



THE F1 RACING AWARDS
WHY YOU'RE MAD
FOR 'MAD' MAX

**RENAULT'S
F1 RETURN
AND WHY
VICTORY
WILL COST**

**PICTURES OF
THE YEAR**
WE SHOOT
WE SCORE!



**€300
MILLION
A YEAR**

SPARK UP!
TECH SECRETS
OF SKID PLATES

HISTORY OF F1
PART 2: HOW FANGIO
RULED THE FIFTIES

No 240
February
2016
UK £4.99



02 >
haymarket



Renault CLIO RENAULTSPORT

The road provides its destiny,
the track its DNA.

After 115 years in motorsport, our name is synonymous with some of the fastest cars on the track. The same dedication and expertise is now available at our network of expertly trained Renaultsport specialist dealers countrywide.

Visit renaultsport.co.uk to find out more.

The official fuel consumption figures in mpg (l/100km) for the Renault Clio Renaultsport emissions are 144g/km. EU Directive and Regulation 692/2008 test environment figures.



RENAULT
Passion for life



are: Urban 34.9 (8.1); Extra Urban 55.4 (5.1); Combined 44.8 (6.3). The official CO₂ Fuel consumption and CO₂ may vary with driving styles, road conditions and other factors.

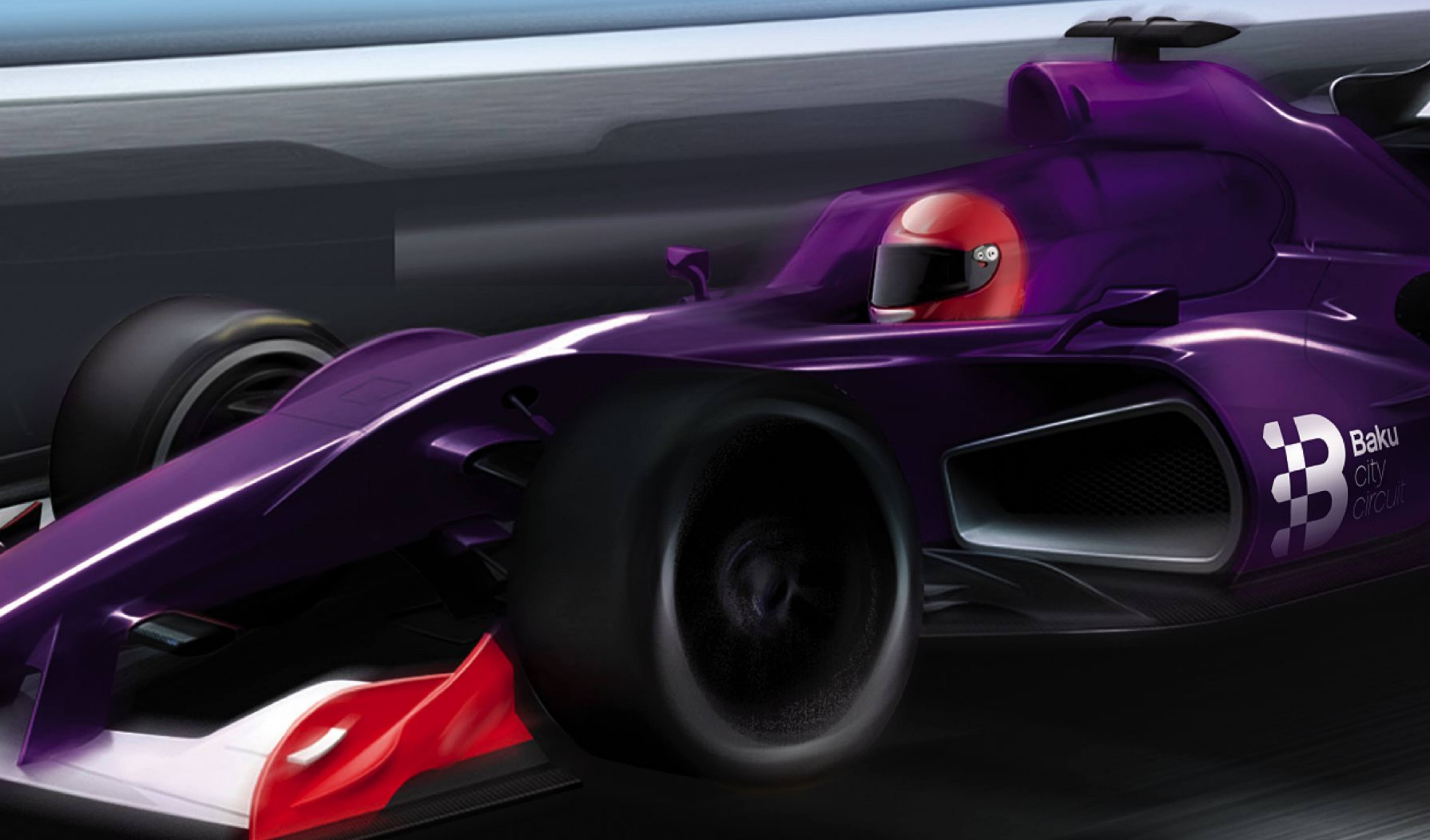


**2016 FORMULA 1
GRAND PRIX
OF EUROPE**

**BAKU
17-18-19 JUNE**

17-19 June 2016

**Don't miss your tickets
bakucitycircuit.com**





The F1 FORMULA 1 Logo, F1, FORMULA 1, FIA FORMULA ONE WORLD CHAMPIONSHIP, GRAND PRIX OF EUROPE, GRAND PRIX and related marks are trade marks of Formula One Licensing BV, a Formula One group company. All rights reserved.





FIRST SECTOR: THE REGULARS

- 8 **IGNITION** REFLECTIONS ON LOSS
- 10 **F1 INSIDER** NEWS, OPINION AND ANALYSIS
- 20 **INSIDE TECH** THE SCIENCE BEHIND DRS
- 22 **PETER WINDSOR** DAN GURNEY'S LATEST SUCCESS
- 25 **DAMON HILL** HIS AUTOBIOGRAPHY IS IN THE OFFING
- 27 **DIETER RENCKEN** ON A MARRIAGE OF CONVENIENCE
- 28 **NOW THAT WAS A CAR** THE HESKETH 308
- 102 **SUBSCRIBE** AND GET AN ADIDAS RACE BAG

COVER STORIES



30 **RENAULT** It's a full works attack for 2016, after buying back Team Enstone



48 **HAMILTON** End-of-year celebrations at Mercedes' Stars & Cars spectacular



68 **VERSTAPPEN** On getting his driving licence after his F1 superlicence



78 **PICTURES OF THE YEAR** You're in for a treat with this visual retrospective

SECOND SECTOR: THE FEATURES

- 30 **RENAULT: THE RETURN**
After six years out, the 2005-06 champions are back in the game as a works entry and they're determined to win again
- 38 **GO FIGURE**
All the stats and figures behind Renault's times in Formula 1
- 40 **THE LONG INTERVIEW**
F1 Racing sits down with Red Bull's Christian Horner to find out how he leads when his team are floundering
- 48 **MERCEDES: STARS & CARS**
The world champions celebrate in Stuttgart, with a full quiver of Silver Arrows from every category and era
- 52 **F1 UP CLOSE: SKID BLOCKS**
These meticulously crafted pieces of titanium alloy help keep the cars legal, while contributing to a dazzling show
- 55 **F1 RACING AWARDS 2015**
You, the readers, voted in your thousands for the men and machines that made 2015 a season to remember
- 68 **YOU ASK THE QUESTIONS**
Max Verstappen, F1's youngest ever entrant, on crashing, sim racing - and avoiding the wrath of his father, Jos
- 72 **MAURIZIO ARRIVABENE**
The former head of Philip Morris is now at the helm of a Ferrari resurgence, and is forthright about his tactics
- 78 **PICTURES OF THE YEAR**
The most inspiring and incredible offerings from the 2015 season of F1, by that talented bunch at LAT Photographic
- 88 **MEET THE MANAGERS**
We talk to the ten largely anonymous men who, from pitstops to logistics, keep their teams running like clockwork
- 94 **THE HISTORY OF F1: PART 2**
Examining the rise and domination of Juan Manuel Fangio, as the sport moved into a more powerful era

THIRD SECTOR: FINISHING STRAIGHT

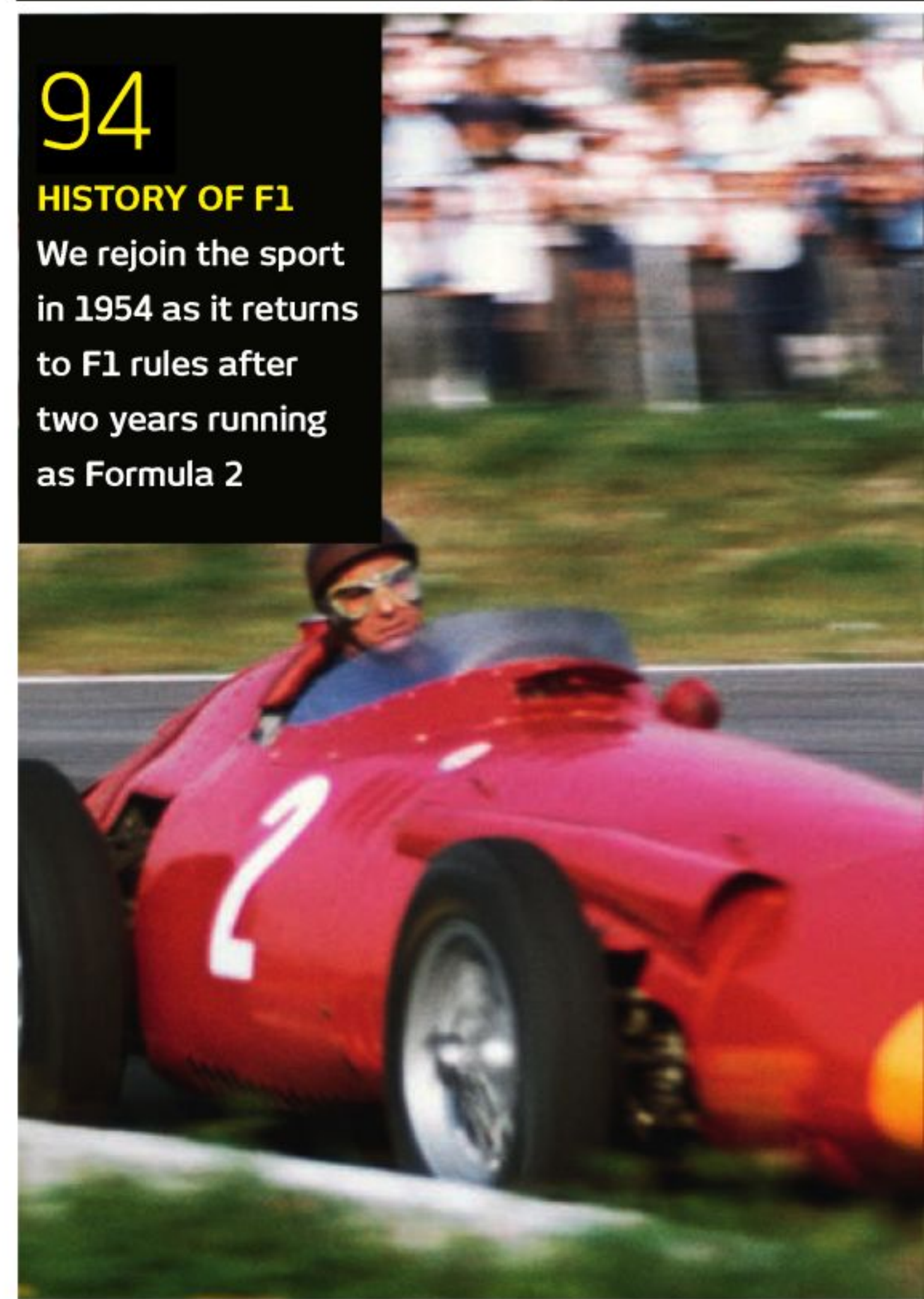
- 104 **INBOX** YOUR OPINIONS ON ALL MATTERS F1
- 106 **MURRAY WALKER** HAS HIGH HOPES FOR A BETTER YEAR FOR FALLEN DREAM TEAM McLAREN-HONDA



48

STARS & CARS

Lewis Hamilton joins a host of Merc legends as the team celebrate their 2015 success



94

HISTORY OF F1

We rejoin the sport in 1954 as it returns to F1 rules after two years running as Formula 2



40

HORNER

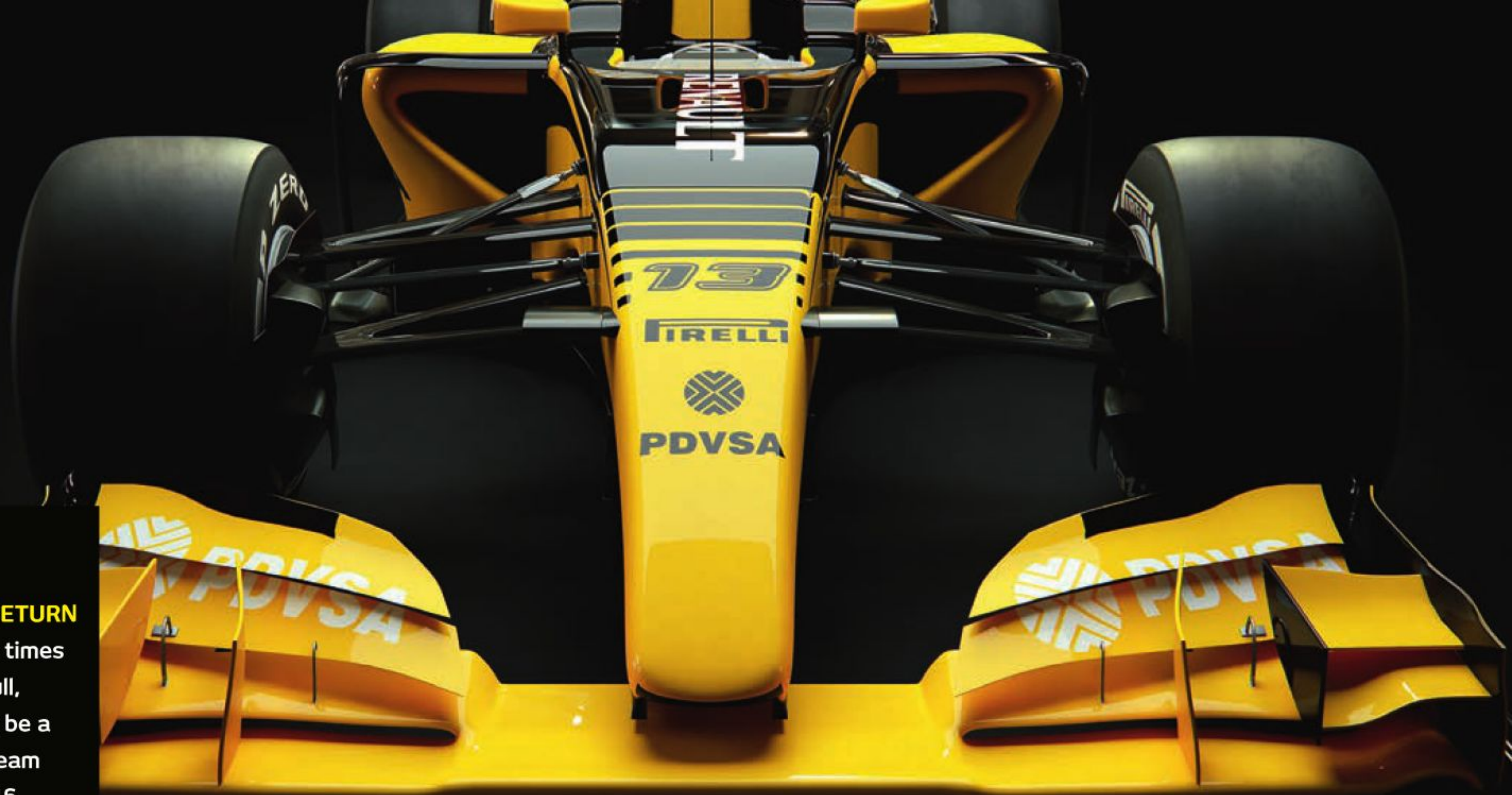
The Red Bull team principal on why he always leads from the front



30

RENAULT RETURN

After tough times with Red Bull, Renault will be a full works team again in 2016



AS VOTED FOR BY YOU

55



72

ARRIVABENE

Meet the man in the Ferrari hotseat, following on from Marco Mattiacci's short-lived tenure



68

MAX VERSTAPPEN

The Toro Rosso youngster answers your questions on his impressive debut season in F1



Wham, bam, thank you ma'am!



Follow Anthony on Twitter: @Rowlinson_F1

Only readers of a certain age are likely to understand the significance of Maria Teresa de Filippis. She was the first woman to start an F1 grand prix, and also the first female classified finisher – both milestones achieved at the 1958 Belgian GP.

She began racing, she said, to settle a bet with her brothers: a keen horsewoman, she only

went and won the first race she entered, in a Fiat 500.

In the near-58 years that have since passed, only one woman has bettered de Filippis's F1 tally: the late Lella Lombardi, a fellow Italian, who started 12 grands prix between 1974 and 1976, scoring half a point for her sixth-place finish in the red-flagged 1975 Spanish GP.

So to say that de Filippis, who died earlier this month aged 89, was a trailblazer, would be an understatement. Before Formula 1 she competed in a number of top-flight sportscar races, in an era when driver safety was never considered, earning herself a reputation for bravery at the wheel that took her to the limit of – and sometimes beyond – her talent. Perhaps mindful of the sport's dangers, she curtailed her own career in 1958, having seen "too many friends die" in competition, including the likes of Jean Behra and Peter Collins. She didn't turn her back on motor racing altogether though; in 1984 she became secretary general of the *Club International des Anciens Pilotes de Grand Prix* and was later appointed its honorary president.

De Filippis's statistical record is slight in the context of her totemic peer, Juan Manuel Fangio – whose own Formula 1 legacy is examined in detail in part two of our History of F1 series (page 94). Yet her importance to the sport's wider narrative is beyond question.

A similar sentiment might be applied to another member of the F1 family who died days before de Filippis: Tyler Alexander. Not a driver, but the ultimate 'backroom boy', Alexander was central to McLaren for almost his entire career. An aircraft engineer by training, he was in at the very start with Bruce McLaren and Teddy Mayer; all too soon he was one of those who stopped the ship from sinking after Bruce's death in 1970. Of that experience, he wrote in his memoir, *A Life and Times with McLaren*: "It's times like these when you have to get ahold of yourself and keep people together – in this case, the people who helped make Bruce McLaren Motor Racing the team that it was. It was now time to use the things that we had all learned from Bruce, without showing personal sorrow."

Alexander briefly left McLaren, but Ron Dennis knew his worth and lured him back to his spiritual home to fortify the team as they embarked on their period of '80s domination. As "one of the first pillars" of McLaren, he remained there until his retirement in 2008.

You'll forgive, I hope, the somewhat reflective nature of this column, but as it's being written on the day we learned of David Bowie's death, it seems only appropriate to pause for a moment to remember those in F1 and beyond who burn so brightly to lighten our lives. [They] can be heroes. Just for one day.



HAYMARKET CONSUMER MEDIA, TEDDINGTON STUDIOS, BROOM ROAD, TEDDINGTON, MIDDLESEX, TW11 9BE, UK

THE TEAM

Group Editor Anthony Rowlinson
Group Managing Editor Stewart Williams
Associate Editor James Roberts
Executive Editor Stuart Codling
Chief Sub-Editor Vanessa Longworth
Art Editor Frank Foster
Designer Jack Woolrich
Principal Photographer Steven Tee
Office Manager Joanne Grove
Editorial Tel +44 (0)20 8267 5806

ADVERTISING

Global Partnerships Director Chris Gowland
Partnerships Manager LeAnne Foley
UK Sales Manager Ben Fullick
Advertising tel +44 (0)20 8267 5179/5916

MANAGEMENT

Haymarket Specialist Media Group Director Tim Bulley

LICENSING

Licensing Director Alastair Lewis
Licensing Managers Lisa Vernall (Asia) Ian Porter (ROW)

CONTRIBUTORS

Columnists Peter Windsor Dieter Rencken Damon Hill Murray Walker
Technical Consultant Pat Symonds
Photo Agency LAT Photographic

PRODUCTION

Production & Group Publishing Manager Sunita Davies

SUBSCRIPTIONS

Subscriptions Marketing Executive Maria-Luisa Fernandez

PUBLISHING

Group Publisher Stuart Williams

Missed an issue?

Back issues hotline: 08456 777 818

Email F1racing@Servicehelpline.co.uk
Fax 01795 414 555
Customer Hotline 0844 848 8826

Contributors



Peter Crowther

F1 Racing's ace illustrator and design grandmaster

Renault have yet to unveil their 2016 livery, but that didn't stop our top graphics artist from creating a rendition of how their new machine *might* look (p30)



Alastair Staley

LAT Photographic lensman tasked with shooting stars

Staley was trackside at all 19 GPs last season and his best snaps accompany those from all of LAT's photographers in their top pics of the year (p78)



Andrew Benson

Newshound and chief F1 reporter for BBC Sport

We tasked Benson with answering one of the burning questions in F1. What will it take to make the Enstone team winners again? Find out on p30



Adam Warner

Resident photographer and studio manager at LAT

As studio manager of LAT's new facility in Feltham in south-west London, Warner took charge of shooting a tiny titanium skid block for us. Check it out on page 52



Thanks to Alberto Antonini, Michael Appleton, Deborah Armstrong, Stephen Carpenter, Tim Clarke, Steve Cooper, Ben Cowley, Richard Cregan, Russell Day, The Donington Collection, Aurelie Donzelot, Fiona Fallon, Jonathan Hedly, Darren Jones, Jai Joshi, Bradley Lord, Duncan Olley, Adrian Myers, Matt Morris, Vinit Patel, Annie Proulx, Britta Roeske, Kemar Roofoe, Santa, Andy Stobart, Lynden Swainston, Will Taylor-Medhurst, Steven Tee, Fabiana Valenti, Nikki Vasiliadis, Herman Wouk..... and most of all to Ziggy Stardust #RIP

Editorial director Mark Payton
Strategy and planning director Bob McDowell
Managing director David Prasher
Chairman and managing director Kevin Costello

F1 Racing is published monthly in Australia, Germany, Greece, Hong Kong, India, Indonesia, Malaysia, Mexico, Middle East, Philippines, Poland, South Africa, UK, USA. Formula One, Formula 1 and F1 (trademarks of Formula One Licensing BV, a Formula One Group company) are used under licence.

Circulation queries Frontline Ltd, Midgate House, Midgate, Peterborough, Cambridgeshire, PE1 1TN. Tel: +44(0)1733 555161. ISSN 1361-4487. EAN 07713614480012.

Printed by Southernprint, Ltd, 17-21 Factory Road, Upton Industrial Estate, Poole, Dorset, BH16 5SN. Colour by Haymarket Prepress. Reproduction in whole or in part of any photograph, text or illustration without written permission from the publisher is prohibited. Due care is taken to ensure that the content of F1 Racing is fully accurate, but the publisher and printer cannot accept liability for errors and omissions. F1 Racing is a member of the Audit Bureau of Circulations.

