porsche 997 GT3 R with Autorlando Sport.

### STEVE HARRIS WILL STEP UP FROM

the RX150 category to tackle the main British Rallycross Championship in a Citroen C4 Supercar this year. Harris, 51, will drive the car used by Liam Doran to win last year's X Games and will be run by former title-winning team Autopoint.

### VW CUP RACE WINNER KIERAN

Griffin will return to the category this season. The 41-year-old elder brother of BTCC racer Liam will again race a SlideSports-run Scirocco.

### PORSCHE CARRERA CUP RACER

Richard Denny will contest the Maserati Trofeo World Series in 2012. The Aussie has spent the past three seasons racing Porsches in the UK with Parr Motorsport and finished third in the Pro-Am2 class of the Carrera Cup GB last year.

### NICK ELLIOTT AND DAVE PRICE

won last Sunday's British Historic Rally opener, the Mid Wales Stages. The crew took victory by 1m15s after 50 miles on the gravel roads of Myherin and Hafren.



Historic win for Elliott/Price



InterSteps champion Dennis was fastest

### Formula Renault UK

## Poor turnout for Renault test

Six cars from two teams make up field for first pre-season run at Donington

### ONLY SIX FORMULA RENAULT UK

drivers ran in the first official pre-season test at Donington Park last week.

Fortec Motorsport's Jake Dennis led the way by 0.190 seconds from Mark Burdett Motorsport's Josh Webster, as drivers from these two squads made up the entire FR UK field. Formula Renault BARC squads MTECH Lite and Scorpio Motorsport both fielded one car each to bolster the total to eight cars.

Manor Competition has already defected to the Eurocup for 2012, while frontrunning squad Atech Reid, which

ran four cars last season, has yet to sign any drivers and skipped the test.

Team boss Anthony Reid said: "We're talking to drivers but no one has signed. It's not looking too healthy and I don't think they can run it with six cars."

TOCA boss Alan Gow says FR UK's position as a BTCC support series "is not in question" for this year, despite the current lack of runners.

"We have been advised by [series promoter] SRO that they expect 12 cars on the grid and that those numbers will build during the year," he said.

"We appreciate it's been a challenging off-season for them - just as it has been for other single-seater categories such as F3 and Formula Ford."

Nine British Formula Ford Championship cars attended a general test at Silverstone last Friday, with more expected. Rival series Formula Renault BARC was due to confirm more than 16 full entries for 2012 by the end of this week, while 14 drivers were set to take part in the first InterSteps test of the season at Rockingham yesterday (Wednesday).

## Robert Fearnall 1952-2012

### FORMER DONINGTON PARK

circuit managing director Robert Fearnall died last week aged 59.

Brought up near Oulton Park, Fearnall's lifelong passion for motorsport led him to carve a career within it, firstly as a young journalist and historian, and later as a management professional.

He first came to prominence as a writer for AUTOSPORT in the early 1970s, rising to deputy editor, before

becoming press officer at Silverstone.

Although he was not a competitor as such, he sat alongside flamboyant James Hunt on the 1973 Tour of Britain. Perhaps fortuitously, Fearnall was barely able to see over the dashboard of the AJ Rivers Chevrolet Camaro as they took victory.

Two years after building tycoon Tom Wheatcroft brought racing back to Donington in May 1977, Fearnall became managing director and

went on to establish a wide range of events at the East Midlands venue.

Although not there continuously, Fearnall was never far from the track and was responsible for promoting car and bike racing at the circuit through the successful Two-Four Sports epoch. He then aided Donington's recent rebirth following Simon Gillett's failed attempt to return F1 to the circuit in 2009-10.

Marcus Pye

## Selwyn Hayward 1933-2012

### SELWYN HAYWARD, WHOSE

Merlyn designs made Colchester Racing Developments one of the most successful racing car manufacturers of the 1960s and early '70s, died last Saturday aged 78.

He succumbed to complications from a rare blood disorder.

Hayward's earliest cars were front-engined Formula Juniors, the first at the end of the 1950s, but it

was the birth of Formula Ford in '67 that really energised his brain. The Mk11/11A series of chassis propelled Emerson Fittipaldi and Jody Scheckter towards F1, and carried Tim Schenken to a prodigious wins record.

Over 150 of the cars, and dozens more of their Mk20 successors, continue to be sought after in historic circles 40 years on.