F1 Racing Subscriptions PO Box 326, Sittingbourne, Kent ME9 8FA. Tel: 0844 848 8826. Fax: 01795 414 555. Overseas: +44(0)1795 592 990. Email: f1racing@servicehelpline.co.uk
F1 Racing (ISSN number 74597X) is published monthly by Haymarket Media Group, Teddington Studios, Broom Road, Teddington TW11 9BE, United Kingdom. Airfreight and mailing in the USA by agent named Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Jamaica NY 11431. Subscription records are maintained at Haymarket Media Group, Bridge House, 69 London Road, Twickenham, TW1 3SP. Air Business Ltd is acting as our mailing agent. F1 Racing is published 12 times a year by Haymarket Consumer Media, © 1996 Haymarket Media Group Ltd



 **head &
shoulders**

UNBEATABLE

(dandruff protection^{***})



UK's #1** gives you up to
100% flake free* great hair, it's all anyone will notice

*Visible flakes seen at 2ft with regular use. **Based on Nielsen Shampoo value shares, from July 2014 to June 2015.
***With regular use vs. non-selenium containing anti-dandruff shampoos, against visible flakes seen at 2ft.





MERC DRIVERS 13



RENAULT RETURN 14



TYLER ALEXANDER 16

F1 INSIDER

NEWS ■ OPINION ■ ANALYSIS

NEWS

Channel 4 races to build Formula 1 team

New UK terrestrial broadcaster has just weeks to assemble presenters and production staff ahead of 2016 F1 season

Channel 4 are faced with a race against time to put together a Formula 1 broadcasting team for the start of the season, after taking over the UK television rights from the BBC.

The company will fulfil the remaining three years of the BBC's contract until the end of 2018, after the corporation decided to drop the sport because of a £150m gap in their finances. This follows an increase in people watching television using catch-up services, which don't require them to pay the licence fee.

Mirroring the previous contract with the BBC, Channel 4 will broadcast ten of the 21 races live in 2016, with the remainder presented as highlights shows. The identity of the ten live races is yet to be confirmed, but all will be shown without advert breaks during the race action, as will the highlights. Sky Sports will continue to broadcast all races live, as they did last year.

The switch was announced on 21 December, giving Channel 4 less than three months in which to put together a group to handle the presenting, production and technical side of broadcasting Formula 1. The BBC took a team of around 40 people to the live races.

David Coulthard, who has emerged as one of the stars of British F1 broadcasting, was the first



NEWS DIGEST

The month's big stories at a glance

10.12.15 Teams notified of Australian GP tyre choice, which includes Pirelli's new ultra-soft compound **13.12.15** Mercedes boss Toto Wolff confirms talks to place reserve driver Pascal Wehrlein with Manor **14.12.15** Ferrari president Sergio Marchionne calls for F1's rule book to be "scrapped"

18.12.15 Toro Rosso to change working practices in order to conquer reliability problems



21.12.15 Renault formally acquire the Lotus F1 team **31.12.15** CBE for John Surtees announced in New Year Honours List **4.1.16** Jenson Button calls for increased mechanical grip to be a priority in discussions over 2017 technical package

BBC Sport regained UK F1 rights from ITV in 2009, but to cut costs negotiated a share deal with Sky from 2012. The BBC coverage was highly regarded and let them access a demographic they struggle to reach. But it was a casualty of the sport department being asked to deliver £35m of the savings required.

BBC director of sport Barbara Slater said: "A significant chunk of BBC Sport's savings target will be delivered through the immediate termination of our TV rights agreement for Formula 1. Any decision to have to stop broadcasting a particular sport or sporting event is hugely disappointing and taken reluctantly. There are no easy solutions; all of the options available would be unpopular with audiences."

She added: "These are very challenging times for the BBC and sport is not immune to those financial pressures."



F1 boss Bernie Ecclestone on the switch: "I am sorry that the BBC could not comply with their contract"

name to be confirmed as part of the presenting team when Channel 4 announced the identity of the independent production company that will produce its F1 coverage. He had three years left on his contract with the BBC. No other names had been confirmed as *F1 Racing* went to press, but the BBC's lead commentator, Ben Edwards,

is also thought to be in the running. There is also a possibility that Jake Humphrey, who presented F1 for the BBC from 2009-12 before leaving to join BT Sport, could return.

Whisper Films, a production company owned by Coulthard, Humphrey and ex-BBC producer Sunil Patel, and in which Channel 4 have a 25 per cent shareholding, emerged ahead of North One Television (which produced F1 for ITV from 1997-2008) in the race for the F1 contract. Whisper are only five years old, but have worked for the vast majority of the F1 teams in recent years, producing promotional films, and their tender included a number of credible and experienced personnel including Mark Wilkin, the editor of the BBC's F1 coverage. North One, by contrast, have been out of the sport since 2008, although they will now produce a number of accompanying programmes for Channel 4.

A number of roles remain open at the time of writing as Channel 4 sought to finalise exactly how they will cover the sport. One of the range of questions revolves around how they will approach the highlights races. Will they follow the BBC model of taking most of the live team to races and handling the entire production as an outside broadcast, or will they keep down costs by presenting them from a studio in the UK? As for the technical side, the simplest route would be for Channel 4 to use the team employed by the BBC, which was provided through an independent company called Pristine.

F1 boss Bernie Ecclestone said: "I am sorry that the BBC could not comply with their contract but I am happy that we now have a broadcaster that can broadcast Formula 1 events without commercial intervals during the race.

"I am confident that Channel 4 will achieve not only how the BBC carried out the broadcast in the past but also with a new approach as the world and Formula 1 have moved on."



Boys in blue (left to right): David Coulthard is now confirmed as a Channel 4 F1 presenter, with Ben Edwards and Jake Humphrey also in the running

NEWS

Pirelli secretly plan for more unpredictable races

New construction applied across all F1 compounds will create a bigger drop in performance as tyres approach their wear limits



In addition to introducing a new ultra-soft tyre compound for the 2016 F1 season, Pirelli have made major changes to tyre construction across the range, *F1 Racing* has learned. The change is potentially of even greater significance than the addition of the new compound.

Trialled in secrecy during December's post-Abu Dhabi Grand Prix test, which was subject to a media blackout, the new construction features an under-tread layer that is intended to create a pronounced drop in performance as tyre wear reaches 70 per cent. *F1 Racing* understands that the teams were not made aware of the change until after the test, but before they had to nominate their chosen compounds for the season-opening Australian Grand Prix.

When Pirelli became the sport's sole tyre supplier in 2011, they were briefed to create a product that degraded rapidly after a certain wear point in order to stimulate different strategies and unpredictable racing. But criticism from teams after a number of delaminations at the 2013 British Grand Prix, along with a lack of opportunities to test the new-generation hybrid cars introduced in 2014, led the company to employ more conservative construction.

The under-tread layer should stimulate scenarios similar to those in the 2011-12 season, but with reduced likelihood of the tyres suffering delaminations or punctures.

• *For the full story on the new tyres, read Pat Symonds' 'Inside Tech' column in next month's 2016 Season Preview issue of F1 Racing, on sale 3 March. He'll also reveal more about the 2016 rule changes – including louder engines.*

Out with the old: for 2016, Pirelli tyres will feature an under-tread layer designed to drop performance

QUIZ



F1 Mastermind

Your chosen specialised subject: the world's greatest sport



TYRES

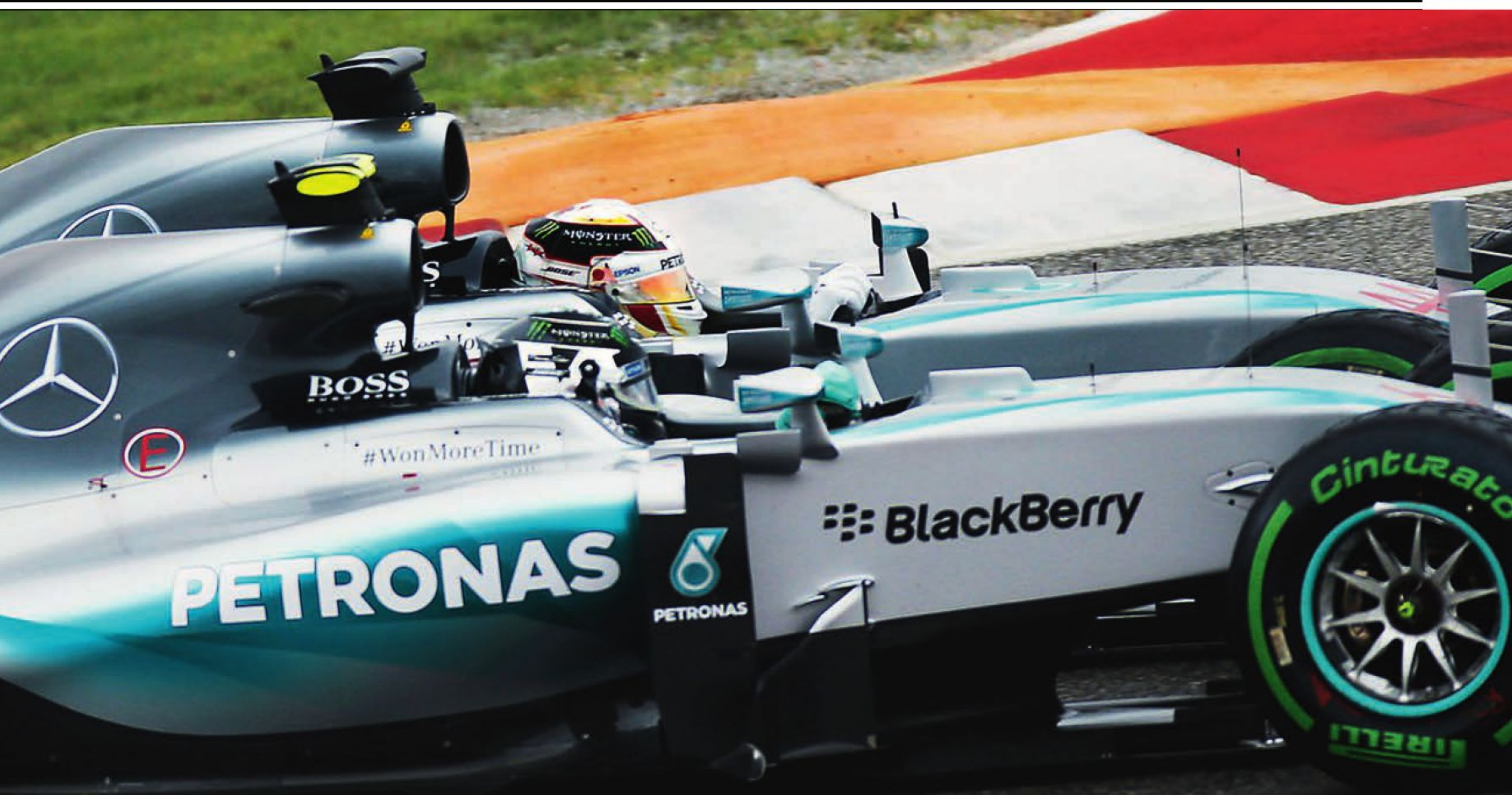
- Q1** What is the name of the new compound introduced by Pirelli for the 2016 season?
- Q2** Who was the last driver to claim pole on Bridgestone tyres?
- Q3** Who was the first driver to lead a grand prix on Bridgestone tyres?
- Q4** Which Belgian tyre producer supplied Ferrari in the early 1950s?
- Q5** Which tyre supplier made a low-key F1 debut on the Scarabs of Lance Reventlow and Chuck Daigh at the 1960 Belgian GP?

- Q6** Who was the first driver to win the world championship on Firestone tyres?
- Q7** What make of tyre did Giuseppe Farina use to claim the first F1 world championship?
- Q8** In which year would you have seen rear-tyre widths in F1 virtually double, on account of a change in engine regulations?

- Q9** What type of tyre construction did Michelin introduce to F1 in 1977?
- Q10** Which manufacturer introduced the first synthetic-treaded tyres, which could be identified by a green spot?
- Q11** What manufacturer, which supplied only contemporary F1 teams in 1981-82, is now the *de facto* choice in historic F1 racing?

- Q12** Goodyear and Firestone introduced what sort of tread format, now ubiquitous, in 1971?
- Q13** When did Bridgestone make their F1 debut, and at which race?
- Q14** When Mercedes made their F1 comeback in 1954, which German tyre brand did they run on?
- Q15** In which year did Michelin win 18 of the 19 grands prix?

1 Ultra-soft 2 Sebastian Vettel 3 Damon Hill 4 Englebert 5 Goodyear 6 Graham Hill (1968) 7 Pirelli 8 1967 9 Radial 10 Dunlop 11 Avon 12 Slick 13 1976 Japanese GP 14 Continental 15 2005



Hamilton and Rosberg could be allowed to fight

Merc boss admits he may have to let his drivers choose their own strategies and battle it out on track if they continue to dominate

Mercedes Formula 1 boss Toto Wolff has raised the possibility of letting Lewis Hamilton and Nico Rosberg off the leash completely should the team's dominance continue this year.

Red Bull boss Christian Horner, Wolff's political and competitive rival, has claimed that Mercedes' superiority is damaging interest in F1, and Wolff now acknowledges he has a point.

"Our dominance is bad for Formula 1," Wolff told *The Mail on Sunday*. "It is. It makes the racing boring. The result becomes predictable. The sport needs multiple winners. It needs the odd freak result. It needs the underdog to win. The moment you become a dominant force, you suffer and your brand suffers."

Wolff and Mercedes have so far operated a policy of allowing their drivers to race while giving them both as close to the optimum strategy as possible. This has often led to them being close on track but unable to race one another because

the driver in front, with first call on pitstop timing, has a small but crucial advantage: in the Pirelli era, stopping first is worth between two and five seconds over a driver behind.

Wolff says that if Mercedes remain dominant, he may have to re-think this policy: "I want the dominance to continue but, if it were to continue like this I need to think what to do so we do not become the enemy, and how we can help the show. Maybe it's about unleashing the two of them completely. Make them have their own strategy. That would be a solution."

Mercedes boss Toto Wolff: "I need to think what to do so we do not become the enemy"



This raises the prospect of the team allowing a more naked fight, with the drivers and their respective engineers allowed to compete against each other and devise alternate strategies.

Wolff added: "It might have a new dimension. I want to contain it. I don't want fighting in the team. I'd like the boxers to fight, but not the trainers and the physios and everybody around the ring. I'd like the boxers to behave like boxers, who fight very hard, but after the fight has finished you can be a sportsman and embrace your enemy. But it is easy when it is theory."

His comments were made in the context of his warning at the final race of the season that if he felt the rivalry between Hamilton and Rosberg was bad for the team, he may have to drop one of them. Rosberg's contract runs out at the end of 2016, while last season Hamilton signed a new three-year deal that ties him to Mercedes until the end of 2018.

NEWS

Renault: life with Red Bull was "going nowhere"

Head of Renault Sport reveals how the cooling relationship with Red Bull pushed them to become constructors in their own right

Renault have returned to Formula 1 as constructors because they felt it was the only way they could enjoy success in the future (see cover story, p30).

Their relationship with former partner Red Bull had always been tricky, even when they were winning consecutive titles together, but it had soured irretrievably since turbo hybrid engines were introduced in 2014. Renault were also aggrieved that they had not received the exposure they merited from their involvement in F1 during their relationship with Red Bull.

Renault Sport boss Cyril Abiteboul said he felt the relationship with Red Bull was "going nowhere" and that Renault needed to rethink their approach. "F1 represents a certain value for Renault, so the question was, are we capable of being in F1 successfully for that value?"

"It took a year to come back and say, with reasonable evidence, that it is possible to do it, within this set of parameters. With modern regulations, it is very difficult to be a successful engine supplier if you cannot control the full package, because you need to have a more

holistic approach to the car, to approach the car as a system including the resource allocation.

"The frustration when you are in a customer-supplier model with anyone – but in particular Red Bull – was that Red Bull were investing a fortune in the chassis at a time when the regulations were dictating that we had to invest much more massively in engine technology to derive performance and sporting results."

Abiteboul said that in 2016 Renault needed to be "humble" in their expectations for next year. The focus will be on restructuring after the takeover of Lotus, especially in getting the French engine department and English chassis team working smoothly together.

Renault have recruited former Mercedes technical director Bob Bell, who occupied that role at Renault from 2003-09, to oversee this process. His appointment is likely to be followed by that of a new team principal.

The Renault/Red Bull partnership soured following the 2014 introduction of hybrid turbo engines, eventually leading to a split



F1 BANTER

PASSNOTES

Your essential F1 briefing #23 Succession



Name Succession
Age As old as human civilisation
Appearance Assertive, when visible

Succession? Wasn't that an abandoned single by Heaven 17?

No, you twit, I refer to the word.

I see. You know, my aunt has had a succession of door-to-door salesmen around recently. She's now the proud owner of, among other things, a steam wand for sweeping the floor. Gave the cat quite a fright. I'm thinking of disconnecting the doorbell.

That's not quite what I had in mind.

What then?

Succession. From Old French. Via the Latin *successionem* meaning: "a coming into another's place". But an idea that, in fact, has been central to human civilisation ever since *Homo sapiens* lumbered forth from the Stygian murk and began to bash one another over the head with bones to determine who was in charge.

Ye gods! Sounds like a Tory leadership contest.

In recent weeks, both Ferrari president Sergio Marchionne and McLaren optimiser-in-chief Ron Dennis have spoken about the need to identify a successor to Bernie Ecclestone in the long run. **I'll bet they have. And have they humbly and self-deprecatingly put themselves forward for the role, hmmm?**

Ron did say: "I would be flattered to be asked."

I do hope he's not holding his breath for that.

He went on to say: "I would decline."

Dear Lord! He sounds like one of those people who take umbrage when you neglect to offer them a crisp, and then when you apologise for the oversight and grudgingly thrust the packet their way, say they didn't want one anyway.

Highly *infra dig*, I know. Still, it's out there. People are thinking about the succession.

Aren't they always? If I were Bernie I'd pull some stunt to show them who's in charge, like that Roman emperor who made his horse a senator. Perhaps it could be a Prancing Horse!

Do say Thank goodness Sergio and Ron have identified a future need that nobody had noticed

Don't say I'm feeling a little ho(a)rse

PHOTOS: STEVEN TEE/LAT; DESIGN PICS INC/REX SHUTTERSTOCK



**2016 FORMULA 1
GULF AIR
BAHRAIN GRAND PRIX**

SAKHIR
01-02-03 APRIL

01-02-03 APRIL 

**2016 FORMULA 1
GULF AIR BAHRAIN GRAND PRIX**

ENJOY UP TO
20%
NOW ON





EARLY BIRD TICKETS



طيران الخليج
Gulf Air 

travel packages available on:

BAHRAINGP.COM / +973 1745 0000

 /OFFICIALBAHRAININTERNATIONALCIRCUIT  BAH_INT_CIRCUIT  @BAH_INT_CIRCUIT  /BAHRAINBIC

THE F1 FORMULA 1 LOGO, F1, FORMULA 1, FIA FORMULA ONE WORLD CHAMPIONSHIP, BAHRAIN GRAND PRIX AND RELATED MARKS ARE TRADE MARKS OF FORMULA ONE LICENSING BV, A FORMULA ONE GROUP COMPANY. ALL RIGHTS RESERVED.

COLUMN

MOTOR MOUTH

What we're talking about at *F1 Racing Towers*

TOO GOOD TO BE TRUE

When **Pirelli's Paul Hembery** floated the idea of having three regional F1 championships, it struck a chord with us here at *F1 Racing Towers*. When we sit down with the new calendar at the start of every year and try to work out the logistics of who will go to which race and when the magazine needs to be published, we've always said that something like this would make life much easier. The F1 calendar has for years been built around a European core and, as more races are added in far-flung locations, it wouldn't take too much effort to mould the series into three distinct parts.

And if in an ideal world we *did* get three regional championships, it would be great if teams could be allowed to enter third cars in at least one of them, not only to give new drivers a chance, but also to get more exposure for their particular sponsors.

But, of course, it's not going to happen....

Stewart Williams

Hembery: suggested holding regional F1 championships



Relocated: our Ocean's Twelve nosecone

HOW'S IT HANGING?

As *F1 Racing* settled in to its new fourth-floor eyrie at the end of 2015, high above the scurrying burghers of Twickenham, an unusual query came in from a reader: "What happened to your *Ocean's Twelve* Jaguar nosecone?"

Said item, autographed by Brad Pitt and George Clooney no less, had adorned the walls of our various Teddington offices since 2004, but could not join us in TW1 owing to space constraints.

But fear not, dear readers. The nosecone has not shared the mysterious fate of Teddington Studios' famous blue plaques, which celebrated the historic presence of such stars as Tommy Cooper, Benny Hill, Kenneth Williams and Sid James, and which were pilfered by persons unknown just before the bulldozers moved in. It's currently in storage in, er, Feltham...

Stuart Codling

OBITUARY

Tyler Alexander 1940-2016

F1 mourns the death of the stalwart who helped build and then hold together the McLaren team

Tyler Alexander, one of the founding fathers of McLaren, passed away on 7 January, aged 75.

Alexander grew up on the Atlantic coast in Hingham, Massachusetts, and trained as an aircraft engineer. This vocation instilled in him rigorous attention to detail, but conventional office routines did not appeal and he felt drawn towards the arena of motor racing, in which a number of his friends were competing at club level.

One friend, John Fields, began racing in national 500cc events in a Cooper-Norton, which Alexander maintained for him. It was then that Alexander encountered the gifted young racing driver Timmy Mayer, his elder brother Teddy, and future racing magnate Roger Penske.

Soon Alexander found himself working for the Mayers, which led to a life-changing trip to Europe in the summer of 1963. Within months the Mayers had joined forces with

Bruce McLaren to found a team, and Alexander was persuaded to stay on after Timmy Mayer's death as Bruce McLaren Motor Racing Ltd continued to push forwards.

Over the next 20 years, Alexander went from chief mechanic to director, overseeing construction of both single-seater and Can-Am cars, tirelessly crisscrossing the Atlantic during McLaren's growth phase when Can-Am prize money was underwriting F1 development, and helping keep the team together after Bruce's death in June 1970.

He left briefly in the early 1980s to form an IndyCar team with Teddy Mayer, but was re-recruited by Ron Dennis to bolster McLaren's engineering, and remained there until he retired at the end of 2008.

"Tyler was one of the first pillars of our company – working hard alongside Bruce from the very earliest days – and Bruce couldn't have asked for a sturdier pair of shoulders upon which to help build the team's reputation," said Dennis.

Tyler Alexander, described by Ron Dennis as "one of the first pillars of our company"



PHOTOS: STEVEN TEE/LAT; STEVE ETHERINGTON/LAT; JED LEICESTER/LAT; SUTTON IMAGES



C70 GRAND PRIX CHRONOMETERS
LIMITED EDITIONS

2015's revised and updated collection of four outstanding COSC-certified Chronometers celebrates the first Grand Prix races established during the early pioneering years of motorsport, when courageous drivers in their temperamental machines put life and limb at risk for glory, fame and occasionally, riches.