Marcus Pye

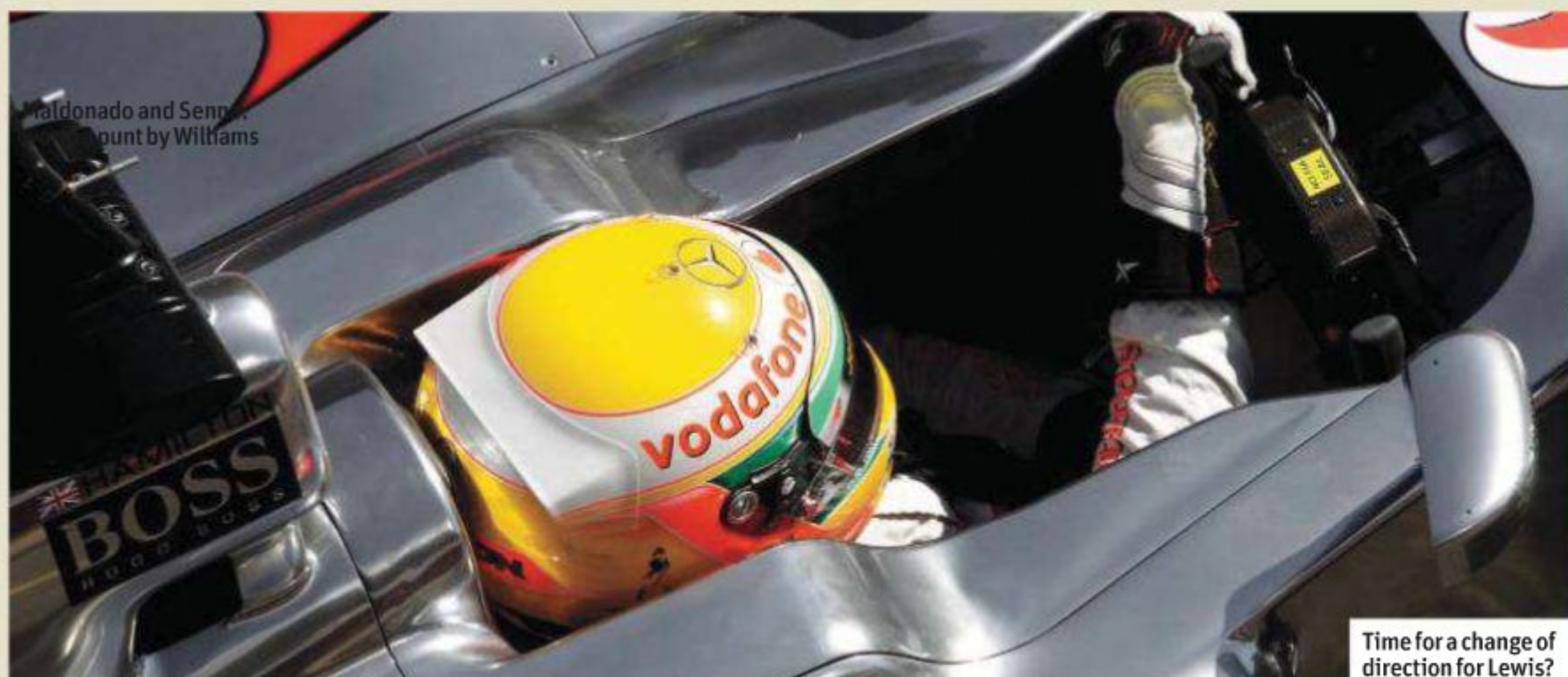


Hayward started with Formula Junior



## YOUR SAY

What you think of the motorsport news of the past week



### Lewis should seek pastures new

I read that Bernie Ecclestone says Lewis Hamilton should move from McLaren if the new season does not result in championship success.

There are precedents where title-winning drivers have failed to find success in a new environment. However, I believe Lewis should use the example of his current team-mate and make a move regardless of the outcome of the year. Jenson Button showed great courage to move to McLaren and has flourished. Lewis is a great driver and it would be great to see him enhance his flagging reputation with a new challenge.

**Adrian King**, Rushden, Northants

AUTOSPORT.COM

### TOP FIVE ON OUR WEBSITE

1. FERRARI, RBR CHANGE TEST PLANS AGAIN
2. RED BULL REVEALS UPDATED RB8
3. McLAREN DOWNPLAYS ENGINE-MAP ISSUES
4. MARUSSIA FORCED TO DELAY CAR LAUNCH
5. GROSJEAN QUICKEST FOR LOTUS ON DAY ONE

AUTOSPORT.COM PLUS

### TOP STORY ONLINE

INSIDE TESTING: BARCELONA TEST BLOG

To read this exclusive feature and many others like it, log on to [autosport.com/plus](http://autosport.com/plus) and choose which package you'd like. A month will cost £5.50, a year £46. Includes access to Forix – the ultimate stats website.

WIN!



### ROAD ANGEL VANTAGE

This week's star letter will receive a Road Angel Vantage – a dedicated safety camera and blackspot locator that displays the legal speed limit of every road you drive, automatically and wirelessly updating its database every few minutes as you drive. For more details on Road Angel visit [www.roadangelgroup.com](http://www.roadangelgroup.com). Please ensure that your full address is included on all correspondence.

### CORRECTIONS AND CLARIFICATIONS

● On p57 of last week's magazine we said that Gabriele Tarquini is in a SUNRED SEAT this year. He's not; it's a Lukoil Racing car.

● Thanks to reader David Rimmer for pointing out that Tony Brooks won four times for Vanwall, not five as claimed in *From the Archive* (February 23, p93). One of those four victories was a shared win with Stirling Moss in the 1957 British GP.

EDITORIAL CONTACT [mail@autosport.com](mailto:mail@autosport.com)

#### Having read Bernie

Ecclestone's comments on the future of the Australian Grand Prix, I can't help but feel the world would be a better place if he just stopped talking.

These barely veiled threats to race organisers now seem to precede almost every event – not only is it boring and predictable, it starts to make a mockery of the sport he is supposedly promoting.

The Aussie GP is a perfect season opener, both in terms of atmosphere and on-track action. I'm sure many F1 fans are, like me, sufficiently

excited about the prospect of the new season that they are more than happy to get up early to watch the race.

We've already seen from Singapore that, on TV, night races look bereft of any recognisable features and I'd rather that fate didn't fall on Albert Park, which is a great-looking circuit.

If Bernie is so desperate to pursue the concept of night races, then the Yas Marina method works better, starting the race in daylight and finishing under the lights.

**Sam Lockyer**  
Surbiton, Surrey

**Yet again the jokers of** the F1 pack have missed pre-season testing.

I will never understand why HRT was given a licence to race by the FIA. This under-resourced team just scrapes through each season by the skin of its teeth. It brings little to the table, except for providing a rolling roadblock at each race.

Had the FIA given the licence to a racing thoroughbred like Prodrive, we would've had a much better set of teams on the grid.

**Duncan Sabiston**  
Didcot, Oxfordshire

**What a brilliant and** educational feature by Mark Hughes (March 1, p30).

As a 46-year-old ex-F3 driver, my best days were long ago, but this opened the door in my brain marked 'Love and Understanding of Racing Cars'.

I wish I'd met Dr Riccardo Ceccarelli – he could have helped my development.

I hope current drivers read this piece and see where they can develop. I live with the frustration of not getting the most out of my racing. Let's hope others avoid that fate.

**Scott Stringfellow**  
By email



# THE LATEST GEAR

Desirable new releases for motor racing fans: books, DVDs, models, art and gifts

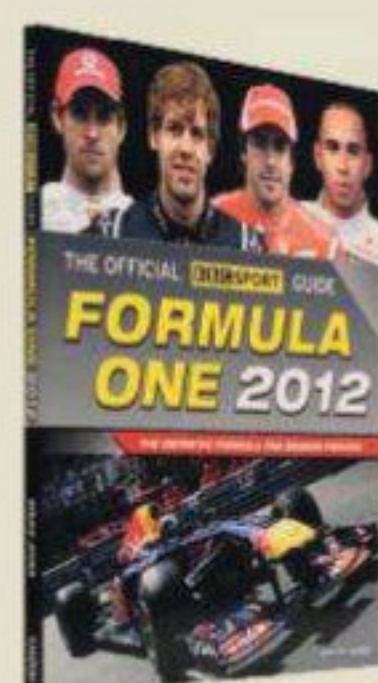


## EBBRO 1:20 LOTUS 72 KITS

£42.75 (grandprixmodels.com)

Japanese diecast and resincast ace Ebbro is moving into plastic-kit territory in 2012 and its first subject will have 'builders' chomping at the bit. The two Lotus 72C options come in factory spec (Jochen Rindt or John Miles) or Rob Walker Racing (Graham Hill).

The detailing – particularly the Cosworth DFV and rear suspension – is staggering, with removeable bodywork showing off pedalbox and inboard brakes.



## BBC FORMULA 1 GUIDE

£14.99 (978 178 0970 318)  
autosport.com/shop



## CASIO EDIFICE WATCH

£350  
casioracing.co.uk



## PORSCHE 718 F2 MODEL

£59.99 (1:43-scale)  
autosport.com/shop

Compiled by former AUTOSPORT editor Bruce Jones, this 128-page official BBC companion to the 2012 season features all the usual handy tips on drivers, teams, circuits, race dates and facts.

There's also an all-time records section and a chart to fill in as the 20-race season unfolds.

Casio's solid stainless-steel Edifice EQW-M600DC comes with too many features to list here – but for the price you get a lot of watch. As a taster: it's solar-powered, features world time functions, a 1/20th-second stopwatch, is water resistant to 100 metres and has an after-dark neo display.

TrueScale Miniatures' 1:43-scale Porsche 718 F2 racer celebrates the German marque's 2-3-4-5 finish in the non-championship Solitude GP in 1960, with Hans Herrmann, Jo Bonnier, Graham Hill (pictured) and Dan Gurney.

Great detail includes wood-effect steering wheel and treaded tyres.

## HOT ON THE WEB THIS WEEK

**YOUTUBE: AUDI LAUNCHES HYBRID LE MANS RACER**



**SEARCH FOR:** Audi R18 e-tron quattro Launchtrailer (2:26)

Audi's recent announcement that it's coming to Le Mans with a hybrid system that effectively makes its R18 four-wheel-drive just makes us want to shout 'QUATTRO!' (Kwattro, not Kwottro, of course). Watch this moody VT and see if we're wrong...



# WHAT'S ON...

Your guide to the best events taking place in the UK and around the world this week – plus TV and online

## SNETTERTON

MSVR

March 10

Admission £13 on the gate

Tel: 01953 887303

Snetterton's 'Radical Raceday' kicks the 2012 season into life in Norfolk this Saturday. A small six-race programme includes double-headers for the Radical UK and Club Cups, and a pair of non-championship Formula Vee events.



Radicals break hibernation

## WORLD TOURING CARS

Rd 1/12

Monza, Italy

March 11

[fiawtcc.com](http://fiawtcc.com)

Britain's Rob Huff is chasing an elusive maiden drivers' crown, having lost out by just three points to Chevrolet team-mate Yvan Muller in last year's campaign. Adding to the tin-top bias, the European Touring Car Cup also kicks off at Monza.

## RALLY MEXICO

World Rally Championship

Rd 3/13

Guanajuato, Mexico

March 8-11

[wrc.com](http://wrc.com)

## NASCAR SPRINT CUP

Rd 3/36

Las Vegas, Nevada, USA

March 11

[nascar.com](http://nascar.com)

## ARGENTINIAN TC2000

Rd 1/12

Cordoba, Argentina

March 11

[tc2000.com.ar](http://tc2000.com.ar)