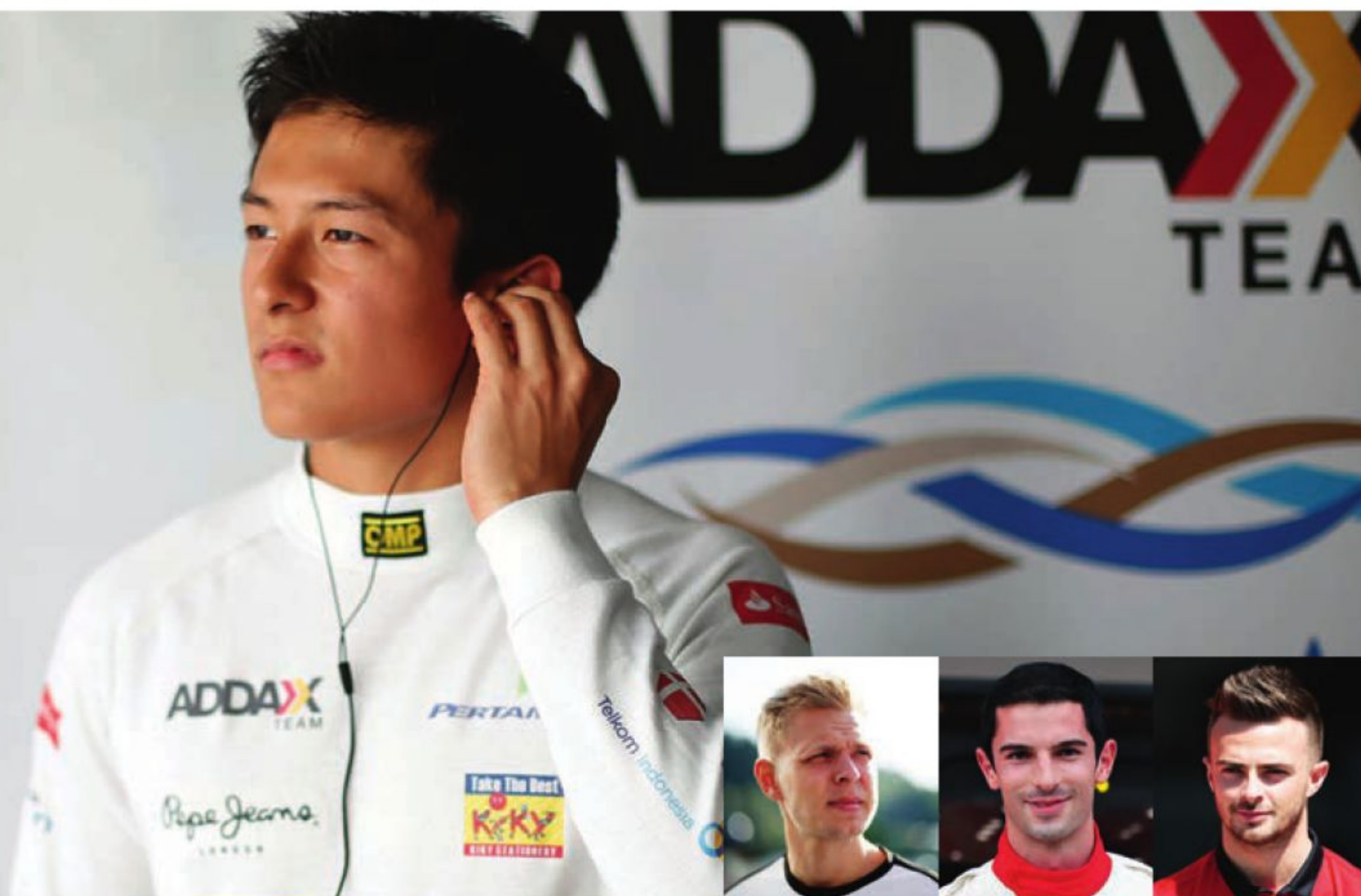
SWISS MOVEMENT **CHR. WARD** ENGLISH HEART
LONDON

EXCLUSIVELY AVAILABLE AT christopherward.co.uk

NEWS

Manor set for cash injection from Indonesia

The team are poised to take on state-backed Rio Haryanto, with former McLaren man Martin Whitmarsh involved behind the scenes



Indonesian GP2 racer Rio Haryanto looks set to take up a race seat at Manor Marussia for 2016 after his country's government pledged £11.3m of sponsorship.

A letter released by Indonesia's Minister of Youth and Sport, Imam Nahrawi, guaranteed the payment "to be made via several instalments in return for the branding space taken on the race cars and drivers' race wear, plus a host of promotional activities to promote Indonesia and associated companies".

Haryanto has long been linked with a drive for Manor Marussia, whose other candidates include former McLaren driver Kevin Magnussen as well as 2015 racers Will Stevens, Alexander Rossi and Roberto Merhi.

Stevens has expressed his confidence that he will retain his seat. "If it's going to happen, I'm sure it's not going to be far away," he said. "In terms of how confident I am to get the seat, I'm 100 per cent confident."

Manor Marussia are now a much more attractive proposition for drivers than previously, following their acquisition of a Mercedes engine and a technical partnership with Williams,



Rio Haryanto is set for a Manor Marussia seat, with Kevin Magnussen, Alexander Rossi and Will Stevens competing for the other one

which will produce the car's gearbox and rear suspension. But they remain a team in transition following the departure of their founder and team principal John Booth, as well as president and sporting director Graeme Lowdon, at the end of last season.

Owner Stephen Fitzpatrick tried to recruit former F1 driver Alexander Wurz as team principal, but Wurz turned him down. This appears to leave a vacancy above new racing director Dave Ryan, who is returning to F1 after a six-year absence, in the wake of the 'Lie-gate' scandal following the 2009 Australian GP.

Former McLaren team principal Martin Whitmarsh has been involved with Manor Marussia behind the scenes, and has recently been interviewing candidate drivers. However, he has no formal role and has said that he is not interested in being an F1 team principal. But sources claim he would be interested in a more senior role with Manor if one were available.

NEWS IN BRIEF



ASTON MARTIN OPT OUT

Luxury car brand Aston Martin have decided against an involvement with Force India. Aston Martin, owned by investors led by the Italian private equity firm InvestIndustrial with a 37.5 per cent stake, had been considering a deal that would have involved the team being rebranded with Aston Martin's name. Insiders say the deal has been called off for now, although it could be revived at a future date.

NEW THREAT TO GERMAN GP

F1 boss Bernie Ecclestone has cast doubt over the future of the German GP, saying he does not expect a race at the Nürburgring in 2017. The event was dropped in 2015 due to financial problems. Ecclestone said: "We can say with some certainty that no race will be held there. It's a shame, because when it was up for sale, I agreed to buy it. Then they came back to me and said they had an offer that was a million or two higher. They lost a buyer for the sake of £2million, a buyer who would have made sure that the race would still be there in a hundred years' time."

F1 LOSES ITS FIRST LADY OF F1

Maria Teresa de Filippis, the first woman to start a Formula 1 world championship grand prix, passed away in early January at the age of 89. Born into an aristocratic industrialist family, de Filippis entered her first car races as a result of a bet with her brothers. Her subsequent successes led to opportunities to sample F1 machinery and she finished tenth at the 1958 Belgian Grand Prix, driving an elderly Maserati 250F, but decided to quit the sport soon afterwards.



JOHN SURTEES AWARDED A CBE

John Surtees has been given a CBE, to follow the OBE he received in 2008. The award recognises not only his sporting achievements, but also his charitable work through the Henry Surtees Foundation, named for his son, who died in 2009.

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

BOTB

WIN YOUR DREAM CAR



WEEKLY WINNER - PRASH THURAIRATNAM - MCLAREN 540C



WEEKLY WINNER
ASTON MARTIN VANTAGE



WEEKLY WINNER
PORSCHE MACAN S



WEEKLY WINNER
PORSCHE 911 TURBO

WIN YOUR DREAM CAR

WINNER EVERY WEEK - ENTER NOW AT [BOTB.COM](https://www.botb.com)



Pat Symonds explains
THE SCIENCE BEHIND...
Drag Reduction System (DRS)

F1 TECH

The Drag Reduction System (DRS) has been with us for five seasons now, but what was it that led to its introduction?

It has long been felt that overtaking is a fundamental ingredient of exciting racing. So in 2007, a working group was set up to look at changes that could be made to the bodywork regulations with a view to minimising the detrimental effect of a car's aerodynamic wake on a following vehicle. Even though I was part of that working group, I would be the first to admit that the outcome of the research and the new regulations that it led to in 2009 had a minimal effect on the propensity of overtaking.

In fact, the only way to increase the chances of overtaking significantly is to give the following car an advantage that will outweigh the inevitable aerodynamic disadvantage present when following a high-downforce car. In the days of naturally aspirated engines this advantage could not be created by short bursts of additional power, so the FIA came up with the idea of a movable rear wing flap. This could be deployed if a car was sufficiently close to the car in front and had the effect of a large drag reduction; hence top speed increased to assist overtaking.

Has it worked?

Essentially, yes. The year before the introduction of DRS, 2010, had actually been a reasonably good year for overtaking, with an average of almost 29 overtaking manoeuvres per race, but this leapt to more than 60 per race in 2011 with the introduction of DRS. Many will remember Fernando Alonso's frustration in the final race of 2010 in Abu Dhabi when he could not pass Vitaly Petrov, thereby losing that year's title championship to Sebastian Vettel. While some purists felt that DRS was a gimmick that had no place in F1, the reality is that in avoiding this sort of situation it does provide better racing. Most drivers found they were aided by DRS as often as they were hindered by it and I suspect most would be sorry if it were ever to be outlawed.

Have the rules governing the use of DRS remained the same?

Not quite. The biggest change has been in qualifying. In its first year, drivers could use the system at any time during qualifying and were therefore operating the system on every straight. Some drivers felt this was unnecessarily dangerous as it tempted them to use the system on parts of the track where the loss of downforce made the car too hard to handle, and so for 2012 the system's use in qualifying was limited to the same designated areas in which it was used in the race. At some circuits, the length of the DRS zone was also adjusted and at all circuits other than Monaco, two zones were introduced.

How does DRS actually work?

The system is enabled when a car is following a competitor with a gap of less than one second at a detection point preceding the deployment area. The enabling is done automatically by a car positioning system, which not only detects the gap, but can also transmit the arming command. If the criterion is met, as the car crosses the DRS zone the driver hears a beep prompting him to press a button on the steering wheel. This opens an electro-hydraulic valve allowing an actuator to feather the rear wing flap. If the driver presses the button again then the flap will close, but more normally he will leave it open and allow an automatic system, triggered by the presence of brake pressure, to close it for him.

Is there any danger involved in using DRS?

Naturally the failsafe systems ensure that in the event of any type of failure the flap remains in the non-deployed high-downforce position. Additionally, when the system is activated it causes a flow separation from the wing and therefore as it shuts it is important to get instant re-attachment of the flow. Occasionally there is a fractional delay in re-attachment, which can leave the driver attempting to brake heavily with significantly reduced downforce.

What is it worth in terms of performance?

When it could be used freely in qualifying, DRS reduced lap time on an average circuit by more than one second. Now, with deployment limited to two sectors generally totalling around 0.6 miles in length, the advantage has been roughly halved. In terms of speed, the maximum velocity will increase by around 10-12mph.

Even with DRS, we saw a drop in overtaking manoeuvres in 2015. Why was that?

In 2015, the general performance of the cars was closer than it had been in 2014 and this will naturally reduce the total amount of overtaking. However, what makes good racing are the *combative* overtaking manoeuvres and I am not sure they reduced as much. Of course if we want to increase the overtaking further, the DRS zones could very easily be lengthened. Abu Dhabi, for



example, is still a circuit at which it is difficult to pass. And in Mexico, while the Autódromo Hermanos Rodríguez had a great atmosphere, overtaking was almost impossible there due to the long corner on to the straight. Both of these circuits could do with some adjustment for 2016.

Some fans feel that DRS is too artificial to be a part of F1. What do the teams think?

When it was introduced, the feeling among teams was as mixed as it was among fans, but now the teams support the system. In terms of racing our direct competition, over the course of a season, the gains and losses are evened out, but during a race it lets front-runners pass mid-field cars who are on a different tactical plan, thereby opening up more strategic opportunities. **F1**

INSETS: SAM BLOXHAM/LAT; ALASTAIR STALEY/LAT



DRS is enabled when a car is in the DRS zone and has a gap of less than a second to the car in front. In this situation, the driver can press a button on the steering wheel to open the rear wing flap and reduce drag



PETER WINDSOR

RACER'S EDGE

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

As **F1-related news goes** I guess it was pretty well-hidden behind the off-season TV excitement of darts, cooking shows and endless chat about *Downton Abbey*. For me, though, it was the technical breakthrough probably of the decade – let alone of the year.

Forget your ERS and your KERS and your silver W06s. Forget even the back-patting 'Applied Technology' projects of your MTCs or your Williams F1s. Cloaked heavily in classified secrecy, Dan Gurney and his company, All American Racers (AAR), in 2015 designed and built the landing gear to enable an orbital spacecraft to return safely to earth (not the sea!) successfully, right-way-up.

Think of this in the context of F1 benefitting over the years from the technology flow from NASA – Kevlar and carbon fibre being good examples – and you begin to appreciate the significance of AAR's achievement: they've turned the thing around. The US space programme is now benefitting from the brilliance of AAR. Nor is AAR a totally new company merely wearing the old man's brand name. It is still All American Racers as we've known and loved it. *It's still Dan Gurney.*

I say 'Dan'. What I really mean is 'Dan's energy'. For much of the credit for the SpaceX landing should go to his sons, Justin and Alex

How Dan Gurney shot for the stars

(a former GrandAm Champion) – and to the team behind them. Forget Dan at your peril, however: despite some recent motor-cycling shunts and a couple of other ailments, 84-year-old Dan still drives every day to his man-cave, ostensibly to design and build a new engine (for which he has obtained a patent), but in reality to sniff around all corners of 'the shop'. Back in his racing days, Dan had a reputation for being a 'fiddler' – a very, *very* fast racing driver who too often tinkered with the setup, ultimately to his own disadvantage.

Can I suggest that the success of SpaceX finally confines such clichés to the 'sloppy journalism' bin? If AAR are currently the toast of Aerospace America, it is precisely because of Dan's enquiring, imaginative mind – because he has always questioned the obvious and because he has never let himself become a slave to the idiom, 'that's the way it's always done'. So it is with the next generation, too.

All this would be impressive if Dan were but an engineer. He is, of course, more than that. He's the tall Californian who came to Europe in the late 1950s to drive successfully for Ferrari, BRM, Porsche, Brabham and McLaren. He's the multi-tasking driver-entrepreneur who persuaded Colin Chapman and Jim Clark to build a car for Indy; he's the winning F1 Brabham driver, who, even while he was racing sports and stock cars in the States – crossing the Atlantic like a demented ant – was initiating the Eagle-Weslake F1 project in Rye, Sussex. He's the Dan Gurney who won the 1967 Belgian GP at Spa in that gorgeous Eagle V12; he's the Dan who helped to keep the McLaren faith alive after Bruce's death in 1970.

Dan won the 1967 Le Mans 24 Hours for Ford; his Eagles won at Indy. As a driver, Dan won in F1, NASCAR, IndyCar, TransAm and CanAm, and, as a team owner, he won in all those American categories and more.



The SpaceX contract didn't just fall out of the sky, so to speak. For years Dan has embraced the world of aerospace. Some of his best buddies are, and have been, test pilots, and he works in the heart of Californian space-tech. He lives the life that took them into orbit and then out further. He does it with a leather jacket and the kind of experience you wouldn't sell for a trillion dollars.

Who knows how many classified projects have been signed off by AAR over the past 20 years? AAR know how to work their carbon – and they certainly know, within the world

"Dan has never let himself become a slave to the idiom, 'that's the way it's always done'"



Racer and constructor Dan Gurney's enquiring mind took him from the design of the beautiful Eagle-Weslake (left) to the creation of landing gear for the SpaceX Falcon 9 rocket (above)

of politics, when to push and when to pull, to paraphrase my colleague, Pete Lyons. One AAR package we *did* see recently was the Delta Wing Le Mans prototype. But for every visible AAR achievement you can be sure that there are scores of other, highly classified, defence- and space-oriented, success stories.

Dan didn't let his career flatten out when the racing and the team ownership had run their course: he climbed on his bike, rode up into the hills above Orange County, and thought about the future. And the future, with Justin and Alex, is what you saw in that SpaceX landing.

Segueing that US theme this month, plaudits are due, I think, to Lewis Hamilton for the TV time he has generated for F1 in the States over the winter. I've banged on in the past about how the top three drivers in the world championship should, by FIA regulation, be obliged to spend promotional time between seasons in F1's key countries: China, the USA and India (if India ever returns to the calendar). F1's use of its drivers like this would be: (a) more cost-effective than attempting to find, say, another half-second of downforce in the windtunnel and on CFD; and (b) somewhat

more noticeable to the public than said downforce improvement (if attained).

Nothing happened, of course, until by default, last winter, Lewis went public in his adopted home country. I imagine he feels much more relaxed in front of American audiences – and he didn't disappoint. Indeed, I'll wager that his primetime slot on *60 Minutes* has done more for F1 in the US than louder exhaust notes, tighter track-limit restrictions and a bunch more penalties could do in a 21-run of Sundays. He is doing more for the profile of his sport in the mass, global media than the sport is doing for itself.

In short, it is increasingly obvious to me that F1 is about *people*. It's about Dan and his family and how they emerged from racing to achieve something even greater. You won't see any corporate wrist-flapping at AAR on that Santa Ana industrial estate – just a few water coolers, some plastic cups and lots of good people doing what they do very well.

The guarded, faceless capsule-of-excellence we call the F1 paddock perversely looks increasingly spare, accented as it is by the great gods of technology and secrecy. Don't they get it? It's the *people* who bring F1's technology to life, not the technology itself. Not the security guards. Not the scripted media sessions.

It's the people like Dan and, yes, the drivers like Lewis. F1 should celebrate them, not hide them away or kick them when they're guilty of nothing more than living a life.

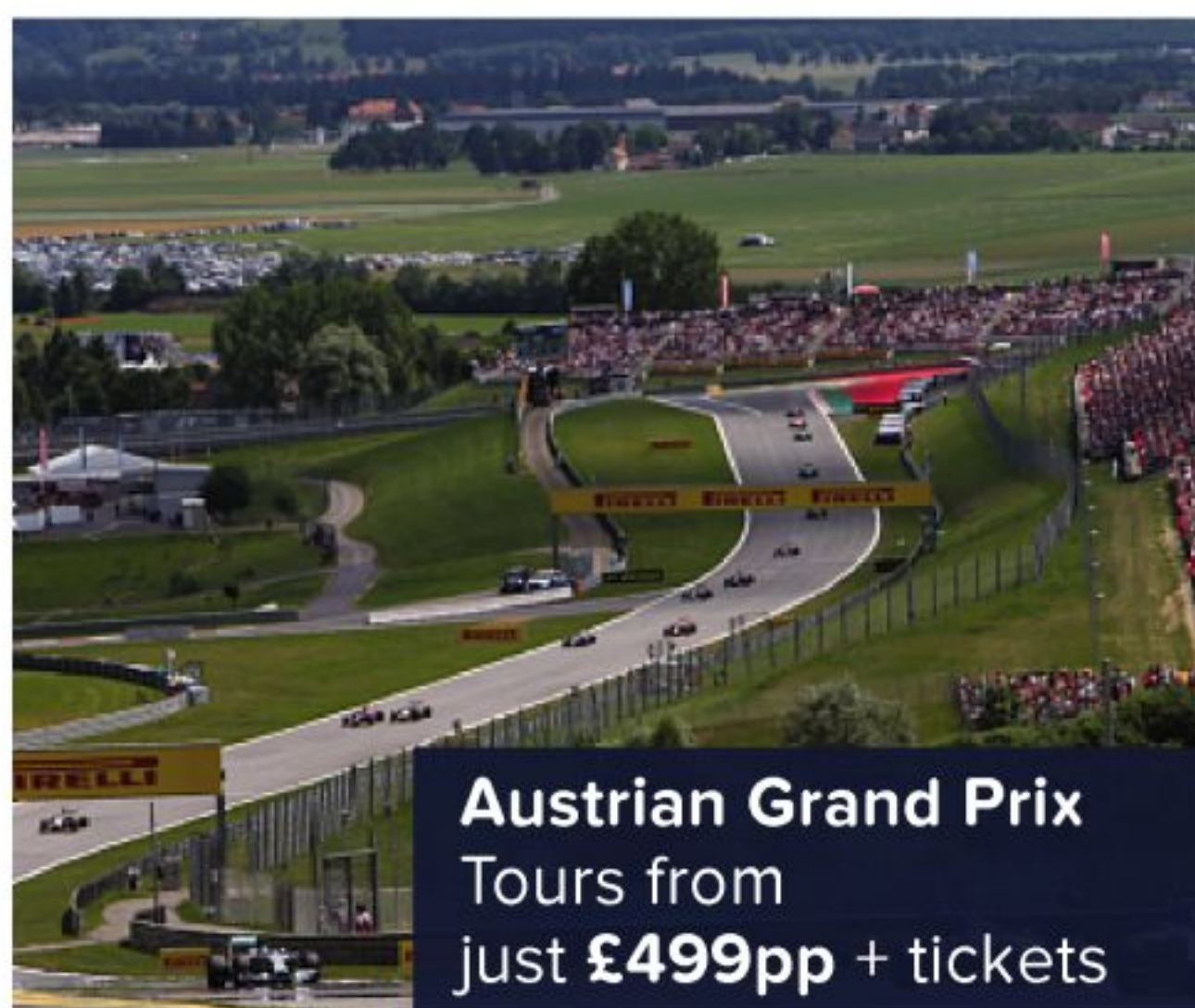
It isn't rocket science. Or maybe it is. 

MOTORSPORT TOURS 2016

GREAT VALUE PACKAGES AVAILABLE NOW



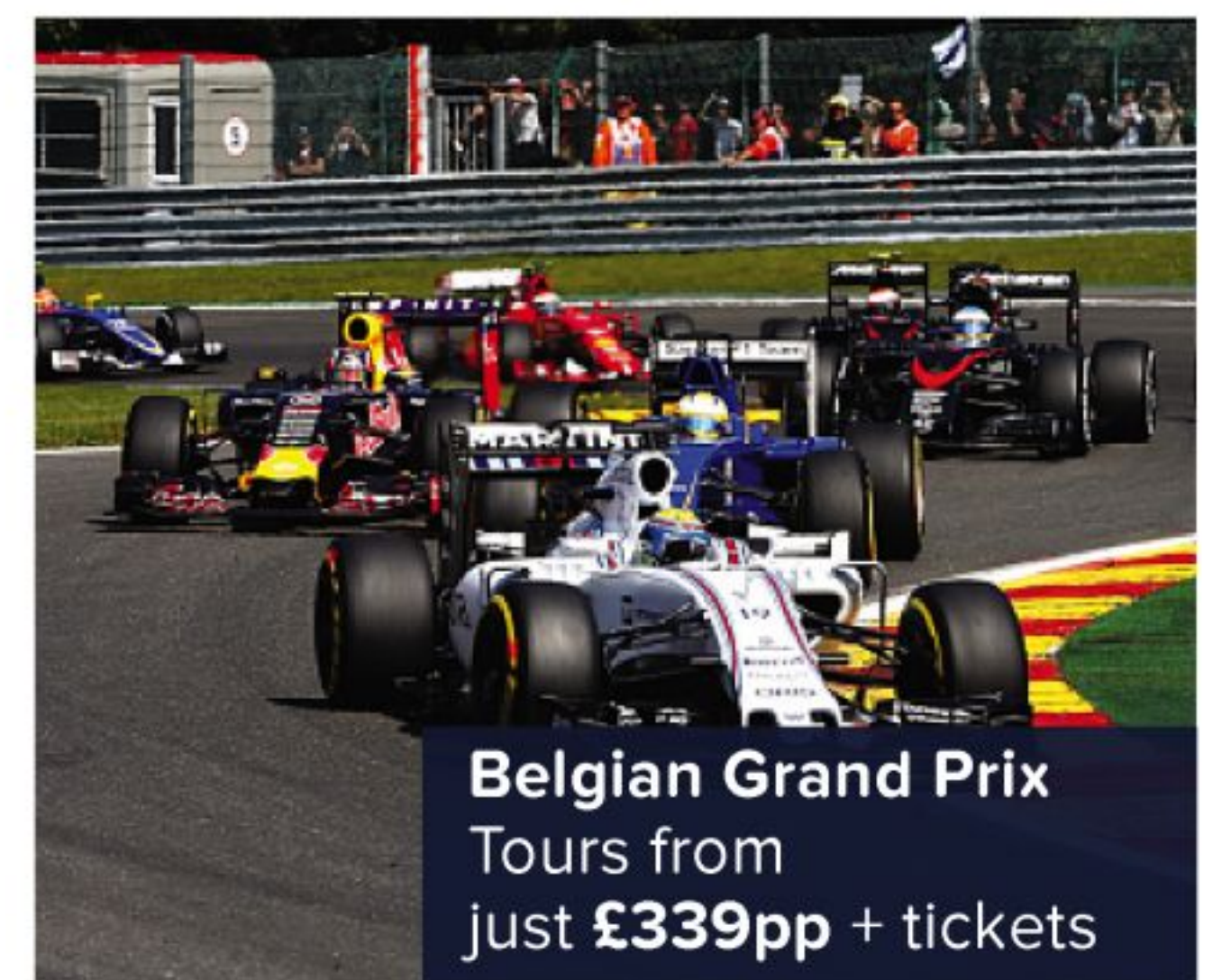
Monaco Grand Prix
Tours from
just **£699pp** + tickets



Austrian Grand Prix
Tours from
just **£499pp** + tickets



British Grand Prix
Hotel Packages from
just **£145pp** + tickets



Belgian Grand Prix
Tours from
just **£339pp** + tickets

OVER 40 YEARS'
EXPERIENCE IN
SPORTS TRAVEL



Images courtesy of Getty Images and Circuit de Barcelona-Catalunya

All tour prices shown include travel to your chosen Grand Prix. Hotel and transfer packages also available. British Grand Prix packages are hotel and transfer only.