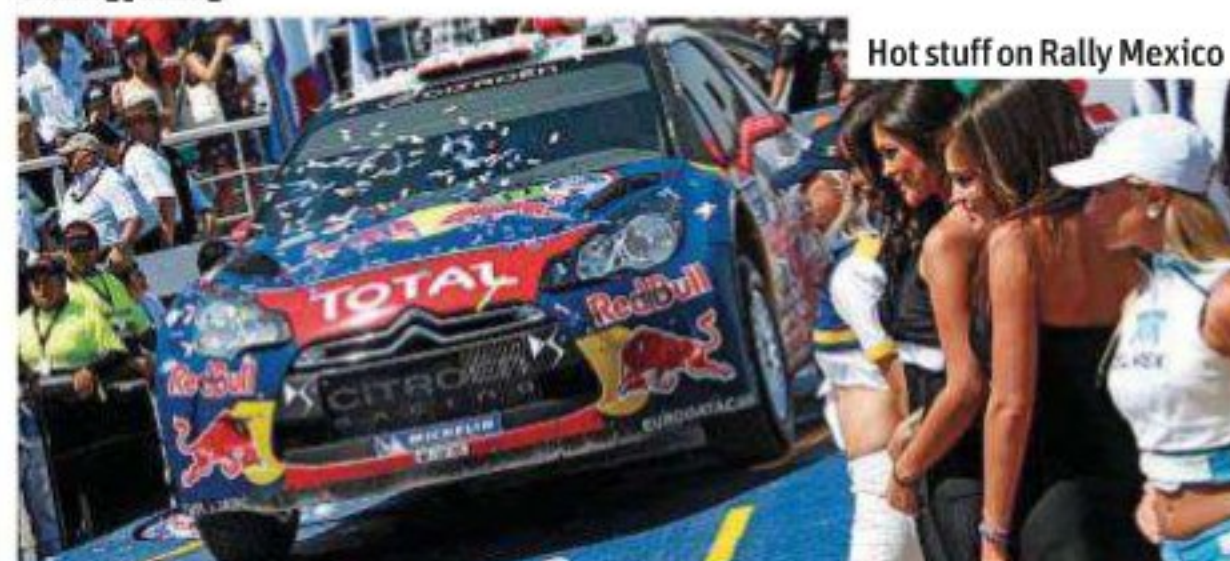
## AUTO GP

Rd 1/7

Monza, Italy

March 10-11

[autogp.org](http://autogp.org)



Hot stuff on Rally Mexico

## KARTING AT DAYTONA

Going karting with your mates just got even better. One of the country's top arrive-'n'-drive companies, Daytona Motorsport, has rolled out real-time dashboard displays on its fleet – and last week AUTOSPORT tried them out.

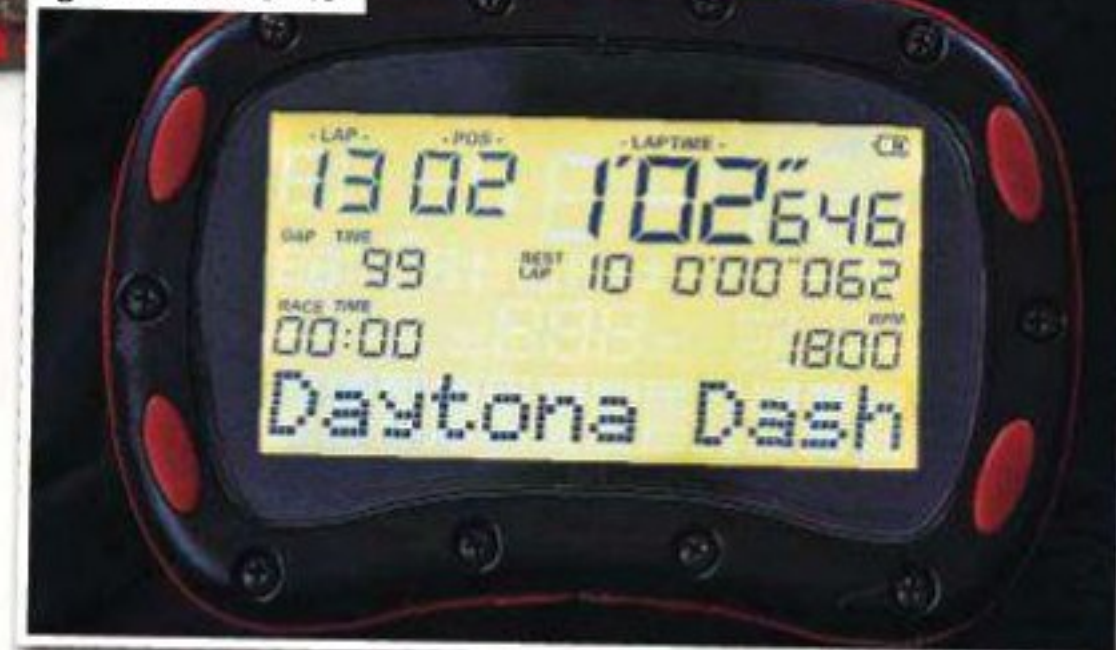
The first thing you notice is your name writ large across the scrolling screen, which is handy to ensure you've got into the right kart for your session or race! Top left is a lap counter – vital if you're doing an endurance race, to plot which lap to refuel. Next to that is your race

position and your latest laptime, to the thousandth of a second.

Other information supplied is the gap to the driver ahead, as well as your best laptime and the difference between that and your latest lap. Time remaining in the session/race is useful (it appears to go slowly when your arms are aching, and quickly when you're trying to catch someone!) and engine rpm.

The laptime info is really useful for improving your technique, as you can try different lines and approaches to the corners

Daytona's new dash gives real-time info



and get instant feedback on whether it's quicker or slower. It's also helpful when you're not in a fight, to help you lap consistently.

It's definitely enhanced what was already a brilliant experience, and Daytona's 21 years in the business really shines through as one of the most professional operations in the country.

Its three venues are Milton Keynes, Sandown Park (both outdoor) and the indoor Manchester track.

Check out [daytona.co.uk](http://daytona.co.uk), where you can book sessions online – they often feature special offers too. And if you enjoy that, why not consider the mega DMAX 125cc two-stroke machines. They're a blast!

# ACCESS ALL AREAS

Our guide on how to keep the motorsport flame burning through the cold winter months



## Television

### THURSDAY MARCH 8

0600-0630 **ESPN**  
Planet Speed  
1445-1720 **Motors TV**  
NASCAR Nationwide: Phoenix replay  
1630-1730 **Sky Sports 2**  
Racemax  
2235-2305 **Motors TV**  
WRC: Rally Mexico preview

### FRIDAY MARCH 9

0500-0600, 1300-1400 **Sky Sports 3**  
Racemax  
0900-0935, 1445-1515, 1720-1750  
**Motors TV**  
WRC: Rally Mexico preview  
1750-2030 **Motors TV**  
NASCAR Nationwide: Phoenix replay  
2200-2230 **Sky Sports F1**  
Formula 1 Legends – Emerson Fittipaldi  
2230-2245 **Sky Sports F1**  
Formula 1 Testing: Jerez  
2245-2300 **Sky Sports F1**  
Formula 1 Testing: Barcelona  
2300-2330 **Eurosport 2**  
WTCC season preview

### SATURDAY MARCH 10

0355-0425 **Channel 5**  
Motorsport Mundial  
0900-0930, 1105-1135, 1445-1515,  
1825-1855, 2130-2200 **Motors TV**  
WRC: Rally Mexico day one  
1030-1130 **Eurosport 2 LIVE**  
Auto GP: Monza race one  
1330-1415 **Eurosport 2 LIVE**  
WTCC: Monza qualifying  
1515-1720 **Motors TV**  
V8 Supercars: Adelaide highlights

2200-0105 **Motors TV LIVE**  
NASCAR Nationwide: Las Vegas

### SUNDAY MARCH 11

0745-0815 **Eurosport LIVE**  
WTCC: Monza warm-up  
0900-0930, 1105-1135, 1415-1445,  
1825-1855, 2130-2205 **Motors TV**  
WRC: Rally Mexico day two  
1030-1130 **Eurosport 2 LIVE**  
Auto GP: Monza race two  
1135-1340, 1855-2100 **Motors TV**  
V8 Supercars: Adelaide highlights  
1200-1300 **Eurosport 2 LIVE**  
WTCC: Monza race one  
1545-1645 **Eurosport LIVE**  
WTCC: Monza race two  
1830-2230 **Premier Sports**  
NASCAR Sprint Cup: Las Vegas  
2000-2100 **BBC 2**  
Top Gear  
Kimi 'chatterbox' Raikkonen is the  
star in a reasonably-priced car.  
2315-0015 **Eurosport**  
WTCC: Monza highlights

### MONDAY MARCH 12

0900-0930, 1135-1210, 1825-1855,  
2130-2205 **Motors TV**  
WRC: Rally Mexico day three  
1545-1750 **Motors TV**  
V8 Supercars: Adelaide highlights  
1900-2000 **Sky Sports 4**  
NASCAR Sprint Cup: Las Vegas  
highlights  
1930-2000 **Sky Sports F1**  
Formula 1 Legends: Emerson Fittipaldi  
2205-0040 **Motors TV**  
NASCAR Nationwide: Las Vegas

## Online

### AUTOSPORT.COM PLUS

Coming up in our premium web content this week

#### AUSTRALIAN GP COUNTDOWN

With just over a week to go before the new F1 season kicks off with Australian Grand Prix practice, find out what the chaps from the AUTOSPORT office reckon will happen this year in our annual pre-season gamble, and read about the politics that Dieter Rencken believes will underpin the season. Plus, check out our mega guide to the World Touring Car season opener at Monza.



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## REVVED UP OVER WHAT'S ON THE BOX

We cast a critical eye over the best and worst of this week's TV coverage



The Sky F1 HD era has begun – well, sort of

AS THAT CREEPY LITTLE girl from *Poltergeist* declared: "They're here!" Yes, on channel 408, Sky's dedicated F1 HD service is up and running.

Well, sort of. The actual programmes don't start until March 9, so for the interim an hour-long rolling promo show is doing the rounds.

At one stage, a montage of footage is cut together with what appears to be its manifesto: set the scene, introduce the players, history and the racing.

To back up this agenda we're treated to snippets of a 'who's who?' at McLaren, which features an organigram explaining

the structure of the race team, already displaying a depth of coverage that the BBC never plumbed.

Next there's some footage from the 1967 British GP, which we all know was the good old days, and despite appearing stilted and quite dull is clearly better than anything on offer today. Having said that, there's a preview of Steve Rider's interview with Emerson Fittipaldi, which forms part of the Legends of F1 series and appears to be must-see TV.

The 'Racing Stories' section retells the tale of how Williams tempted Nigel Mansell out of retirement for his second,

highly-successful stint at the team from 1991.

A further montage demonstrates that Sky has been to all the teams to record feature content during the closed season, but the crown jewel is the motion-capture footage they've taken from inside one of the assembly bays at Williams.

We're perched in front of the new chassis as an army of mechanics set about building the car up from the bare bones, while a huge supporting

cast of technical types pop in and out like something out of the closing scene of *The Benny Hill Show*.

It culminates with footage of some fantastic super-slow-mo action of Pastor Maldonado in testing. It's in glorious HD, which somehow looks crisper than the stock race footage elsewhere.