BOOK ONLINE NOW
gulliverstravel.co.uk

OR CALL
01684 878867



DAMON HILL

KING OF THE HILL

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

We've probably all used the phrase 'One day I'm going to write a book,' but 2016 will be my 20th birthday since being reborn as a Formula 1 world champion. So, I'm going to celebrate by writing about my racing career and how it came to pass that I was even in a racing car. Because, if truth be told – and that's the whole point – I'm not that into cars. So it's a bit odd that I ended up where I did.

My thing was motorbikes. I loved a good bike. First time I saw a motorcycle, I wanted to have a go. First time I had a go, I wanted to have one. First time I got one, I wanted another one. And so on. It's very simple with bikes: wheels, engine, seat. The whole point of a bike is to have an engine connected to a wheel. The other wheel is there so the engine doesn't scrape on the ground and so it can be steered a little. For maximum pleasure they put a seat on top so the biker can have a grandstand view of the whole experience.

Cars, meanwhile, are basically boxes with wheels on, which makes me feel slightly claustrophobic. This probably heretical viewpoint might well be a consequence of being born into a world of cars. I'm guessing that for most of you to have been in my uniquely privileged position backstage during

Is there a book in me? I'd like to think so...

one of the most iconic periods in motorsport would have been heaven itself. But then you didn't *have* to go to the British Grand Prix every summer for the first 15 years of your life, to watch your mum and dad working.

You think some recent Formula 1 races have been boring? You have no idea: we didn't even have a telly! Just a man with a silly hat and a microphone connected to a wire that led to a wooden box full of wasps on top of some scaffolding.

In my youth, I spent a lot of time exploring race circuits. In those days, if I had wanted to walk onto the track and wave to my dad, there was no one to stop me, and they probably would have thought it was a jolly good wheeze anyway, like a scene from some Enid Blyton adventure: *One Goes Nuts in Northamptonshire*.

Nope. My upbringing in motorsport made me about as keen for more cars as a schoolkid with the opportunity for extra maths homework. I hankered for the other worlds that existed outside the tiny, self-obsessed paddock. I never got there. Still here 55 years on. How did it happen? You'll have to read the book. Ha! Got ya.

Don't get me wrong, I have come to enjoy our crazy sport, but it is a love/hate relationship. For every moment of sublime thrill or beauty, there are as many moments of tedium and crassness. Is it this unpredictable extreme contrast that makes us keep coming back? Like a man panning for gold?

And the politics! It's a wonder the show goes on. That it does should give us hope in humanity, for when the crunch is near, and we look annihilation in the face, we do actually do something to save ourselves. I suppose sailing close to the wind is what defines F1?

Perhaps I should call the book *How Time Flies*? Interesting title, because it can also

refer to how our perception of time is altered depending on what we are doing. Like, for instance, when we are racing or on a qualifying lap: our minds adjust to the demands made upon them. Time, or should I say, the 'normal' second, expands into ten seconds. Our minds literally race to cope with our ever increasing speed. And there is so much more capacity than you would ever believe possible. I know. I've been out there. Into the twilight zone. Some people might say I'm still there.

To write a book about oneself might seem a little self-indulgent, and I cannot deny that. But I *do* find myself fascinating, so I thought some of you might do, too. Think of it as a gift from me to you. For £19.99.



"This will be my 20th birthday since being reborn as an F1 champion. I'll celebrate by writing about my racing career"

Actually, I haven't got a publisher yet, so it might end up free on the internet. Would you like lots of luxury photos? Maybe I should do a Platinum Card Holders' version with a USB stick containing a special personalised message from me to the two of you? Let me know. I'll give a prize for the most insulting rejection.

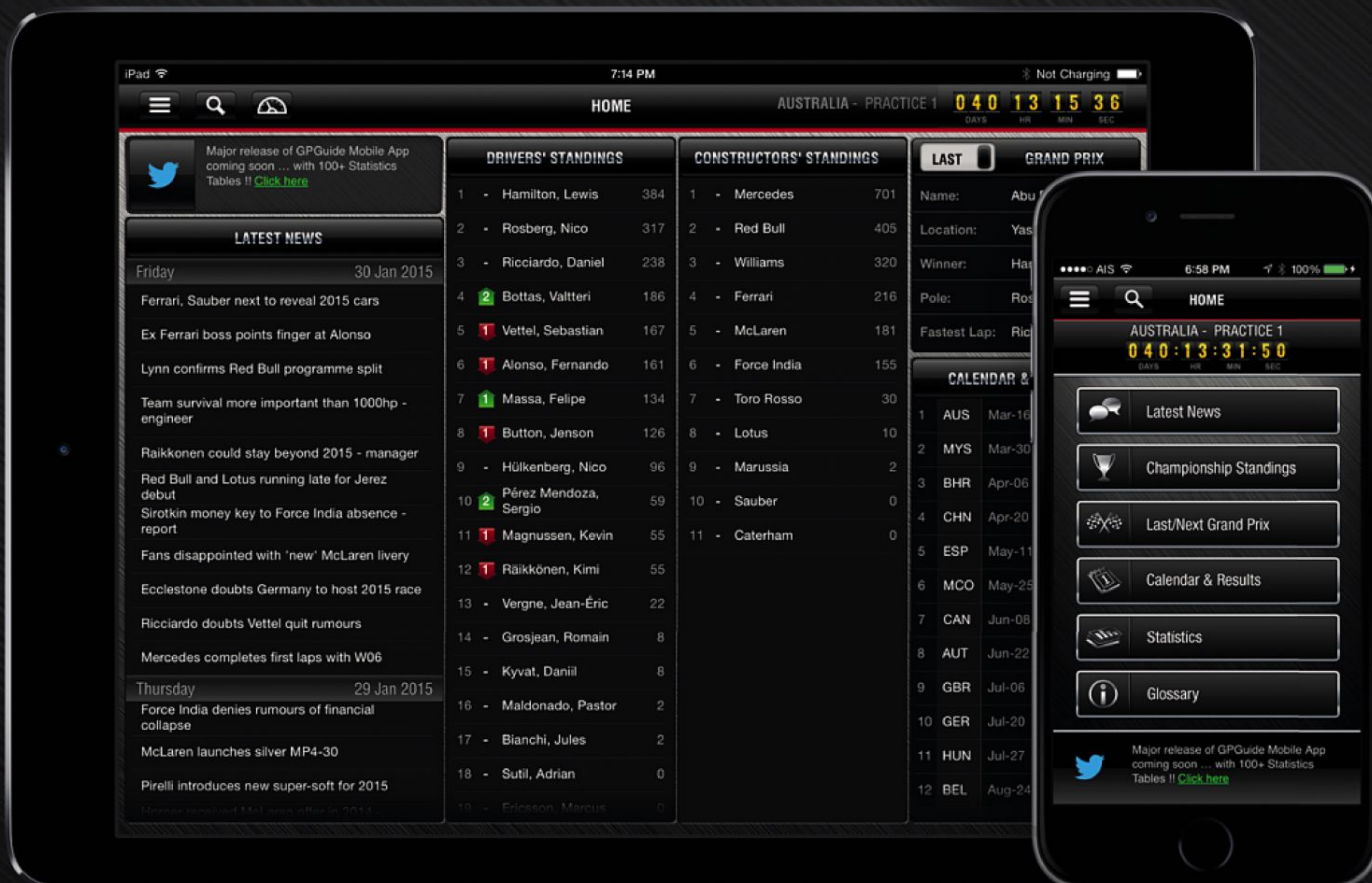
So, before we get stuck into F1 2016, if you liked this *hors d'oeuvre*, put a little aside for a Christmas present for your mum and dad. They might remember when we ruled the world and celebrated great victories together. Also, they are probably aching to know what *really* happened with Sir Frank Williams and what on earth possessed me to drive for Arrows. I'm still trying to find out myself.

Now, I promise never to mention my book again. Much. **F1**

"Don't get me wrong, I've come to enjoy our crazy sport, but it is a love/hate relationship"

GRAND PRIX GUIDE

INTERNET'S MOST IN-DEPTH FORMULA 1™ DATABASE IS NOW MOBILE !



"The most authoritative and certainly the best guide to Formula 1 data & statistics online."

- The New York Times

- **News:** Latest & most up-to-date global Formula 1 news
- **Season Summary:** Every season since 1950
- **World Championships:** Every Championship since 1950
- **Drivers:** 960+ Detailed profiles
- **Constructors:** 200+ Detailed profiles
- **Grands Prix:** 820+ Detailed results
- **Circuits:** 67+ Detailed profiles
- **Engines:** 85+ Manufacturer profiles
- **Tyres:** 9+ Manufacturer profiles
- **Statistics:** 150+ Dynamically updated tables

Available in SIX languages !



WWW.GPGUIDE.COM

Download on the
App Store



GPGuide.com and GPGuide Mobile Apps are exclusive products of RKadia Partners, Ltd.
Copyright © 2014 - All rights reserved
F1, FORMULA ONE, FORMULA 1, FIA FORMULA ONE WORLD CHAMPIONSHIP, GRAND PRIX
and related marks are trade marks of Formula One Licensing B.V.





DIETER RENCKEN

POWER PLAY

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

Picture a marriage entered into between a French-English couple in 2000, electing to go by the Gallic family name for historic reasons. Further imagine the former to be the *monsieur*, with the Briton being the female partner. Slightly convoluted, perhaps, but all becomes clear as matters unravel.

Despite the obvious cultural challenges, their union is generally happy and fruitful, with two children born a year apart, in 2005 then 2006, the result. Yet, after unsavoury nocturnal activities in an Asian capital, the marriage falters. Both go their own ways amid talk of huge settlements.

However, for the sake of the kids they remain enmeshed, although the lady soon falls into the arms of bourgeois Luxembourg entrepreneurs, while *monsieur* enters into a long-term-relationship with a wealthy, yet reclusive Austrian with lofty ambitions.

Although said long-term-relationship delivers four (petulant) offspring, the relationship deteriorates into acrimonious slanging matches, amid accusations of impotence and mutual lack of respect. The Austrian publicly flirts with German, Italian and Japanese would-be paramours, before opting for familiarity, albeit in what is best

Second time lucky for Renault-Enstone?

described as a marriage of convenience forced by mutual desperation rather than founded upon trust.

No children are born of our lady's Luxembourg liaison, though both partners experience occasional moments of euphoric, if expensive, joy – until, alas, impotence hits, splitting the couple amid serious financial issues. In the process various assets are forfeit, while fleeting infidelity – with a German suitor – blights the relationship.

Through it all, *monsieur* makes clear his intentions of entering into matrimony again, and sounds out potential partners – Italian, Swiss, and British of Indian extraction – before settling for his erstwhile ex, who is by now in dire financial straits. This on-off courtship is conducted in full public eye over many months, with their respective families not overly enamoured by the prospects.

Only after guarantees and securities are issued, does the intended re-marriage receive reluctant blessing, and then on the courtroom steps. Numerous caveats shrouded in antenuptial contracts suggest it to be far from a union of equals with *monsieur* making clear his reluctance to re-engage until a substantial, if deferred, dowry is provided by a godfather...

Even the most charitable marriage counsellor could be forgiven for expressing pessimism about such a union. Yet, in the run up to Christmas, Renault/Lotus announced

The proof of Renault CEO Carlos Ghosn's commitment will be the number of GPs he attends



their intentions under parallel circumstances, with their (re)marriage due to be consummated “in the shortest timeframe possible”, in the words of Renault CEO Carlos Ghosn.


In any marriage, success demands huge commitment from both parties. Despite platitudes to the contrary, F1 pays little more than lip service to cost control, with manufacturer budgets hitting close to £200m per annum, after off-setting premium shares of F1's earnings and blue-chip sponsorship.

And that sum would be on top of capital investment such as much-needed overhauls of plant and facilities. Both the Lotus factory in Enstone and the Renault facility in Viry-Châtillon are in need of substantial upgrading, with Enstone having had little in the way of investment since 2010. There is also a question of manpower: Mercedes and Ferrari currently operate their F1 operations on upward of 1,000 heads each. Renault? Around 750.

The rebuilding task is not, however, simply a matter of recruiting the first 300 technicians from the local Job Centre. Assembling a winning (and cohesive) team takes time, money and effort. Such has been the recent squeeze at Lotus that key positions were left vacant for years on end, with many of the team's brighter talents having left motorsport for good, so disillusioned had they become.

The question is not whether Renault can invest the requisite four Ms – Manpower, Money, Machines and Management – to halt the downward spiral, but whether the board will commit without guarantees of success, whether in the short, medium or long term.

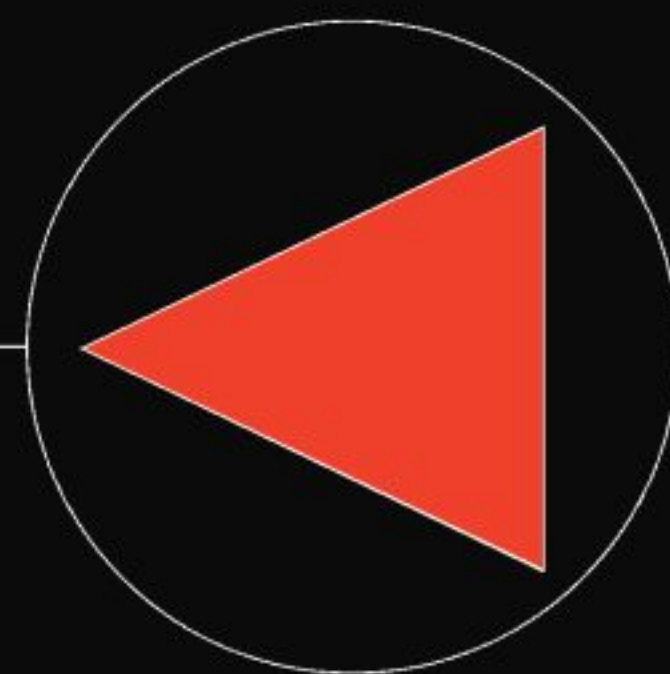
Forget not that in 2009, when Ghosn pulled the plug on Enstone to concentrate on F1 engine supply, he vowed to convert the F1 engine division from a ‘cost-’ to a ‘profit-’ centre. Clearly he failed, but such a mindset is difficult to shift.

The acid test will be whether he is present in Australia, and how many races he subsequently attends. In the past he was seen at just two – Monaco and Brazil – and such visits are an indicator of executive commitment. Mercedes boss Dieter Zetsche and Ferrari president Sergio Marchionne – F1 attendees both – have led the way, and it surely shows... 

“In any marriage, success demands huge commitment from both parties”

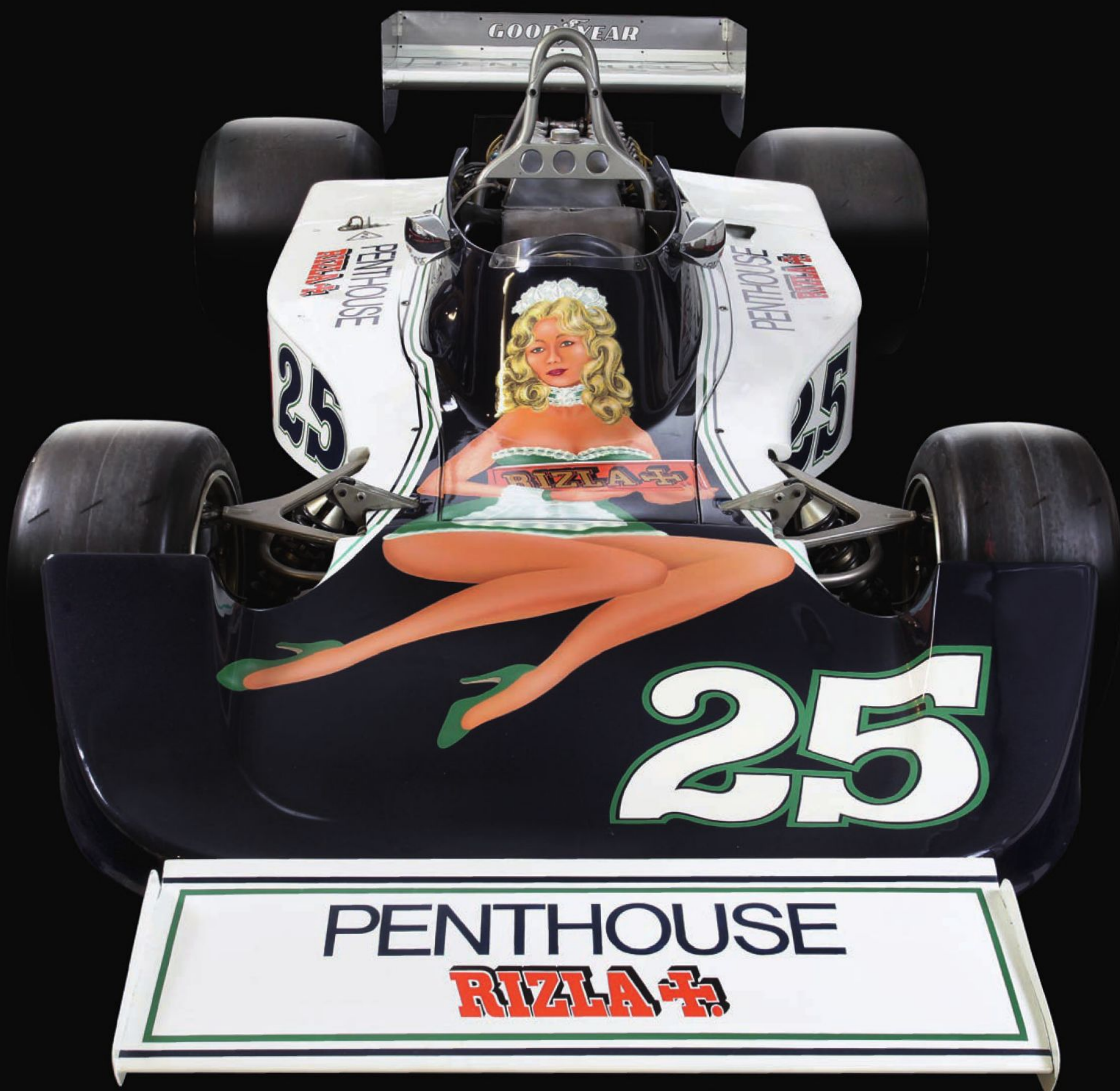
PORTRAIT: BENJAMIN WENCHENJE; PHOTO: SIPA PRESS/REX/SHUTTERSTOCK

Now that was a car



No. 47: The Hesketh 308

The good-time boys finally made good – with a race-winning car



WORDS STUART CODLING PICTURES JAMES MANN

Motor racing, and F1 in particular, were once the province of well-heeled gentlemen with money and time to spare. By the 1970s that had largely faded as sponsorship replaced private funding and a new generation of professional racers finally pushed out the gentry.

That was until 22-year-old Lord Alexander Fermor-Hesketh and Anthony 'Bubbles' Horsley met at a society 'do', discovered a mutual need for an adrenaline-fuelled occupation at weekends, and started a Formula 3 team. Horsley's talents did not extend to driving a racing car quickly, though, and after an unproductive tour of the racetracks in 1972 the duo sought a professional to occupy the cockpit.

That person arrived in the unlikely form of James Hunt, who came with good public school credentials – Wellington College – but also a reputation for contact that had earned him the sobriquet 'Hunt the Shunt'. In the final heat of the 1970 Daily Express Trophy at Crystal Palace, shown live on the BBC, Hunt had initiated a fracas with rival Dave Morgan after a collision at the final corner. The incident was fictionalised in the 2013 film *Rush*, with Niki Lauda replacing Morgan, Hunt driving for the not-yet-extant Hesketh and Cadwell Park standing in for the now barely recognisable Crystal Palace.

Hunt delivered on his reputation by driving quickly but then writing off the team's Surtees F2 car at Pau in 1973. Hesketh decided that the cost of F1 wouldn't be that much different from F2 – in for a penny, in for several hundred thousand pounds, you might say – and decided to move up to the top category. Fittingly – with Hesketh's yacht moored in the harbour – the team made their world championship debut at Monaco in 1973 with a March 731, buying not just the chassis but also

engineer Harvey Postlethwaite. By the end of the season, Hunt had established himself as a contender, placing second at Watkins Glen, a weekend marred by the death of François Cevert.

Postlethwaite had Hesketh's first bespoke chassis, the 308, ready for the third round of the 1974 season, but while Hunt won the Silverstone International Trophy race, he was less successful in grands prix, notching up a string of retirements before claiming podium finishes in Austria and at Watkins Glen. The 308 was a largely conventional design, but as Postlethwaite grew in confidence he explored new ideas, swapping the single front radiators for a pair of side-mounted ones, adding a wing to the nose, and (in the 308C used for the final two races of the year) fitting rubber cones instead of coil springs in the front suspension.

The 308B was an improvement: Hunt finished second in Argentina, the first race of the 1975, and led in Spain before crashing out. In the rain-delayed Dutch Grand Prix at Zandvoort, Hunt gambled on an early change to dry tyres and surged into the lead, holding off determined championship leader Niki Lauda over the final 15 laps.