So, as Nigel Mansell once said, there's only one word to describe how it all looks: very exciting! *Revved Up*

"Sky has clearly been to all the teams in the closed season, with the best bit the motion-capture footage at Williams"



# THE WEEK IN PICTURES

Our lensmen pounding the beat from Adelaide to Barcelona

## FROM BATHURST TO ADELAIDE FOR VERSATILE AUSSIE SUPERSTAR LOWNDES

It's two-from-two for Craig Lowndes in this pic slot, this time in his more natural habitat of V8 Supercars on the streets of Adelaide



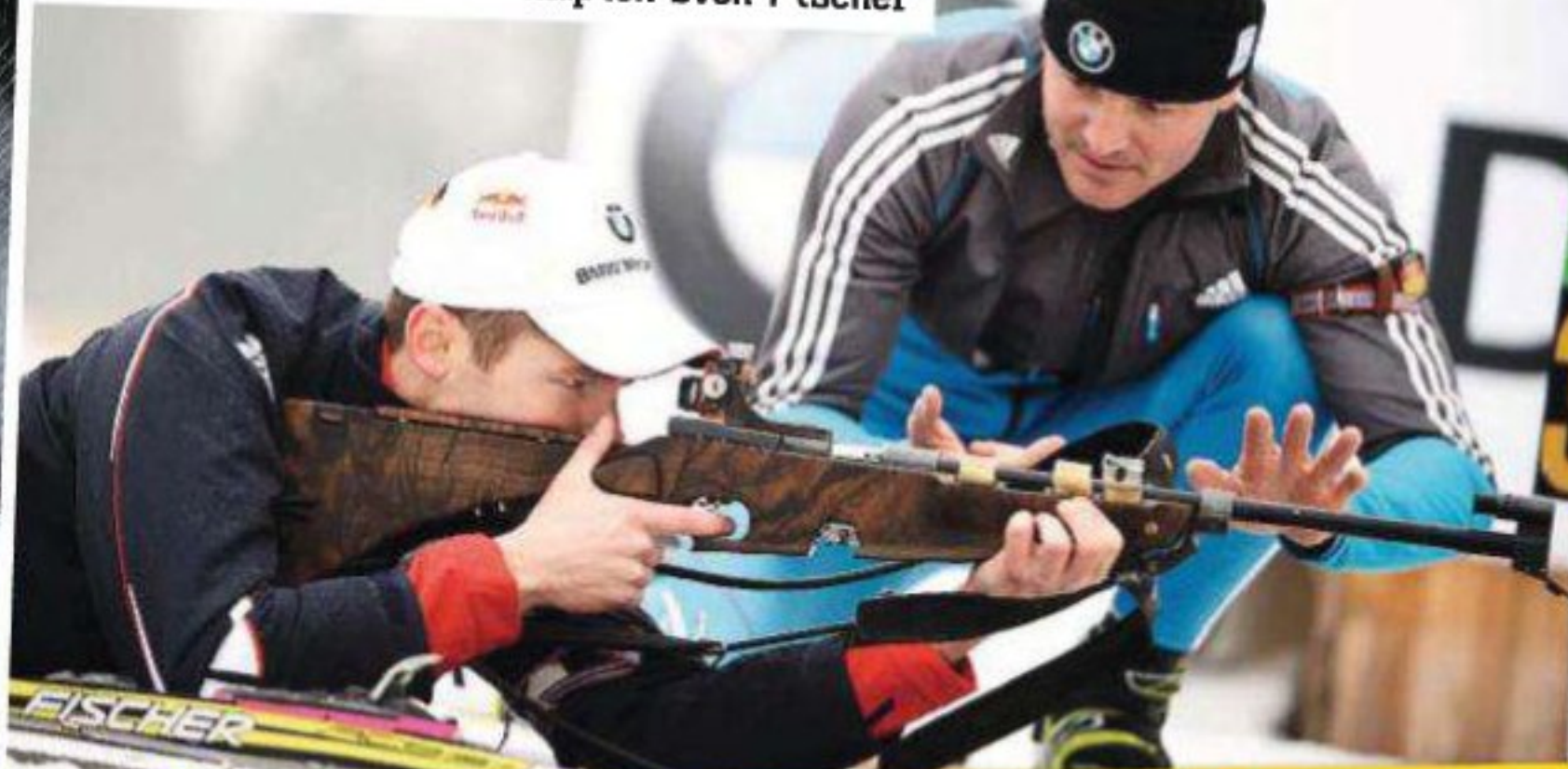
## POWER GETS FIRED UP!

When you're testing new machinery, there's bound to be a few teething troubles. Will Power turns fireman to ensure his Penske Dallara doesn't go up in smoke



## LOOK OUT! DTM STAR TAKES A POT-SHOT

Reigning DTM champion Martin Tomczyk tried his hand at the alpine sport of biathlon with seven-time world champion Sven Fischer



**NEXT WEEK**  
**AUSTRALIAN GP PREVIEW**  
JENSON BUTTON • RALLY MEXICO  
DANICA PATRICK **DON'T MISS IT!**





# FROM THE ARCHIVE

Frank Williams: from humble beginnings to Formula 1 domination



Frank chats with friend and star driver Piers Courage

**IN THE WAKE OF SIR FRANK WILLIAMS'S DECISION TO** step down from The Williams Formula 1 team's board of directors, we take a trawl through the archives to 1961, when Frank – or F.O. Williams as he was then listed – made his first appearance in AUTOSPORT. A sodden Mallory Park club meeting was the occasion, and it proved serendipitous.

Williams had scraped together enough money to buy a tuned Austin A35 earlier that year, and he was soon persuaded to take it on track. His first meeting was a club event at Oulton Park, and while the A35 lasted the race, it suffered transmission failure on the way home.

His appearance at Mallory Park came later that year and, in appalling conditions, he spun off at Gerards – which earned him his line in AUTOSPORT. By a quirk of fate he was left to spectate for the rest of the race alongside another wayward amateur named Jonathan Williams, at the time a student at the Chelsea College of Aeronautical and Automobile Engineering.