It was the first and only world championship win for Hesketh Racing. By the end of the year, Lord Hesketh, unable to find sponsorship, had pulled the plug, although Horsley would continue racing under the Hesketh name while Hunt jumped ship to McLaren. Further updates to D- (pictured here) and E-specs followed from young engineers Nigel Stroud and Frank Dernie, but the most notable aspect of the car through 1976 and '77, before the team finally folded, was the prominent sponsorship of adult magazine *Penthouse*. **F1**



HESKETH 308 TECH SPEC

Chassis	Aluminium monocoque
Suspension	Independent via wishbones and coil springs
Engine	Ford Cosworth V8
Engine capacity	2,993cc
Power output	485bhp @ 10,600rpm (est)
Gearbox	Hewland 5-speed manual
Weight	590kg
Wheelbase	2,570mm
Tyres	Goodyear
Notable drivers	James Hunt, Harald Ertl, Guy Edwards





How Renault will win again

After an acrimonious end to their partnership with Red Bull, French car giant Renault are buying back the team they sold six years ago and rejoining F1 as a full works entry. And they're determined to learn from their past mistakes

WORDS
ANDREW BENSON
ILLUSTRATIONS
PETER CROWTHER



Six years after Renault decided team ownership in Formula 1 was not the way forward, the wheel has turned full circle. After a year of arguments and uncertainty, Renault took the plunge and committed to buying back what they had sold at the end of 2009.

The Enstone team, as many in F1 know the entity that has won four drivers' titles over the past 22 years in two guises (two for Fernando Alonso; two for Michael Schumacher), is once again a Renault works outfit, with all the benefits and pressures that brings.

Renault's decision to return has involved committing themselves to Formula 1 for longer than any other current competitor. The deal reached with F1 commercial boss Bernie Ecclestone will keep them in the sport until 2024 – four years beyond the contracts of any other team. That speaks of a huge commitment by Renault, but are they ready for it... and can they do what is necessary to turn around a team that has been starved of resources in the recent past?

WHAT ARE THE FIRST STEPS?

Asked what was needed to make Renault winners again, one insider quipped: "Another €300m a year." It was a joke, but it contained a fundamental truth. There is nothing wrong that a bit of capital investment couldn't solve.

Former owners Genii Capital allowed the team to wither as they spent two years trying to bring debts under control, putting in as little

extra money as possible as soon as they knew the Renault deal was in the offing.

As trackside operations director Alan Permane puts it: "Things have been difficult, but I personally am incredibly grateful to Genii for keeping us going for the past six years. On the chassis side, of course we have lost some good people over the past three or four years and recruitment has been slim. But we still have a strong core of people here and with Renault coming on board we are already talking about the key areas we need to strengthen. I am hopeful we can quickly build that up."

WHAT HAVE RENAULT ALREADY DONE?

A long road lies ahead, and it will be some time before Renault can look towards the championship success they enjoyed with Fernando Alonso a decade ago. Both the team and the engine department need an overhaul.

That engine department is the biggest problem area. The Red Bull works partnership fell apart largely due to Renault's failure to improve their turbo hybrid engine, and the 2015 season was an example of how far they have to go. Not only did they start the year with a worse engine than that with which they had finished 2014, but, after waiting 18 races for an upgrade, the 'improved' version turned out to be even worse than the one Red Bull were already using.

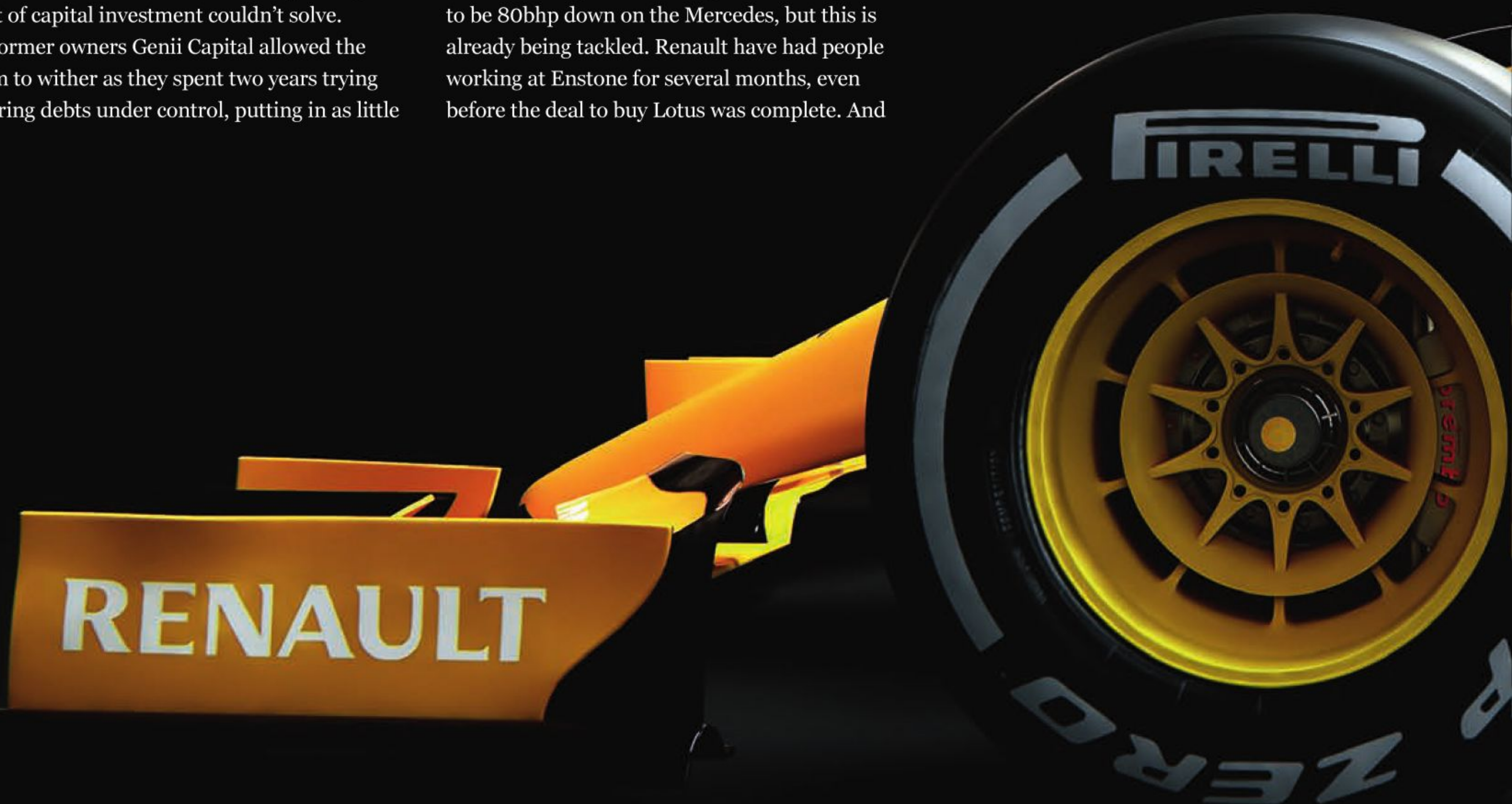
Following that failure, Renault finally acceded to Red Bull's demand that they use British company Ilmor to help develop the engine. And they certainly have their work cut out in trying to resolve the problems of a power unit reputed to be 80bhp down on the Mercedes, but this is already being tackled. Renault have had people working at Enstone for several months, even before the deal to buy Lotus was complete. And

Bob Bell, the highly respected former technical director of Mercedes, and before that Renault, has been re-hired and has been having meetings with Enstone staff since October. Once Bell's position is officially confirmed, he is expected to oversee the integration of chassis and engine departments, with the aim of making them work very much as one cohesive team again.

WHY DID RENAULT DECIDE TO COME BACK?

Of course, none of this would have been necessary had Renault remained involved in F1 as a team owner. Their decision to quit came at the same time that Mercedes made the opposite decision and bought Brawn GP. But it was made in the context of the fall-out from the 2008 Singapore GP race-fixing scandal and the global financial crisis that also led to the withdrawal of Honda, BMW and Toyota from F1, and Red Bull's increasing success as a main partner.

Six years on, the landscape has changed. Even while winning four consecutive drivers' and constructors' titles doubles with Red Bull, →



Cyril Abiteboul
Managing director of Renault Sport F1

Q&A

Why have Renault chosen to buy back a team they sold six years ago?

I will quote Bernie, who is very often quoting Colin Chapman: "Circumstances change." F1, the regulations, the world economy, and our experience, view and perspective of F1 have changed and evolved.

Why has it taken so long?

It was not an easy decision. It was complex and we had to deal with a painful season, and a number of factors, including 'Red Bull-gate', when we had to manage that relationship and the dynamic on engine supply.

Is the motivation marketing, or the belief that a manufacturer can only win with a works team?

It is a combination of those two aspects, but marketing drove the decision. We have been saying F1 represents a certain value for Renault, so the question was: are we capable of being in F1 successfully for that value? It is hard to be a successful engine supplier if you cannot control the full package and it was obvious that the customer-supplier model was going nowhere, so we tried to move Renault-Red Bull away from that model.



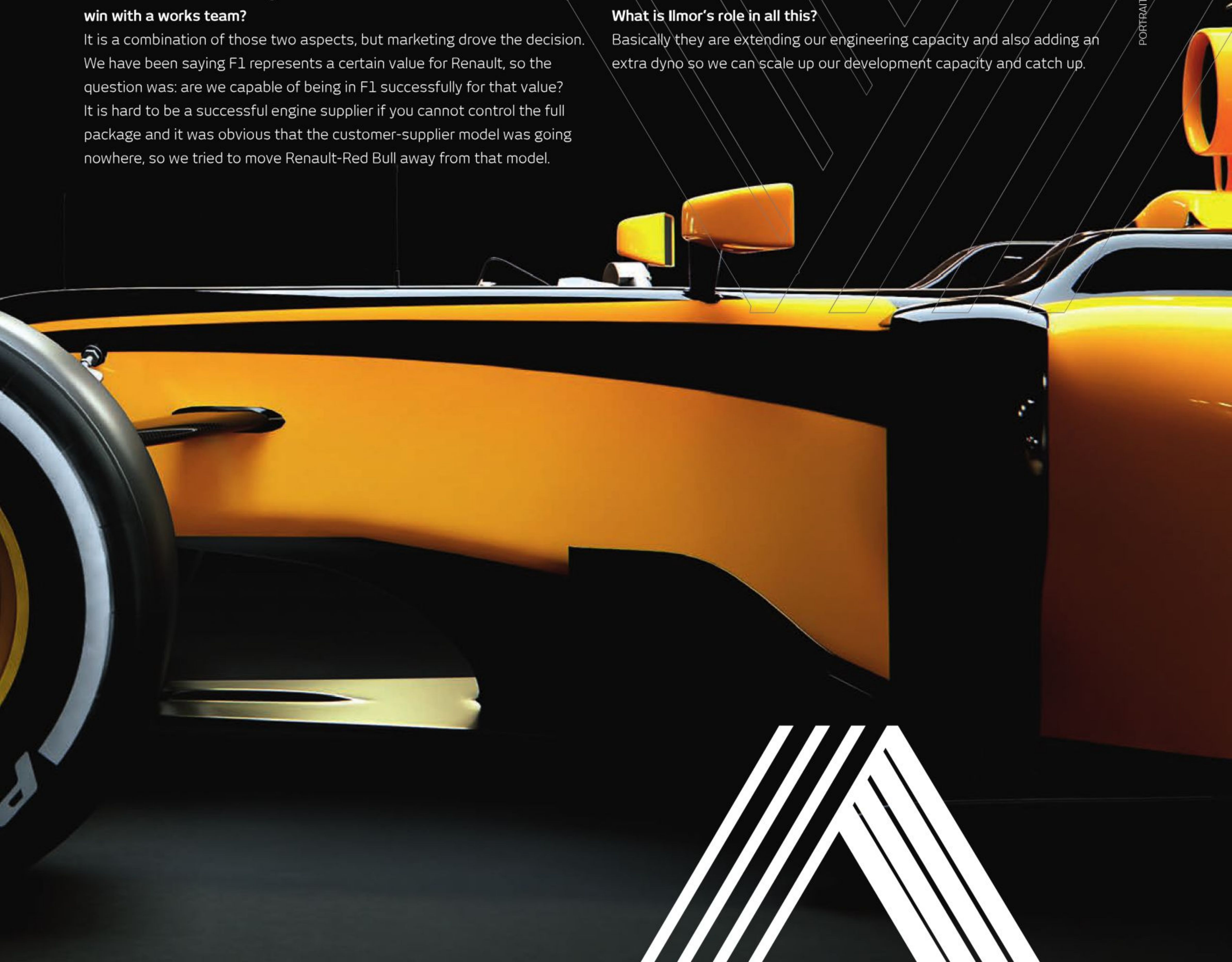
Therefore we had no choice but to explore our options, which were to get out of F1 completely or to come back with a complete works team that would allow us to put in place the holistic approach we were not able to implement with Red Bull.

How will you fix your problems with engine development?

The first thing is that we will have the luxury of more manoeuvrability in the budget. We have more than double, not quite triple, the overall budget we had before. And you can expect to see quite a lot of changes to the organisation and new roles created to bridge in a better way what we do on the chassis and engine sides.

What is Ilmor's role in all this?

Basically they are extending our engineering capacity and also adding an extra dyno so we can scale up our development capacity and catch up.



"We've lost some good people over the past few years. But we still have a strong core and with Renault coming on board we are already talking about key areas we need to strengthen" *Alan Permane*

Renault had already become concerned about the lack of exposure their success was garnering.

So by the end of 2013, they were already considering the right way forward for their F1 programme. Then, over the course of 2014, relations with Red Bull soured, and the conclusion that something needed to be done about it was reached at the end of that season. Red Bull's very public criticism of Renault, following a difficult start to 2015, confirmed it.

But what to do? Convinced of the marketing value of involvement in F1, Renault decided they

needed to make their presence more obvious, and take more control over both the programme itself and the message. The solution they came up with was to buy a team.

Lotus were already well known to Renault, and presented fewer negatives than the alternatives. Sauber and Toro Rosso suffered by not being in the UK, and therefore a long way from the heart of England's 'motorsport valley' and the advantages that offers in terms of knowledge, talent base, suppliers and so on. Force India, meanwhile, lacked the

infrastructure of Enstone – they do not have their own windtunnel, for example, and rent the former Toyota F1 windtunnel in Cologne.

But Lotus have their own problems. And these problems were deeper and harder to solve than Renault had expected.

WHY DID THE DEAL TAKE SO LONG?

Genii overreached themselves with Lotus. They set a budget they felt would guarantee an acceptable level of performance, and more than



achieved it in 2012-13. But they failed to raise the financial backing they believed they would; and concluded an ill-advised performance-based contract with Kimi Räikkönen for his return to Formula 1.

Genii owner Gerard Lopez committed to pay Räikkönen a basic salary of £5.8m, plus £36,000 per championship point. But when that deal was done at the end of a difficult 2011, Lopez had no idea that Räikkönen would finish third and fifth in the championship in 2012 and 2013, amassing 390 points in total. It added up

to £25.64m over two seasons – money the team simply did not have.

The result of these two issues was a series of shareholder loans to the team, and a huge debt, some of which was owed to the Inland Revenue. An agreement for all this to be settled had to be concluded with Renault before the deal could be finalised. Having this self-imposed deadline – and the threat of administration hanging over the team – put pressure on a situation that in an ideal world would not have been there.

Some measure of how long it took to sort it out can be understood by the fact that, since May, Lotus wanted to re-sign Pastor Maldonado for 2016, to guarantee the £20m that comes from his sponsors. But Renault prevented them from doing so, and not having that money was partly responsible for the financial problems that afflicted Lotus throughout 2015. The rest

was due to Lopez's refusal to put in any more funds than was absolutely necessary because he knew the Renault buyout was in the offing.

After months of rumours, the first public indication that funding was an issue was when Pirelli refused to give the team tyres until they were paid ahead of the Hungarian Grand Prix. Lotus raced in Belgium with bailiffs present, and were prevented from leaving the track for some days after the race until bills were settled.

At the Japanese GP, the team were locked out of their hospitality unit all weekend →



A BRIEF HISTORY OF ENSTONE

The Lotus chassis that competed in the 2015 F1 season was known as the 'E23' to represent the 23 years that a team – by whatever name – has been based in Enstone.

Back in 1992, Benetton (who began life as Toleman) moved from Whitney to the Whiteways Technical Centre a few miles north of Oxford. The same year, a young Michael Schumacher joined the team and within three seasons had sensationally claimed back-to-back drivers' – and the '95 constructors' – championships for Enstone.

At the end of the decade, Renault took over Benetton and in 2002 rebranded the team 'Renault F1'. Ten years on from their first title double, Fernando Alonso and Renault took back-to-back title doubles in 2005 and 2006.

At the end of 2009, Renault sold a 75 per cent stake in the team to the Genii Capital investment company (and the remaining 25 per cent a year later) and an alignment with Group Lotus began.

Kimi Räikkönen gave the 'Lotus F1 Team' two grand prix victories in 2012 and 2013, but the team fell on hard times and over the past two years financial problems have threatened their very existence. But Renault's return gives every hope of a return to past glories.



Renault's winning drivers

Renault's haul of 35 grands prix wins has been amassed by just six drivers. And almost half of those victories have been scored by Fernando Alonso...

FERNANDO ALONSO, 17 WINS

When Renault took over the ailing Benetton team in 2002, they had in their young driver programme the promising Fernando Alonso. He repaid their faith with victory at the 2003 Hungarian Grand Prix and, at 21, he became the youngest Formula 1 winner of all time, eclipsing Emerson Fittipaldi's 33-year record. He took a further seven wins in 2005 and seven more in 2006 en route to his second drivers' world championship. On his return to Renault in 2008 (after a disastrous year with McLaren) he scored two more wins, at Fuji, and controversially, at Singapore – from which the 'Crashgate' scandal erupted.



ALAIN PROST, NINE WINS

After making his Formula 1 debut with McLaren in 1979, Frenchman Alain Prost was hired by Renault to lead their world championship campaign. He took three wins in 1981, two in 1982 and four in his final year, just missing out on the title by two points to Brabham's Nelson Piquet after retiring with a mechanical problem in the final round in South Africa. He left Renault at the end of 1983 to win drivers' championships with McLaren in 1985, '86 and '89, although he did ultimately win a title with Renault, whose engine powered his Williams in his final year in F1 in 1993.



RENÉ ARNOUX, FOUR WINS

Arnoux's first two wins in his career came in the early part of 1980 and on both occasions he benefitted when his Renault team-mate Jean-Pierre Jabouille ran into trouble. In Brazil, Jabouille had a problem with his turbo and at the next round in Kyalami, it was a puncture. Arnoux didn't win again for two years, but when he did it was arguably his most notable victory – on home soil, from pole position – at Dijon. His most dominant Renault win came a few races later at Monza, when he denied the Ferraris of Patrick Tambay and polesitter Mario Andretti a home win.



JEAN-PIERRE JABOUILLE, TWO WINS

The Frenchman's win at Dijon in 1979 was significant for a number of reasons. It was Renault's first since they had entered the sport two years earlier. It also marked the first victory of a turbocharged car in the modern era and was a Frenchman's first home win since Jean-Pierre Wimille's triumph in 1948. But everyone who watched that race remembers only the dogfight between the second and third-placed cars of Gilles Villeneuve and René Arnoux (Gilles denied the 'Regie' a one-two on the last lap of the race). Jabouille's second Renault win came the following year at the Österreichring, when he just held off Alan Jones's Williams.



GIANCARLO FISICHELLA, TWO WINS

There was drama in the opening race of the 2005 Formula 1 season, when qualifying in Melbourne was hit by rain and pole position fell to Giancarlo Fisichella, who proved that the Renault could at last challenge the hitherto all-dominant Ferrari team. On race day, his nearest challenger, Jarno Trulli (Toyota), drifted away from the lead, leaving Fisichella in a clear run for victory. His second win came a year later, in the heat of Malaysia when he was able to nurse his tyres better than the rest of the field to take a surprise win.



JARNO TRULLI, ONE WIN

The Italian took a solitary victory for Renault, which also happened to be the only win of his F1 career. In 2004 Michael Schumacher was dominating in his Ferrari, so Trulli lucked in when Schumacher was hit in the Monaco tunnel by Juan Pablo Montoya while the pair were circulating behind the Safety Car (which had been deployed after Trulli's team-mate Alonso had crashed). To be fair to Trulli, he did put his Renault on pole, but the performance wasn't enough for team boss Flavio Briatore to extend Trulli's contract beyond 2004. **James Roberts**



because the bills from the previous year had not been paid, while the mechanics were fed by Bernie Ecclestone's Paddock Club. In a similar incident, the team's freight was not released for two days over the Abu Dhabi GP weekend.

For a while, Lotus existed hand-to-mouth on piecemeal sponsorship deals and advances on their prize money. Eventually, with the Renault deal dragging on and doubt still swirling around the team, Genii management went ahead and signed Maldonado anyway, announcing the deal on Sunday night after the Singapore Grand Prix. Renault were also not keen on the signing of rookie driver Jolyon Palmer but this deal, too, was sealed regardless: again for an up-front payment, again to shore up the finances.

By the end of September, negotiations between Renault and Lotus over the terms of the sale, including the debt repayment schedule, were complete, but the deal was held up by a dispute with Bernie Ecclestone over prize money.

Renault were demanding recognition of their 38-year involvement in F1, with many wins and titles from two periods as a constructor, from 1977-85 and 2002-9, separated by periods as an



engine supplier. But Ecclestone was driving a hard bargain, and the situation was complicated by the concurrent saga over Red Bull's engine supply. Never mind that the situation was self-inflicted, Ecclestone was keen to ensure Red Bull had an engine and was wrapping that issue into his talks with Renault.

By mid-November, a deal had been agreed, only for it to collapse on the eve of the final race of the season. Ecclestone had gone back to Renault and offered a lower figure, with sources close to him saying that this was related to an issue concerning the Red Bull deal. The stand-off concerned the \$100m prize money due to Renault over the nine-year term of the contract. Renault also weren't happy about moves by Ecclestone and FIA president Jean Todt to try to introduce a cheap, alternative engine into F1.

Renault have long been major supporters of hybrid engines in F1. They were instrumental in getting the current formula adopted. So to be faced at the same time with a move to ditch them, largely as a political power-play to reduce the influence of the manufacturers in decision-making, did not go down well.

It was bad timing. With the Renault board set to decide whether to commit what is likely to be billions to the sport over a decade, these difficulties were a reminder of the sometimes questionable ways in which F1 works behind the scenes at just the wrong moment.

In the end, all parties pulled back from the brink. The alternative engine was rejected in a meeting of the F1 Commission the week before Abu Dhabi, and McLaren chairman Ron Dennis intervened on Renault's behalf.

Dennis launched a tirade at Ecclestone and chairman of commercial rights holders CVC Capital Partners, Donald Mackenzie, telling them to "Pay the f***ing money." Talking to the media in Abu Dhabi, Dennis said the situation was "precarious; someone had to step up to the plate and get a sense of reality".

It had the desired effect. By race morning in Abu Dhabi, the prize-money deal was done and Renault committed to buying Lotus.

That, though, is just the start.

SO WHAT NOW?

Renault are braced for a holding year in 2016, with a car designed by a team starved of resources and adapted at the last minute to run an engine that will be uncompetitive, and with a less-than-stellar driver line-up.

"We know 2016 is going to be a tricky year, a transitional year if you like," says Permane. "It is no secret that this is a car designed initially

for a Mercedes engine that will now have a Renault in it. So the car is not going to be where we want it to be. But we will quickly overcome those problems. This year is about building our relationships back up. With the new rules for 2017, that's when we need to start making ourselves much more competitive."

Permane expects Jolyon Palmer to "go well"; even so, the erratic Maldonado and an unproven rookie is no one's dream team for a car manufacturer's return to F1. Sooner or later, this will need to be addressed. It will likely take at least two years before Renault are rebuilt into a semblance of a competitive position. That takes us to the end of 2017 when, coincidentally, Alonso's McLaren-Honda contract expires.

Alonso will be 36 by then, but he is still held in high regard by senior figures at Enstone, who remember him from the glory years of 2005-06. Could Renault be tempted to bring back Alonso and reconstitute a formula of proven success? They will need someone like him if they want to win a title against Lewis Hamilton in a Mercedes and Sebastian Vettel in a Ferrari.

Right now, Renault would be a tough sell to an Alonso or a Daniel Ricciardo. The hacked-together 2016 car is likely to struggle to get out of Q1 at the start of 2016. But after two years of sorting out the problems at Viry, of rebuilding Enstone into what it once was and could easily be again, the sky could be the limit.

Renault are one of the great names of the modern era of F1, run by a proud and determined chief executive in Carlos Ghosn, who has committed them to the sport for the best part of the next decade. In that context, sooner or later, they surely must win again. **F1**



"It is no secret that the 2016 car is a car designed initially for a Mercedes engine that will now have a Renault in it" **Alan Permane**

GO

FIGURE

All the numbers behind Renault's much anticipated return to F1 as a works team

FOUR

The number of F1 championships Renault have won: two drivers' titles and two constructors'

1977

The year Renault made their F1 debut as a constructor, at the British Grand Prix

TWENTY

The number of drivers who have raced for Renault so far in Formula 1

2,398,555

road cars were made by Renault in 2014

23 YEARS

since a Formula 1 team (Benetton) first used the facility at Enstone

48.57%

of Renault wins in F1 (17 out of 35) have been achieved by Fernando Alonso

1

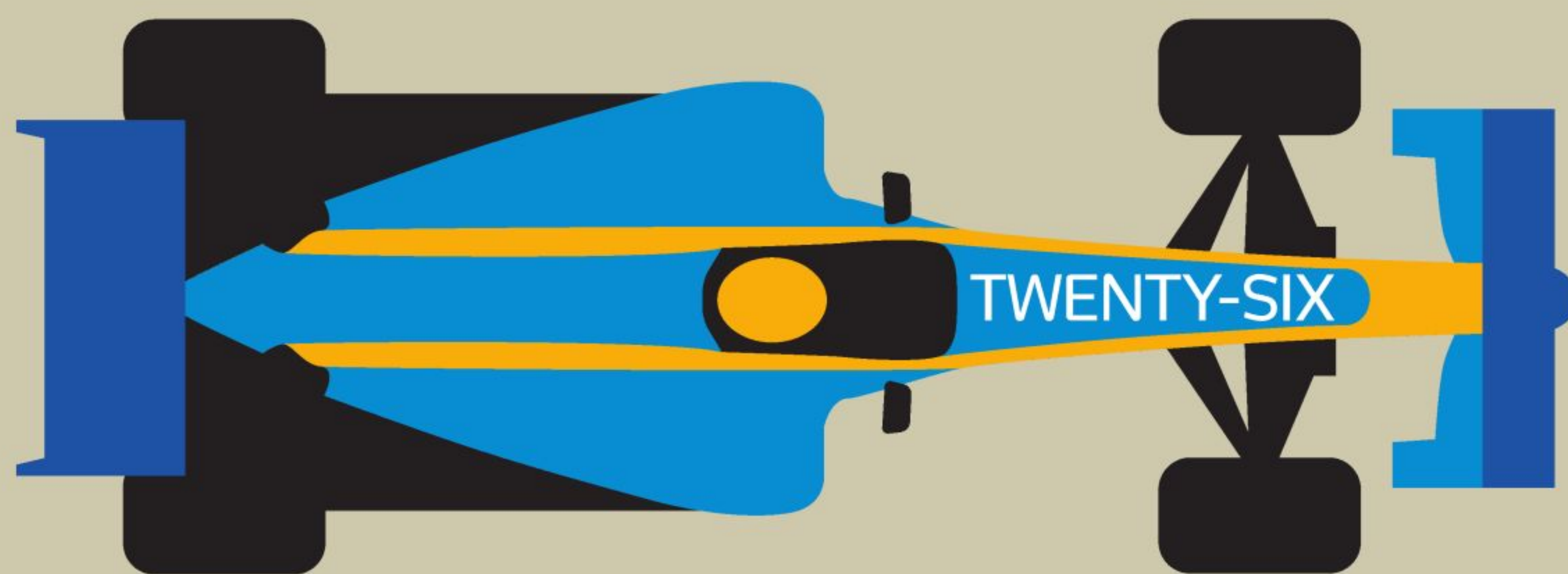
The address on the Avenue du Président Kennedy of the Renault F1 Sport headquarters at Viry-Châtillon

THREE HUNDRED RACES

have been started by Renault as a works team

1688
WINS

in Formula 1, in total, by Renault as an engine manufacturer



The R26 of 2006 is the most successful Renault F1 car, with eight wins, 11 other podiums and that year's drivers' and constructors' titles



from the team base at Enstone to Renault Sport's F1 engine facility at Viry-Châtillon

19
SEASONS

Renault has been an entrant in F1 from 1977-1985 and 2002-2011

1,318

Renault's points tally as an F1 team

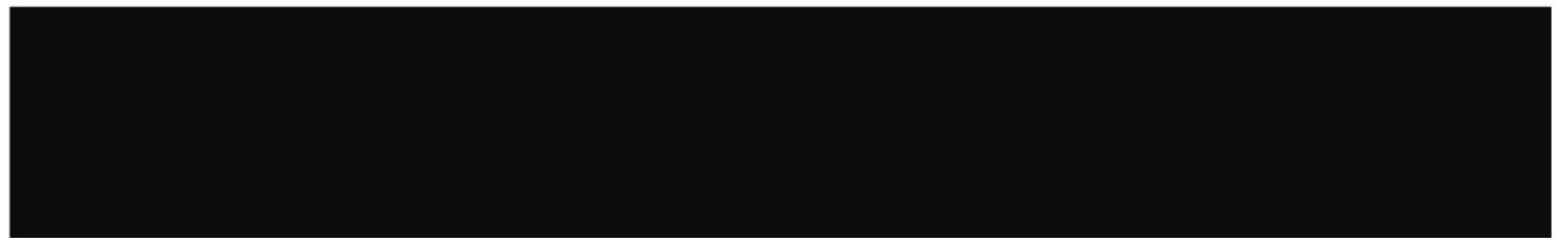
111 DEGREES

the angle of the V10 engine Renault used to re-enter F1 as a works team in 2002



CHRISTIAN HORNER

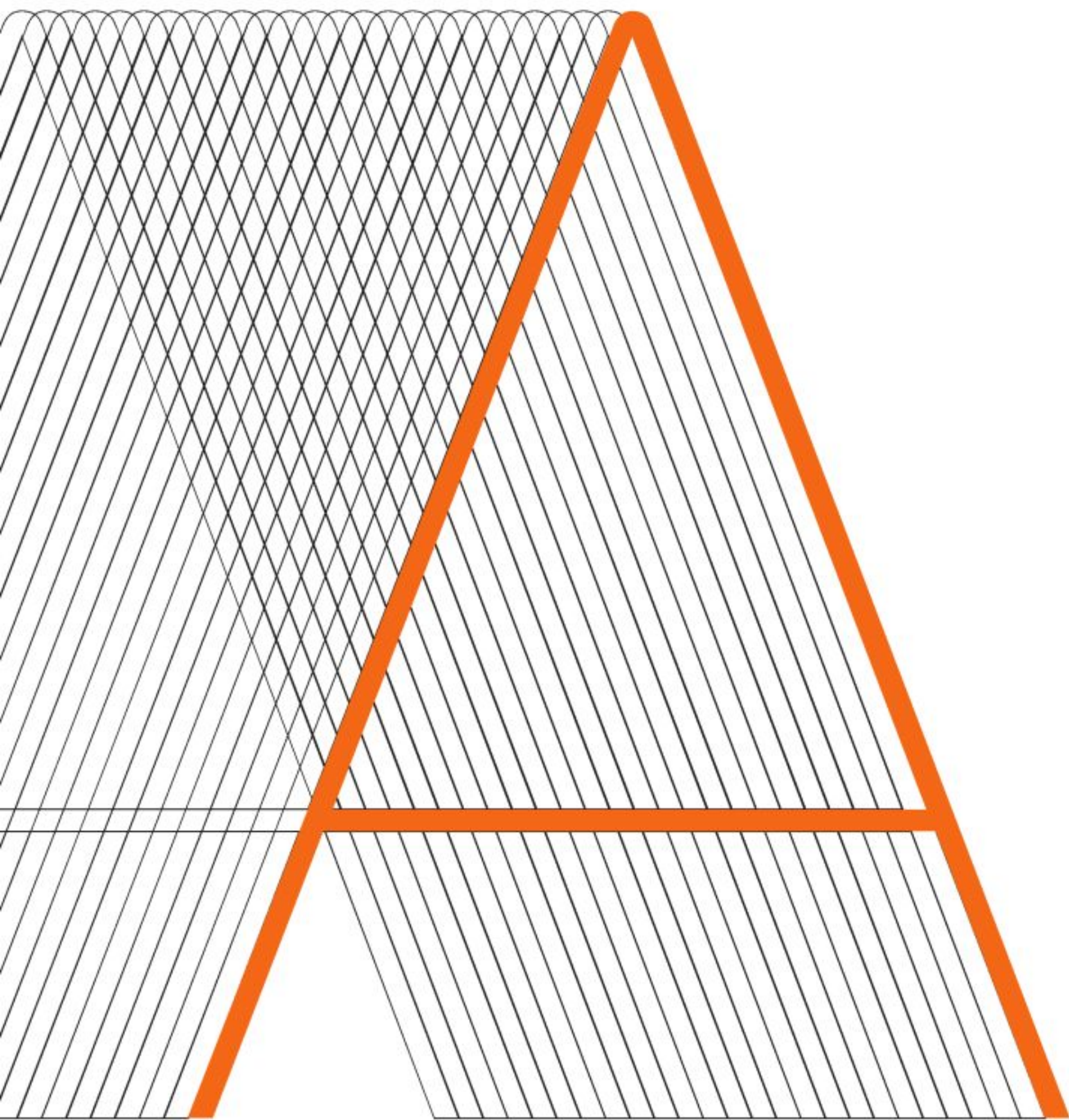
THE
LONG
INTERVIEW



WORDS ANTHONY ROWLINSON
PORTRAITS GLENN DUNBAR/LAT

Resurrecting one of *F1 Racing's* cherished regular features, we get up close and personal with Red Bull Racing boss Christian Horner, to talk over two of the toughest seasons of his racing life. And his verdict?

"You have to
lead from
the front"



dust-up with security at one of Abu Dhabi's swishest hotels. "No pictures!" says the heavy, who's just clocked photographer Glenn Dunbar's lights-and-tripod setup, carefully arranged to create the images you see on these pages.

Our man (dark shades, dark suit, no smile) is clearly not biddable, so we use that old F1 trick: a flash of the hard card and the off-loading of a few 'name-drop' bombs. "This shoot is with a Formula 1 team boss – Christian Horner. You know, he's in charge of Red Bull. Abu Dhabi Grand Prix? Formula 1? Bernie Ecclestone?"

A crack in the edifice. A mumble into the wrist-mounted comms-link.

The hotel chain's head of marketing, no less, is summoned, and, a few honeyed sentences later, we're granted permission to continue going about our business. And not before time, for just as our hosts depart to deal with other matters of import, Mr Horner arrives, hot-foot from the Yas Marina paddock.

It's two years almost to the day since we last had proper, on-the-record face time with Christian, and in a reflective moment before we begin our interview, he notes how quickly things can change – even as they appear to stay the same.

He is still, of course, team principal of Red Bull Racing, which remains one of the most powerful competitive and political forces in the sport, regardless of 2015's engine-partner travails. His paymasters continue to bankroll two slick, competitive and colourful Formula 1 teams, along with their own home grand prix at the Red Bull Ring in Austria. Adrian Newey still heads up the RBR design brains trust; Renault still provide the motive force; an Australian continues to occupy one of their race seats.

All of these constituent parts were in place at the end of 2013, when Christian and co were able to reflect on jobs exceedingly well done over the previous four seasons: between 2010 and 2013, Red Bull and Sebastian Vettel notched up four constructors' and drivers' title doubles.

How things have changed. A slip to fourth in last year's constructors' chase, with only three podium finishes

(in 2014 they were second, with three wins); no Vettel out front, and a Renault power unit that not only lacked where it mattered – under the drivers' right feet – but also proved so unreliable and uncompetitive that it created a rancorous schism between team and supplier. Red Bull overlord Dietrich Mateschitz even came close to quitting F1.

Quite a bit, then, to manage, for a team boss who's hard-wired to be as competitive and as shrewd as they come in the practice of F1's political dark arts. Over a mocktail (mine) and a cranberry juice (his), Christian opens up on how it's all been, since '13.

F1 Racing: Has this been the hardest year of your life in racing?

Christian Horner: It's been challenging, but in a different way. When you're running at the front it's challenging because you've got the pressure of staying there. There are the challenges of getting into a competitive situation in the first place. I'd say 2015 has probably been one of the most frustrating years, but not the most challenging.

F1R: How would you define the difference between 'challenging' and 'frustrating'?

CH: 'Challenging' is things you can control; 'frustrating' is the things you can't. I think that's been a large element of this year. Certain things have been beyond my control, or the team's control, such as power units, which have obviously

dominated our season on- and off- track this year.

Not half they have. Few would have expected things to disintegrate so far, so fast between partners who carried all before them for four seasons.

What became clear over 2014-15 is that Renault dramatically underestimated

**Mocktail hour:
F1 Racing sits down
for a face-to-face chat
with Red Bull team
principal Christian
Horner for the first
time in two years**



“The important thing is we have a solution to be on the grid for 2016, because at one stage it looked as if that wouldn't be the case”

the resource Mercedes were prepared to bring to F1 in their own quest for title glory as a 'works' entrant. Renault, still wedded to working practices and funding that had proved successful only under the shelter of stable V10 and V8 engine regulations, could do no more than look on, breathless, as Merc changed the game. Nonetheless, it's with a Mario Ilien-modded, TAG Heuer-badged Renault PU that Red Bull must compete in 2016, although for 2017 all bets are off. Thus, we're aware that we're about to tread on sensitive ground.

F1R: Your engine deal for 2016 is resolved... isn't it?

CH: We've got an agreement in place for next year. *[Christian is speaking just before the TAG deal is announced. At the time of this interview, the Thursday of the Abu Dhabi GP weekend, the final details of Renault's F1 involvement were still being thrashed out, culminating in a heated paddock showdown on the morning of race day.]* The important thing is we have a solution to be on the grid for 2016, because at one stage it looked as if that wouldn't be the case.

F1R: That was as recently as September 2015?

CH: Yes.

F1R: So it was true that the team might have not raced in 2016?

CH: Absolutely – 100 per cent.

F1R: So how much of a 'sell' did you have to do to Dietrich Mateschitz [Red Bull's billionaire founder-owner] to say: "Look, this is a tricky time but you need to be in F1"? *[Mateschitz, despite being a motorsport fan, whose first sponsored athlete was Austrian F1 driver Gerhard Berger, is famously ruthless in terminating business ventures that have ceased to align with the wider interests of the Red Bull brand.]*

CH: He's obviously been frustrated by the politics that surround Formula 1, and earlier in the year became fairly disillusioned with what was playing out. *[Mateschitz believed he'd shaken hands with Mercedes F1's non-executive*

chairman Niki Lauda on a future engine supply deal – only to see it evaporate.] But beneath it all, Dietrich is a racer and he is passionate about this sport. You've only got to look at what he has invested in his two teams, the sport in general and all the drivers he has backed and supported, to recognise that this is much more than just a commercial exercise. It is the passion of an individual. He recognises that this has been a tough period for the team, and he is trying to help find a solution for the medium and long-term future as well.

F1R: What timeframe do 'medium-' and 'long-term' encompass?

CH: I'd say 'medium-term' is the next three to four years, and 'long-term' is five years and beyond.

F1R: That's 2020 and beyond?

CH: Yes.

F1R: So to confirm, from your point of view, Mateschitz sees Red Bull in Formula 1 beyond 2020, when the team's existing financial arrangements with Formula One Management cease?

CH: You can never say never, it depends on what direction the sport takes. But as long as things move in the right direction and Formula 1 remains credible and viable, then I don't see any reason why not.

F1R: What is the 'right direction'? How do you define that?

CH: First of all you've got to remove that remit from the teams, as they will look to protect their own interests. We are competitive animals and teams will try to protect the areas of strength that they perceive they have. I think that's really where it is the job of the owners and the promoters of the sport to decide what they want Formula 1 to be.

My personal feeling is that Formula 1 needs to be entertainment; it needs to be a show. It needs to be man and machine at the absolute limit. It needs to be enthralling, engaging and accessible – and it shouldn't be dominated by the politics of off-track activities. →

Rising star: Seb Vettel makes an early appearance on the cover of F1 Racing in February 2009, before his four-year domination of F1 commenced





F1R: Has F1 shifted too far from these aspects you identify?

CH: I think so. I think we're seeing teams that are really struggling financially, with probably half the grid insolvent at the moment. We've got a situation where we've got one car capable of doing all the serial winning over a long period of time. People will say that Red Bull did that, but we never did it to the extent we've seen in the past two years. Two of our four championships went down to the last race. In 2012 we had seven different winners in the first seven races, and Sebastian had won only one race by the time we left Europe. I think the performance differentiator that a power unit currently represents is too great between the best to the worst. No one wants to see Fernando Alonso at the back of the grid. McLaren are a great team, but they shouldn't be as far back as they are. I think it is in the sport's interest to see the group concertina up, so we see fights between the Ricciardos, the Vettels, the Hamiltons and the Alonsos. I think that is what the sport needs. If you're the promoter of it then that's what you would want to see.

Read between the lines here and you'll see that Horner would like F1 to be revamped, particularly in terms of its on-track offering, but – canny operator that he is – he stops short of criticising the sport's incumbent masters.

F1R: You mention McLaren needing to get back to being front-runners, as they were in 2005, when you entered F1. But isn't F1 all about highs and lows, as you're experiencing? You came in, immediately took the team on from where they had been [as Jaguar Racing] in 2004; then there were a few seasons of gradual gain before four years of great success. Last year was tricky, this year has been worse than 2014. What's it like being on that roller coaster?

CH: It's tough, because in the beginning you're striving and believing you can get there. You're working flat-out to put the pieces in place, and it took all of 2005, '06 and '07 to get the basics of the team and the infrastructure in place. So when the new regulations came about during 2008 for the 2009 season – in 2008 we'd produced a reasonable car under the existing regulations, but then the 2009 year was a blank canvas – that was a chance for the team to show what we were capable of.

As a team we were still quite immature, but suddenly we had a car capable of winning. Of course there were all the politics off-track with FOTA and FOM and double-diffusers. But we focused on building the team and by 2010 were in a position to capitalise on that hard work, winning the title and then defending it repeatedly for another three years – and with each year came more and more pressure.

There was never any expectation of turning up to the race, bagging pole and walking away with the win. I don't ever remember attending a grand prix with that expectation. Then, of course, the big regulation change came for 2014.

We had a very competitive 2013 [a title double and an incredible winning margin of 236 points over Mercedes],

and you start to get used to your drivers being in the press conference at the end of qualifying, or being on the podium at the end of the race, and then suddenly that wasn't the case any more. You have to mentally readjust and it is very easy to let motivation wane at a time like that. But having tasted that success and worked so hard to get there we remained absolutely focused. Mercedes did a great job with their power unit in terms of the new regs, but in 2014, on the days when they screwed up we were there to capitalise, through good strategy. The rest of the power units – the Ferrari and the Renault – were relatively evenly matched. The problem we faced going into 2015, having won three grands prix in 2014, was that an awful lot of promises were made about narrowing the gap to Mercedes in 2015.

F1R: From Renault?

CH: From Renault, and therefore expectations were raised. When you are a competitive team who want to compete to win, that's what you're pushing for. So of course when that didn't happen, frustration sets in. From frustration comes annoyance, because at the end of the day we are all competitive people. This year has been really challenging, because the power unit is not something we've had any control over. We had some issues with the car at the start of the year that we managed to engineer our way out of. We developed it and demonstrated that actually we've got a very fine chassis. You could see that in the middle sector at Spa for example, or the races in Hungary, Singapore and Monaco. Wherever power wasn't a key factor.

F1R: Like Texas when it was wet?

CH: Texas when it was wet, yes, certainly – you saw Daniel Ricciardo take the lead there. It was probably the only time that Lewis Hamilton was overtaken all year! They were reassuring moments, which demonstrated that we'd definitely still got it and that the car was still competitive. We just needed to get ourselves into a more competitive position with the power unit.

F1R: So, when you go through patches such as the 2015 summer break, when it was all quite sticky for Red Bull, with hard words being written by various media outlets, what was that like for you? What sort of conversations do you have with the guys you lead? Do you have to stand up in the factory and say 'we've got to make this right'? How do you deal with that and how do you deal with the wider Red Bull question, being part of a global brand that has its own marketing expectations beyond Formula 1? That must be a complicating factor, because on the one side they are an amazing backer, but equally they're a very demanding company to satisfy...

CH: So much of the world that we live in today seems to happen on social media and on the internet. So much speculation exists... and of course it's an interesting story when there is nothing going on in Formula 1, this whole →

The sharp exit:
We interviewed Mark Webber in October 2013 about his retirement from F1. Webber wrote strong words about his departure in his autobiography, but Horner insists there is no ill feeling



engine scenario and the uncertainty surrounding Red Bull and whether they would pull out or stay in.

The 750-odd members of our staff all read that and of course it's unsettling for everyone. But right from the start, it has always been a matter of communicating, getting the group together and saying: "These are the things we can control and these are the things we can't. Let's concentrate on the things we can control and be the best that we can, and the rest will take care of itself."

We've had a very low turnover in staff and the group have really knuckled down into developing this car and turning it into a podium-achieving car. It's been a tough experience for the team, but adversity brings a team closer together. It's my job to bring the group together and keep them focused on the things they should be focused on.

F1R: Do you find yourself going home and thinking to yourself: 'How will I do this, how do I lead the team, what do I tell them?'

CH: No, I never do that, because I react to situations as they happen. I think that if you doubt yourself in moments of toughness then in this business you don't last that long. I've never had any doubt that we won't be on the grid in 2016. I've always relayed that to all of the staff and in my mind I absolutely believe that. How to achieve that has not always been absolutely clear to me, but I've known that it will be achieved and that we will be there and we will get ourselves into a better position. I think when you're in a position of responsibility and people are looking up to you then you have to lead from the front.

F1R: So when you were thinking that you'd be in Formula 1 in 2016 come what may, did you ever consider that might have to be without Red Bull?

CH: No, because I didn't have any doubt that despite Dietrich's frustration with the situation, when push came to shove there was too much invested in the team, in the people, and by him personally. If he had decided to pull out then we'd have looked at that and dealt with that. You deal with what you can – with the now, rather than thinking about tomorrows that might never happen.

F1R: Did 'Christian Horner Racing' cross your mind, like, say, Brawn GP in 2009?

CH: No. People wrote about it, but no, my pure goal was to convince the group that it was right to stay in Formula 1.

F1R: 'The group' as in the Red Bull group?

CH: Yes.