Through Jonathan, Frank would meet Piers Courage and later Sheridan Thynne, a fellow student of Jonathan's. The trio would become central figures in the establishment and growth of Williams Grand Prix Engineering.

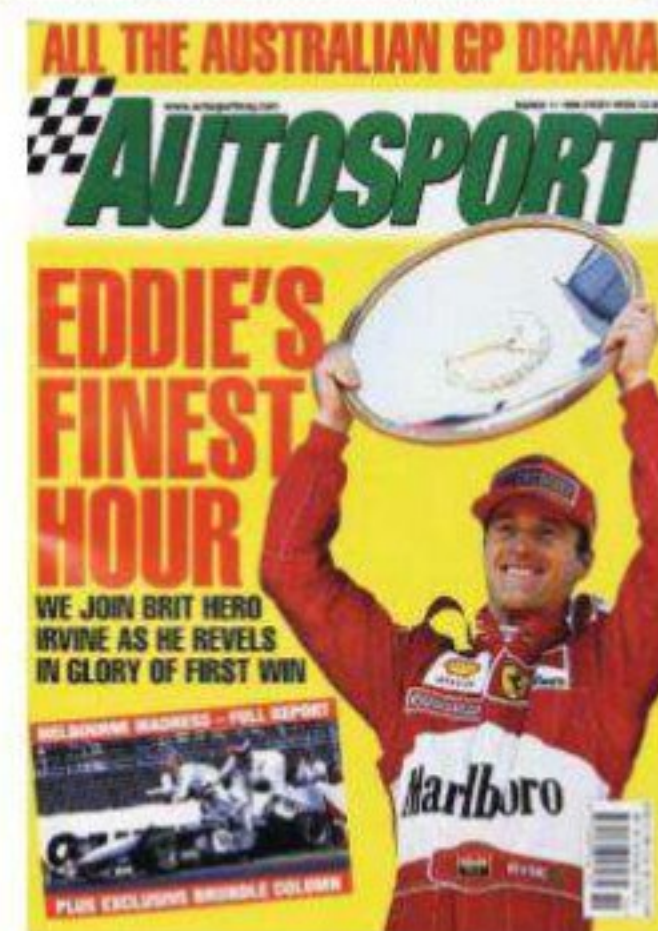
In 1963 Frank agreed to mechanic for Jonathan after he

had bought a Merlyn in which to compete in Formula Junior. During the time spent travelling round Europe, Frank established another key future contact in Charles Crichton-Stewart, and when Jonathan's budget ran out Frank was able to stay in Europe. In 1964 he joined the F3 trail, with permission to compete in return for acting as mechanic and general helper.

That venture came to an end when Williams crashed his Brabham at the Nurburgring, and he returned to England flat-broke but undaunted. Despite sometimes having to sleep in the back of a Morris van, he found the languages and contacts he had developed gave him the ability to cater for demand from drivers on the continent for racing cars built in England, and created his own business buying and selling cars and parts.

It grew rapidly, and with Frank proving extremely financially adept, he turned over £160,000 in 1967. He had stayed in touch with Courage too, and opted to run him in the F3 Motor Show 200 at Brands Hatch, where Courage qualified on pole and won his heat, setting a new lap record in the process. Water in the electrics put paid to their hopes in the final, but they had done enough to impress; and the seeds of a world-beating Formula 1 dynasty had been sown.

## THIS WEEK IN...



MARCH 11 1999

### EDDIE IRVINE CELEBRATED HIS FIRST

grand prix victory this week in 1999, although as he attested afterwards it was a case of the tortoise beating the hare in Melbourne's Albert Park.

Ferrari was very much in the reptile category as it headed to Australia with the hope of being within 0.6s of McLaren's MP4-14. Instead, Mika Hakkinen and David Coulthard were more than a second clear of Irvine and Michael Schumacher in qualifying, and were equally dominant during the race until they were sidelined by failures.

Schumacher had stalled on the parade lap so started from the back, and it was therefore Irvine who profited most from McLaren's retirement, coming home to take his first win in 81 attempts. "It's fantastic and to do it with Ferrari is amazing," he said. "I was a bit lucky today."