F1R: Did the group take a lot of convincing? Was it a hard sell?

CH: At times, yes, and I think that is where Helmut [Marko, Red Bull motorsport adviser] played an important role because he is particularly close to Dietrich. Bernie played a key role in that as well, as he desperately doesn't want to lose

Dream team: By the time they appeared on our January 2014 front cover, Red Bull were firmly established as the force to be reckoned with in F1, with four consecutive championship doubles



Red Bull. I think in terms of promoting Formula 1, Red Bull does more than any other team. In terms of running show cars and driver promotions and so on, we are very, very active globally with promoting the sport.

F1R: Did you ever think: 'This is all just a bit too difficult; I might go off and do something else?'

CH: Not for one minute! It's a bit like a game of chess – trying to work out which is the right move. It's been a complicated year, but what's been interesting – and you have to take it as a back-handed compliment, which is something I've told the staff on numerous occasions – is how much fear and paranoia seems to exist about Red Bull among our opponents. To generate that kind of paranoia from our major opposition only demonstrates how strong this team must be.

F1R: One leading F1 journalist described you last year as an "aggressively competitive" team. Is that a fair description?

CH: It's an interesting way of putting it. If you want to be successful in life, or sport, then you've got to push, otherwise you're happy just to be there and take part. That's not what I'm about. That's not what Red Bull are about. That's not why we've won 50 grands prix and eight world championships. I don't think Frank Williams is like that; I don't think Ron Dennis is like that. People have different ways of conducting their business, but if you want to be successful, not just in this sport but in any sport, then you've got to push. You've got to push the boundaries.

F1R: So which boundaries will Red Bull be pushing next year?

CH: We're probably set for quite a challenging first quarter in 2016, but then with each new power unit, the situation should improve. That clearly and realistically has to be the goal.

F1R: You've done quite well commercially recently, haven't you? Signing TAG Heuer, for example, and Puma...

CH: We've signed some interesting new partnerships and some great brands, yes – TAG Heuer being one of them. We've also renewed many of our existing partnerships. The team has a real attraction and appeal, and to attract brands such as TAG, who have been synonymous with McLaren for so many years, demonstrates the commercial value that Red Bull hold, even after such a difficult year. People believe in the future. Yes we've been down this year, but we will be back – it's only a matter of time.

F1R: Do you think that your facilities in Milton Keynes limit you in any way? [Red Bull's collection of utilitarian factory units on an out-of-town industrial estate are a far cry from the glitzy architectural fanfare of McLaren's Technology Centre]

CH: Not at all. They might not be in the shiniest of buildings, but it's about what's inside, not what the buildings look like. We could do with a bigger car park and a better canteen, but the rest of it... there's nothing that is holding us back.

“I encouraged Niki Lauda to sign Lewis, to weaken McLaren – not envisaging that Mercedes would become the absolute powerhouse they are today”

F1R: You come across as pretty good-humoured most of the time, and you usually give a good account of yourself in terms of banter on television when you're being interviewed. How do you manage that?

CH: You've got to take a view on a certain situation. I'm not the type of person who bawls and screams. I'll weigh up a situation and deal with it accordingly. There are certain things that you can control and certain things that you can't. The things that you can't... well, there's no point stressing yourself out over them because getting stressed and wound up isn't going to be a good use of my time, and ultimately it's not going to achieve anything. So again, it's all about focusing on the things you can affect and control. Life is too short to become totally obsessed over something. In a lot of situations you'll be able to find an ironic humour – even when you print a cover with no f*cking wheels on the car! *[Mr Horner, bless him, is referring to the August 2015 edition of F1 Racing, which featured an RB11, sans wheels, jacked up on bricks as the main image, under the coverline: 'How the wheels fell off Red Bull'. It led to, shall we say, a robust exchange of views – now amicably resolved...]*

F1R: Do you ever think about life ten years down the line? Will you be doing the same job, do you think? Or a version of this job, perhaps representing the sport in a wider way?

CH: Honestly, I really enjoy what I'm doing here, although the challenges of Formula 1 can be extremely demanding because you find yourself being judged every two weeks. I have a real affinity and commitment to this team, and I'm not thinking... *[He tails off momentarily, perhaps casting his mind to a secretly envisioned future existence...]* I mean, who knows what Formula 1 will look like in three, four, five, ten years' time?

F1R: Do you think that Red Bull might end up buying the commercial rights to Formula 1?

CH: I doubt it. I'd never say never, but I'd be very surprised.

Fresh blood: Toro Rosso's Daniel Ricciardo is promoted to the top team in 2014, appears on our front cover in August, and outscores his quadruple-champ team-mate Sebastian Vettel 238-167



F1R: Mateschitz quite likes owning things, though: two F1 teams, a race track, The Red Bull Air Race, Hangar-7 at Salzburg airport, a major commercial interest in the World Rally Championship

CH: I'd say that he likes creating things, like the Air Race. They're all interesting entities. And of course we've got Red Bull TV coming next year, which is a massive thing.

F1R: Mark Webber wrote a few spiky things about you in his autobiography, which was published recently. Did you read that?

CH: To be honest, I haven't read Mark's book. Inevitably he's going to have an opinion, and that will of course be whatever he perceives. Reality is sometimes quite different to perception but I was really pleased for him, to see him become a world champion in sportscars, and I have no ill feeling towards Mark. I wish him the best of luck for the future.

F1R: Do you remember back in Canada in 2011 when Lewis [Hamilton, then driving for McLaren, but growing increasingly disillusioned about his future prospects with the team] popped in to have a chat? What really happened?

CH: He wanted to drive for Red Bull. It wasn't the only time he approached us; he was *desperate* to drive for the team, actually. In 2012, he wanted to come and drive for us, but there was no way we could accommodate him while Sebastian was with us. Then before he signed for Mercedes he was very keen to drive for Red Bull for 2013. The McLaren had been very competitive in 2011 and 2012 and I thought it would probably be better for us for him to be at Mercedes than McLaren, so in the event of us not being able to sign him I encouraged Niki Lauda to sign him to weaken McLaren – not envisaging that Mercedes would become the absolute powerhouse they are today.

F1R: So Lewis owes you a drink?

CH: No, Niki Lauda owes me a drink! What Lewis has gone on to achieve, he was going to achieve that anyway. He's done an amazing job. He's a deserving champion. **F1**



ONE NIGHT IN STUTTGART

Every year, Mercedes throw a party in their home city to celebrate their achievements. And this year, they had more to toast than usual...

WORDS ROBERT HOLMES PICTURES MERCEDES

VfB Stuttgart have been kicked out for the weekend.

Freshly laid asphalt lies atop the grassy surface where Bundesliga footballers usually ply their trade. Curiously, nobody is complaining – certainly not the 36,000 people filling the seats on this cold December afternoon. Perhaps the clue is in the stadium's name: the Mercedes-Benz Arena.

Stuttgart is Mercedes-Benz town. Perhaps more than any other local industry, the company defines the identity of this bustling metropolis. And perhaps more than any other car manufacturer, Mercedes-Benz can lay claim to the invention of the automobile – after all, rivals Gottlieb Daimler and Karl Benz raced to be the first to use an internal combustion engine to power a four-wheeled carriage on roads nearby. The fortunes of their once-separate companies – forced to the altar by national economic woe during the 1920s – run parallel to the heartbeat of the city itself. As you descend to the taxi rank at the airport, your eyes behold a line of vivid yellow →





E-classes. Here in Stuttgart it is unthinkable not to be wafted thither in a vehicle bearing the three-pointed star.

Stars & Cars is Mercedes' annual fist pump: part hall of fame, part race of champions, it's a rorty victory lap for local fans to celebrate the company's racing achievements. For 2015 the guest list is particularly long, since this is Mercedes' most successful year ever. Along with drivers' and constructors' titles in F1, the trophy cabinet must now expand to accommodate silverware from the DTM, European Formula 3, GP3, ADAC GT Masters and sundry sportscar series.

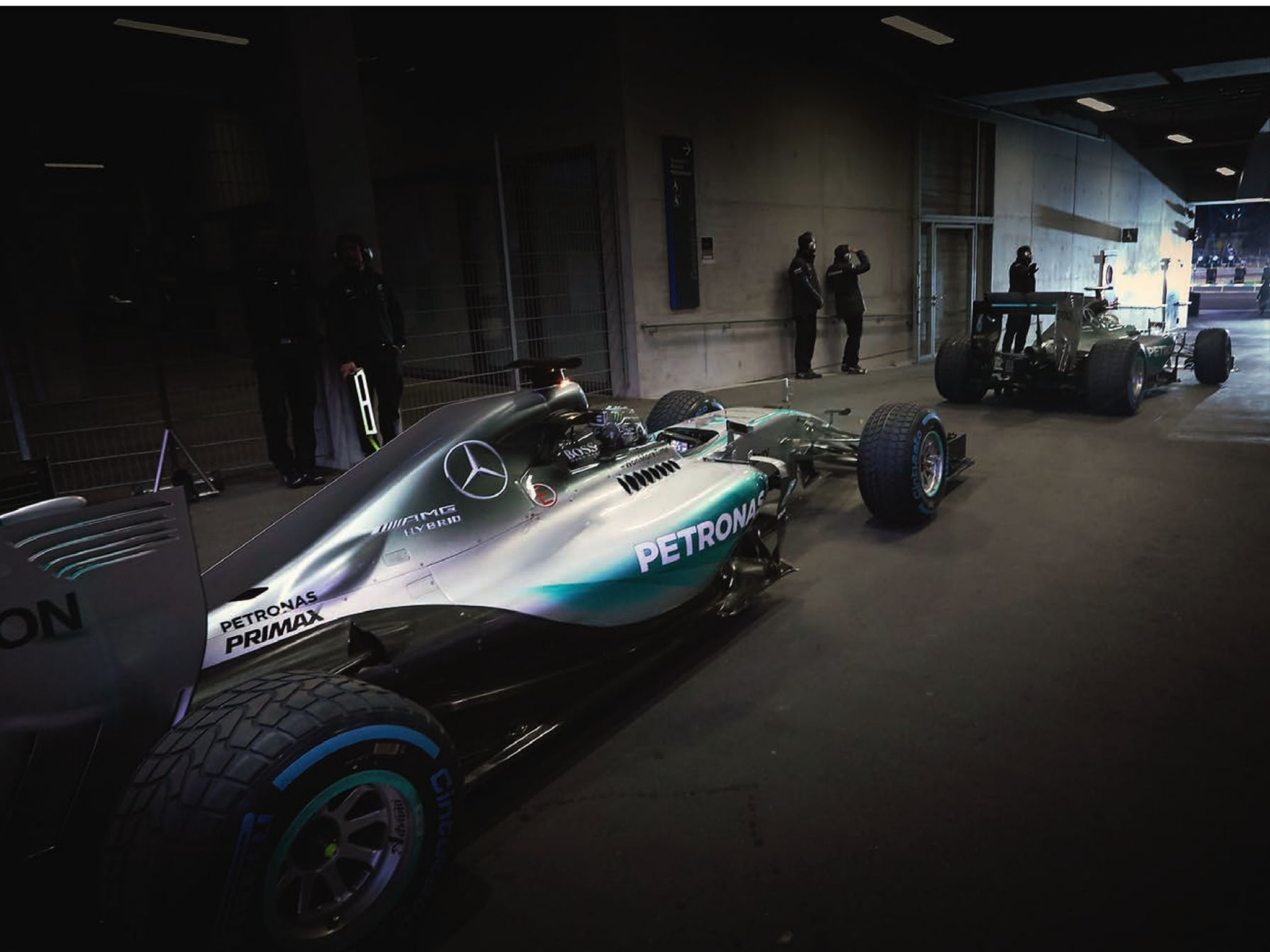
As proceedings get under way to the accompaniment of energetic music spun by DJ Larry van Housen (not one man, it transpires, but two), the suits enjoy their time in the sun. Mercedes motorsport chief Toto Wolff and marketing boss Ola Källenius introduce the real stars of tonight's show: Lewis Hamilton, of course; Nico Rosberg; DTM champion and F1 hopeful Pascal Wehrlein; F3 champion Felix Rosenqvist; GP3

champion Esteban Ocon; and joint ADAC GT Masters champs Sebastian Asch and Luca Ludwig (sons, respectively, of racers Roland and Klaus). And that's not all: in the wings stand Susie Wolff, Bernd Schneider, Mika Häkkinen, David Coulthard, Jean Alesi, Niki Lauda, Stirling Moss and Hans Herrmann, along with an eclectic mix of successful Mercedes racing machines. This event certainly lives up to its billing.

A blast of pyrotechnics brings a welcome wave of heat as the unmistakable braarrp-whoosh of a V6 turbocharged hybrid F1 power unit reverberates around the stadium. Lewis sallies forth onto the asphalt in his title-winning W06 Hybrid, waving to the crowd, every inch the conquering hero; in his wake, the other champions in their respective DTM, GT and F3 winners. The atmosphere, with the raucous crowd encircling the protagonists, is positively gladiatorial.

The older warriors join the younger ones for a succession of demonstration laps in historic machinery, interspersed

Stars from every era and category – including Lewis Hamilton and Sir Stirling Moss – get to mix it up out on track in a variety of Mercedes machinery in celebration of the marque's magnificent year





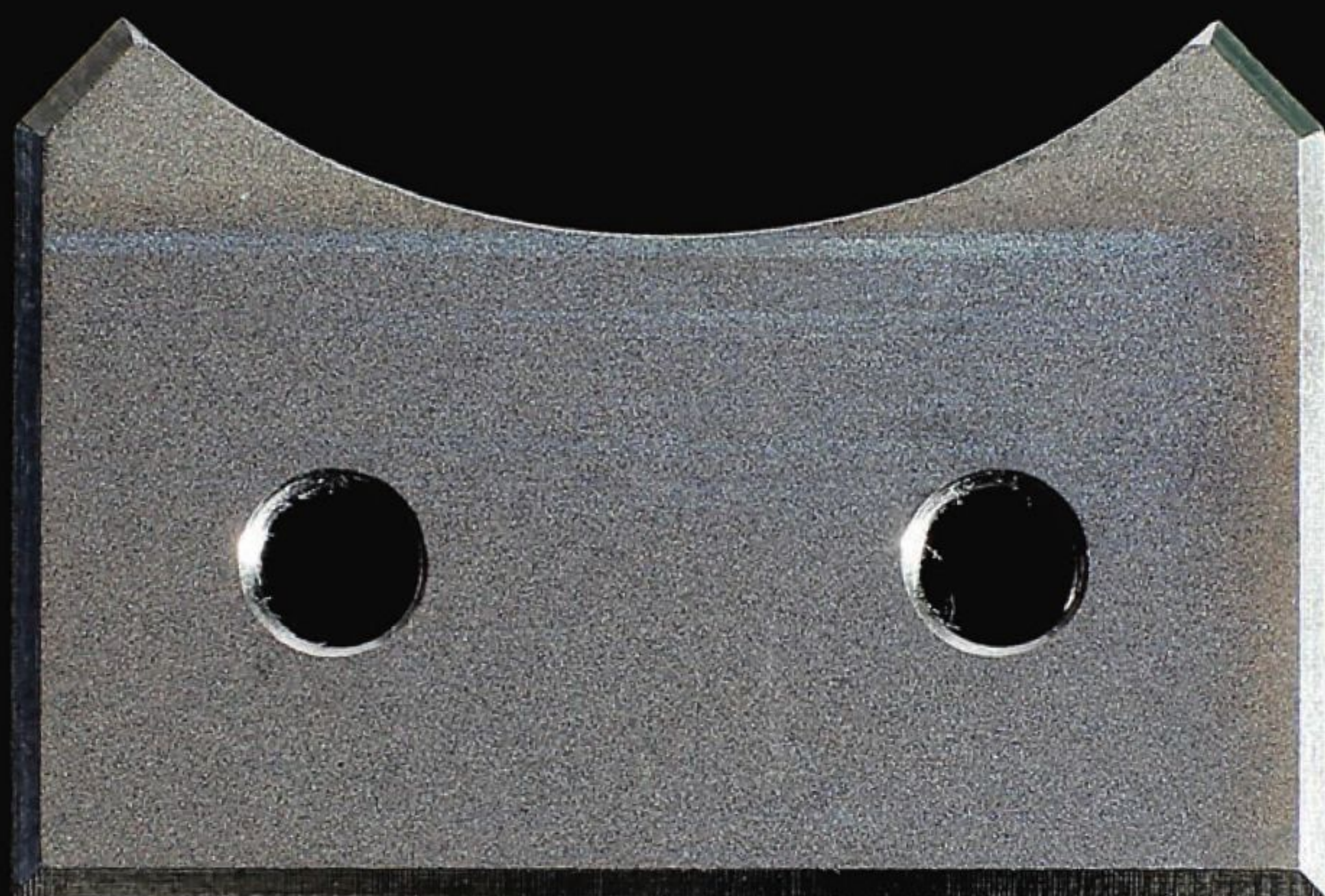
with competitive run-offs in newer cars. It's a rivet-counter's delight: Toto Wolff and Niki Lauda circulating in the SL and SLC rally cars of the 1970s; Moss and Hermann in an immaculate 300 SLR of the type Moss used to win the 1955 Mille Miglia; Susie Wolff in a W196 like that which propelled Fangio to F1 world titles in 1954 and 1955 (see p94).

The competitive element is a chance for Mercedes to show off newer performance-oriented rolling stock, and the drivers are eager both to please and to enjoy themselves. The marketing spiel of the AMG-tuned A45 4MATIC talks of "ground-breaking paradigms". From the moment Lewis belts himself into one, it's clear that his mission is not to break the ground, but to peel the temporary asphalt from it with a succession of smoking wheelspins. As the starting 16 drivers are whittled down to eight, then four, even bigger guns are laid out: AMG C63 Ss for the quarter finals, GT Ss for the semi-finals, and then a pair of AMG GT3s for the final.

Not that Lewis and Nico make it that far. Lewis loses out narrowly to Pascal Wehrlein in their semi-final run; Nico to eventual winner Daniel Juncadella. But as the two F1 pilots hug one another and laugh excitedly – "I want another go!" exclaims Lewis – it feels as if a genuine warmth has returned to their relationship after a somewhat rancorous year.

The grand finale is a mock run-off between Lewis and Nico in their F1 cars, although it has none of the raw edge of recent months. And as they depart, waving to the crowd, it's clear that both have laid down their proverbial arms (if temporarily) and are simply enjoying themselves – as their employers and the denizens of Stuttgart gleefully join in. **F1**

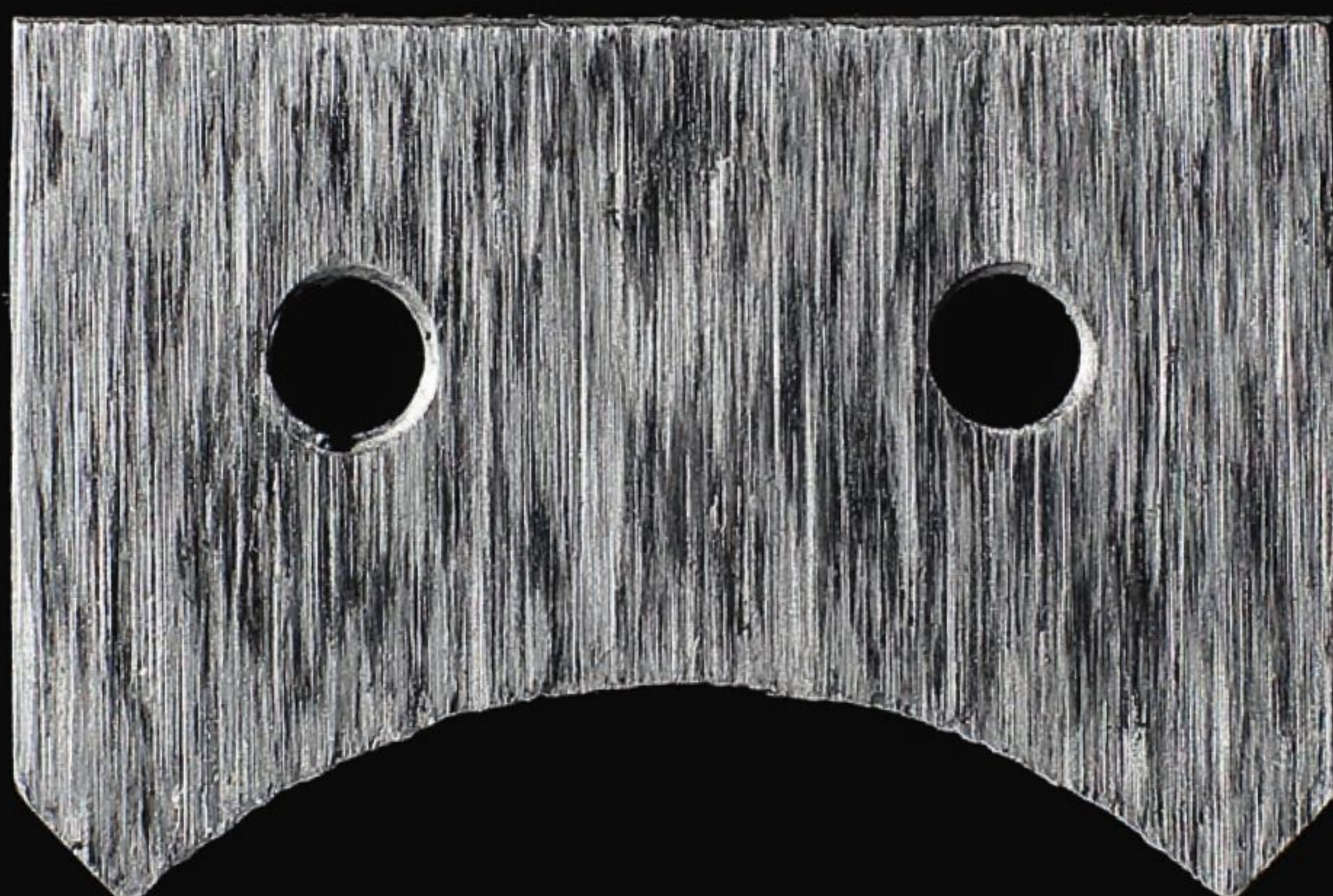


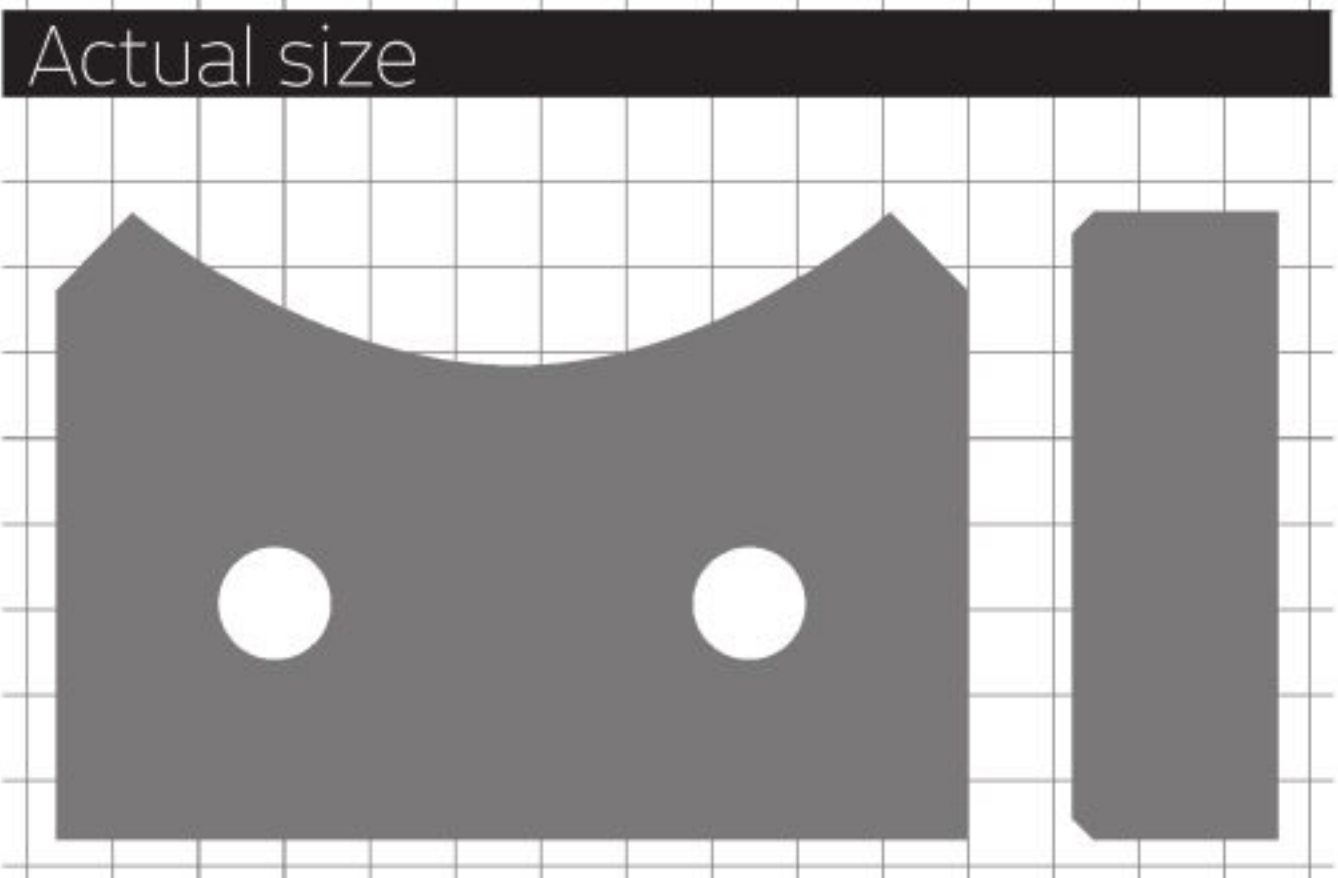


A spark of genius

Whenever an F1 car hits a bump it throws up a spectacular shower of sparks, thanks to these tiny, beautifully crafted pieces of metal

WORDS JAMES ROBERTS **PICTURES** ADAM WARNER/LAT





Since the start of the 2014 season, revised Formula 1 regulations have decreed that titanium must be used to make the skid blocks on the underside of every F1 car. Titanium is named after the mighty Titans of Greek mythology due to its extreme strength. It's also durable, lightweight and perfect for F1 in numerous applications. In fact it is one of the most commonly used materials on an F1 car aside from carbon fibre.