PICS: LAT



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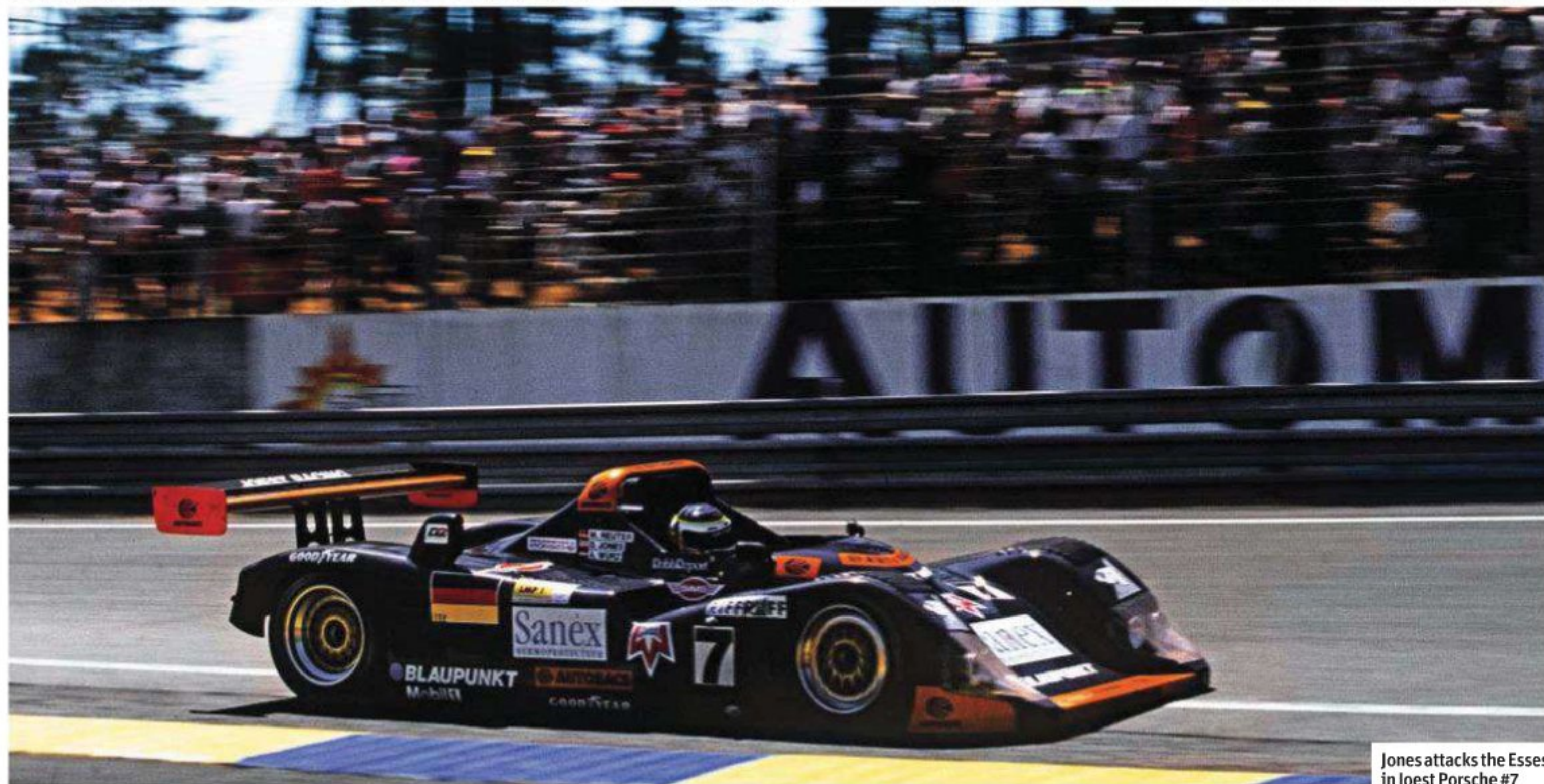
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PREDICTOR





# DAVY JONES

■ Le Mans 24 Hours ■ June 15-16 1996 ■ Porsche WSC 95 ■ 'Privateer' Porsche win against the factory cars



Jones attacks the Esses in Joest Porsche #7

**IF I COULD CHOOSE A TIME** period, it would be the two weeks in the middle of 1996 that included the two biggest races of the year: the Indy 500 and Le Mans 24 Hours. But I can't, so I'll have to go for Le Mans, which we won in the Joest TWR Porsche.

We had a good line-up, a great one in fact. Manuel Reuter, who was carrying a bit of an injury and was in a neck brace whenever he drove, had won Le Mans before and Alexander Wurz was a really talented young guy, whom I asked Reinhold Joest to put in our car after a test at Paul Ricard earlier in the year.

It was supposed to be me, Reuter and Pierluigi Martini, but I didn't feel he [Martini] was quite the right mix for us in terms of his character and his driving style, so he moved into the other car with [Michele] Alboreto instead.

About 20 minutes into the race I lapped one of the Ferrari prototypes on the Mulsanne straight, and I instantly recognised it as the team owner Andy Evans. Two weeks earlier I'd been leading the Indy 500 when I came up to lap Andy's driver, Eliseo Salazar, quite late on. Andy got on the radio and told Salazar to block me,

**"The temptation to put that Ferrari in the wall at 210mph was huge but we were leading Le Mans early on and I knew that meant the TV cameras would be on me"**

so he did, and he put me so high into the wall that I actually scuffed the outside of the tyres. I lost the race by almost nothing [0.695s to Buddy Lazier] and with it, the chance of being the only other guy after AJ Foyt who won Indy and Le Mans in the same year.

The temptation to put that Ferrari in the wall at 210mph in revenge was so huge in my mind,

but I thought better of it. We were leading Le Mans early on, and I knew that meant the TV cameras would be on me and that if I tried anything silly, I wouldn't get away with it.

We led for a lot of the race but then lost it for a bit on Sunday morning to one of the factory 911 GT1s. Porsche was pretty desperate to win the race with one of its

GT1s and we were the outsiders, but when one of the top guys at Porsche asked Mr Joest to back us down so they could win, he told them, "No way guys. This is a sport". In fact, he came to me before one of my stints in the morning and said, "OK Davy, we need to pick up the pace now".

We got the lead back and just had to control it after that. It was an amazing 24 hours and an amazing win.

On the podium Mr Joest made a gesture with his hands, which he told me means 'up yours' in German. That was directed at Porsche for what they'd asked him to do earlier on. A lot of people took the picture while he was doing it, and I have one in my collection, too! ☼

*Davy Jones was talking to Jamie O'Leary*

## IN PROFILE



**DAVY JONES WON THE CANADIAN** Canadian Ford 1600 title in 1981 and then ran at the front in US Super Vee and British F3. A move to sportscars netted 10 IMSA GTP wins, including the 1990 Daytona 24 Hours with Jaguar. He added victory at Le Mans in '96 and raced irregularly in Champ Car and IRL, taking second in the Indy 500 the same year. He has raced sporadically since suffering head injuries at Disney Speedway in '97, and now runs a motorsport consultancy firm.

**NEXT  
WEEK**

**Steve  
NICHOLS**







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