Whenever a skid block touches the asphalt, the result is a spectacular pyrotechnic burst of sparks. At speeds that are approaching 200mph, when a car 'bottoms out' the friction is so intense it causes particles of the titanium alloy to break off and burn white hot as they fly through the air. Pictured on the left is a brand new skid block (top) and one that has been battle-scarred (bottom) through contact with the ground. Replacements have to be fitted after every session.

To prevent teams from running their cars too low, a plank of wood around 10mm thick (the regulations state they can't be less than 9mm), is fixed to the car's floor. If a car is too low – which is aerodynamically advantageous, but can lead to loss of control – the plank becomes worn below the minimum level and the car will be disqualified, which is what happened to Michael Schumacher's Benetton at the 1994 Belgian Grand Prix. The FIA measures the plank only at certain points, and it's around these areas that the teams position their skid blocks.

Skid blocks were previously made from a wood composite, which did not produce sparks, left brown marks around the track and caused problems when they became detached from the plank. During Friday practice at the 2013 Belgian Grand Prix, Sebastian Vettel picked up a puncture after he ran over a skid block that had fallen off another car. "It was very big and sharp, and the FIA were worried about these items falling off and hitting someone, so they decided to act," a team source told us.

The result was a change to F1's Technical Regulations, issued by the governing body. Article 3.13 deals with the 'Plank and Skids' and article 3.13.2 (g) in particular was amended to state that mounted metal skids "must be made from a titanium alloy".

"The purpose of making them out of titanium is threefold," explains FIA race director, Charlie Whiting. "Firstly, it's safer, because if they do come off they are a third of the weight of the previous ones. Secondly, the titanium wears some two- to two-and-a-half times more quickly than the material used before. So cars have to run a little bit higher to manage the wear, and teams won't be able to drag them on the ground quite as much as they have in the past. The third effect is that you get a lot more sparks, which is more spectacular."

A true F1 spark of genius, the rule change offered a safer alternative, while simultaneously livening up the show. **F1**



- Element:** Titanium
- Symbol:** Ti
- Classification:** Transition metal
- Atomic number:** 22
- Colour:** Silvery white
- State:** Solid, non-toxic
- Discovered by:** Rev. William Gregor in 1791
- Key properties:** Low density, high strength
- Melting point:** 1,668°C
- Boiling point:** 3,287°C
- Cost:** 1kg = £2.86



PHOTOS: ANDY HONE/LAT; SHUTTERSTOCK

Sparks fly from the titanium skid blocks at the 2015 Bahrain GP as Mercedes' Nico Rosberg attacks Ferrari's Sebastian Vettel



- Formula One
- Le Mans 24hr
- WEC - Spa - Nurburgring - Sakhir

TOUR PACKAGES

DESTINATIONS



FORMULA ONE WINTER TESTING

BARCELONA

Pit Lane Hospitality
Team Packages

FORMULA ONE 2016

ALL GRAND PRIX

UK Tour Travel Team Escorted
Tours By-Air with Holiday options

FORMULA ONE COACH TOURS

SPAIN, MONACO, AUSTRIA,
GREAT BRITAIN, HUNGARY,
GERMANY, BELGIUM, ITALY

Escorted Holiday Tours
Executive Coach Travel
All Events

LE MANS / WEC-6HR

LE MANS 24HR, SPA &
NURBURGRING 6HR
SAKHIR, BAHRAIN

By-Air, Coach Tours, Self Drive
All Events
By Air Packages

HISTORIC EVENTS

MONACO HISTORIC
MILLE MIGLIA
GOODWOOD FESTIVAL
LE MANS CLASSIC
GOODWOOD REVIVAL

Escorted Tour Package
By-Air
Coach Tours
Self Drive
All Events

- Mille Miglia
- Le Mans Classic
- Monaco Historic
- Goodwood



UK TRAVEL TEAM: +44 (0) 1451 833 721

BOOK ONLINE: enquiry@selectmotorracing.com





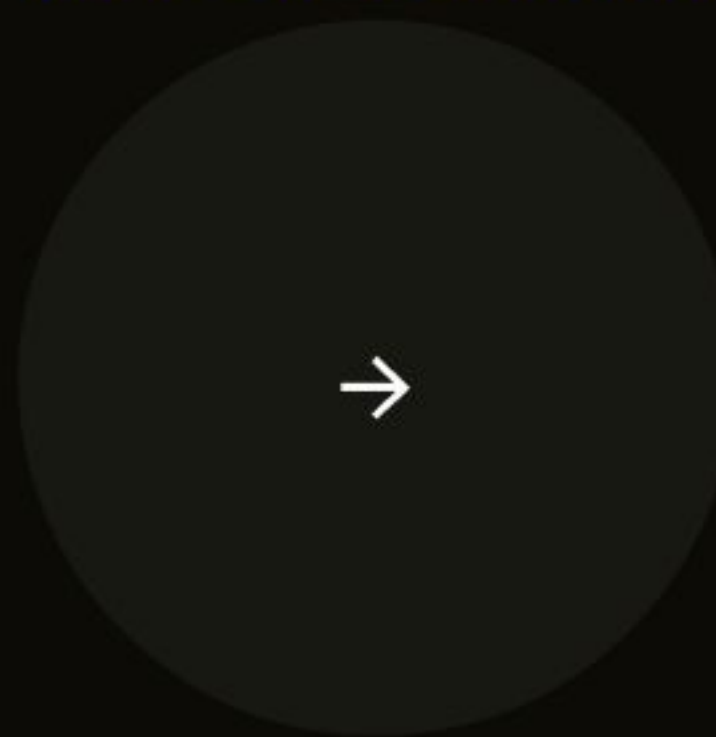
AWARDS 2015



AS VOTED FOR BY YOU

Who were the kings of the Formula 1 castle?
Who were the dirty rascals? YOU decided in our poll of
more than 100,000 readers worldwide

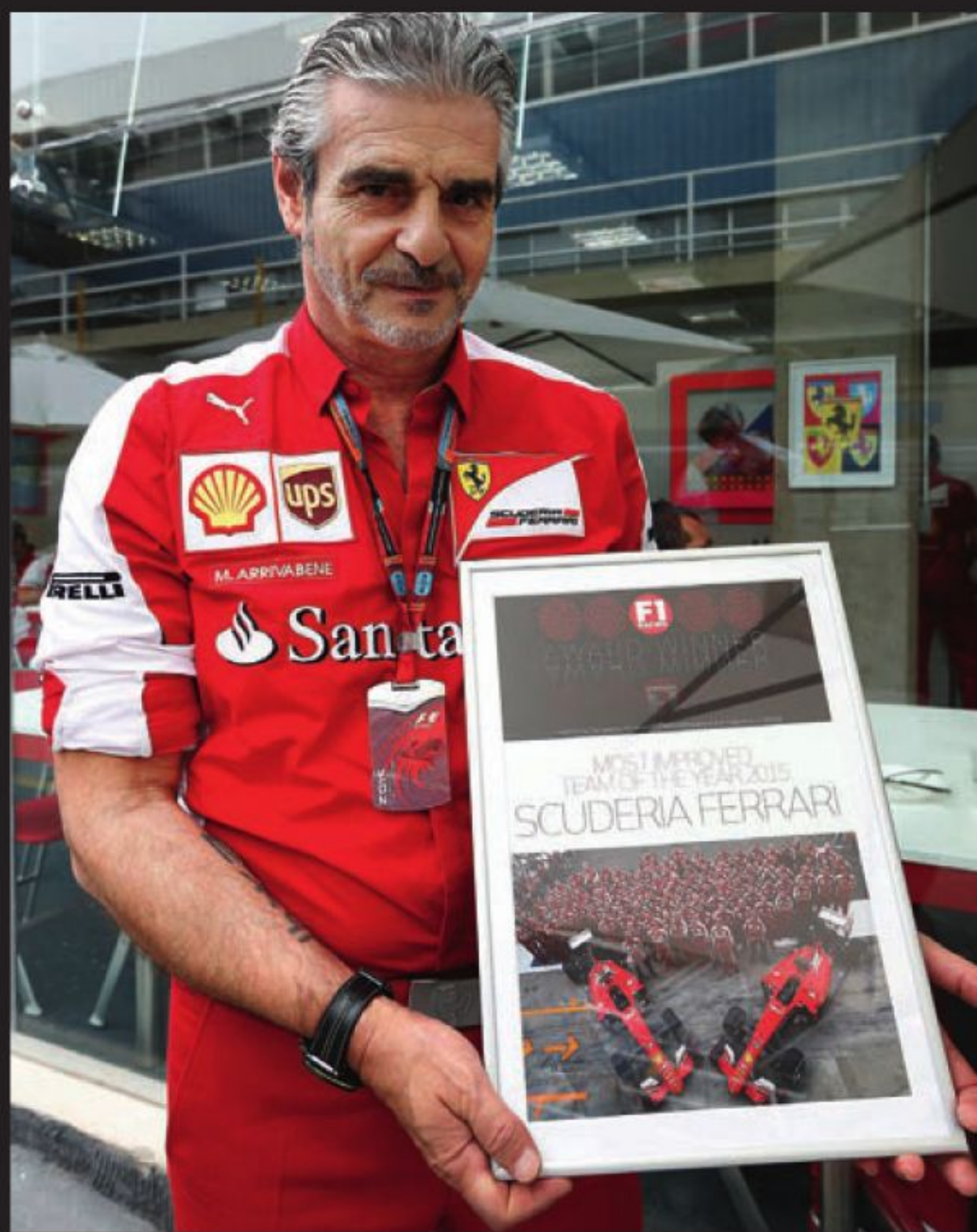
- MOST IMPROVED TEAM OF THE YEAR
- ROOKIE OF THE YEAR
- TEAM PRINCIPAL OF THE YEAR
- TECHNICAL LEADER OF THE YEAR
- START OF THE YEAR
- OVERTAKE OF THE YEAR
- QUALIFIER OF THE YEAR
- CAR OF THE YEAR
- DRIVE OF THE YEAR
- DRIVER OF THE YEAR
- SPIRIT OF F1 AWARD



WORDS JAMES ROBERTS



MOST IMPROVED TEAM OF THE YEAR



SCUDERIA FERRARI

First of all, thanks a lot to all the F1 Racing readers. It was unexpected, especially from our fans in the UK, but on behalf of the team, who have been working very, very hard to deserve this award, I'm very grateful to all of you guys. Thank you very much."

Maurizio Arrivabene
Ferrari team principal



Maranello went through a transitional year in 2014. Long-serving team boss Stefano Domenicali fell on his sword, and his replacement, Marco Mattiacci, set changes in motion but swiftly fell out with star driver Fernando Alonso. The two-time champion grew increasingly restless through a winless season, and then more heads rolled as the CEO of Fiat, Sergio Marchionne, replaced Luca Di Montezemolo.

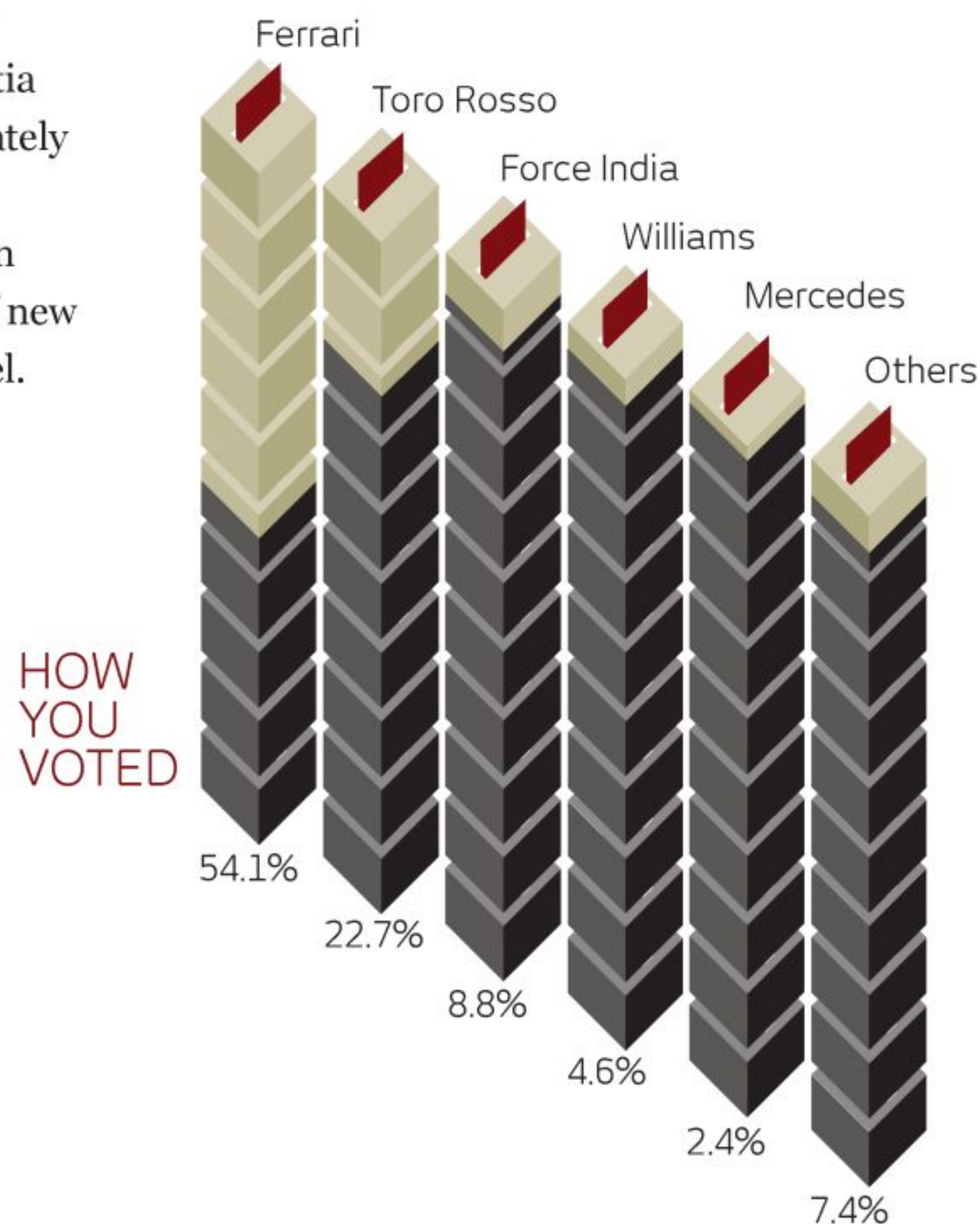
Mattiacci was shown the door after less than a year in charge and Alonso gave up on the whole deal, making a surprise return to McLaren.

The key figure to survive the cull was James Allison, the technical brains of the operation, who was given the time he needed to reorganise the various departments at Maranello. The resulting chassis, allied to an improved power unit (overseen by Mattia Binotto), was immediately on the pace when it appeared at pre-season testing in the hands of new arrival Sebastian Vettel.

The SF15-T suited Kimi Räikkönen, too, and under the guidance of their third team principal in 12 months, the charismatic former Marlboro man Maurizio Arrivabene, Ferrari finally found themselves in a position to take the fight to Mercedes.

Their breakthrough win came early, in Malaysia, where Vettel performed outstandingly in the heat and humidity of Sepang. Two more wins followed, in Hungary and Singapore, but reliability – and ‘that’ puncture in Spa – cost the Scuderia any shot at a world title bid.

It didn't matter. For the first time in the new 1.6-litre turbocharged engine era, there was a threat to Mercedes. With continuity for 2016, you would expect further improvements to come from Ferrari.





ROOKIE OF THE YEAR

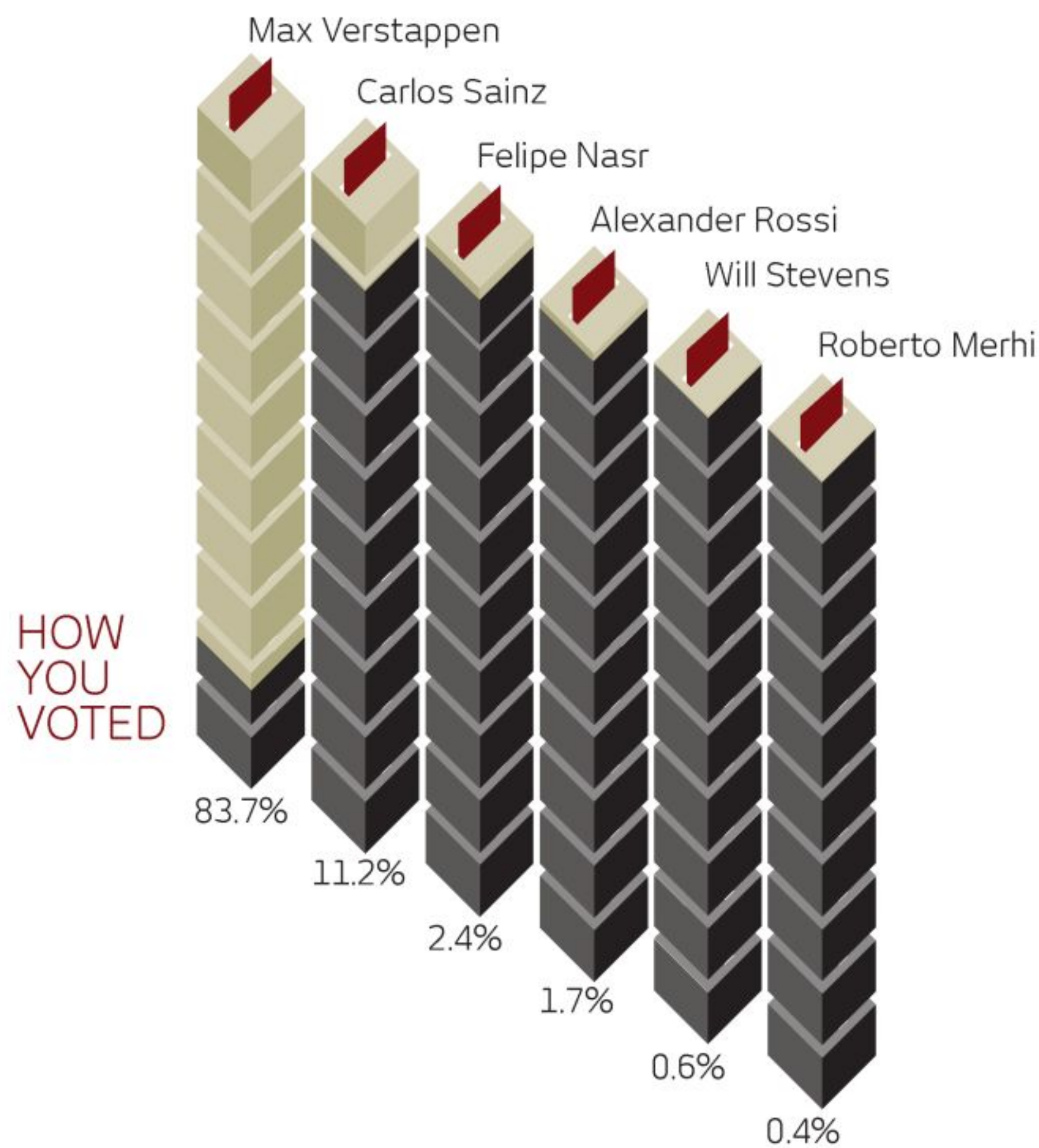


MAX VERSTAPPEN

One of my targets was to try to be the best of the rookies – and I see that I've won it by quite a big margin. I've enjoyed my season, scoring points, and to achieve this award is very nice. I'm very happy with that, and I see that I was second behind Lewis Hamilton in the 'Driver of the Year' category, but he is world champion, so I can live with that."

Max Verstappen

Toro Rosso driver



The announcement that Toro Rosso were to place a 17-year-old rookie, with only one year of single-seater experience, in their car for the 2015 season was treated with almost universal scepticism and concern. But how wrong we were. By the third race of the season, in China, pundits were already referring to Max Verstappen as a future world champion.

He delivered arguably the two best overtaking moves of the year in Sepang (on his team-mate Carlos Sainz) and Shanghai (on Sergio Pérez) and was widely acknowledged to be racing with a maturity beyond his years.

Privately, Bernie Ecclestone had voiced concerns about how such a young man could enter the sport with so little experience and, as a result, changes were put in place. First, the FIA acted to prevent anyone under

the age of 18 from obtaining a superlicence to compete in Formula 1. And second, the rule-makers set about changing the speed of the cars to make them more difficult and physical to drive from 2017 onwards.

But none of this affected Verstappen, who continued to put together the most impressive rookie season since Lewis Hamilton stormed into F1 in 2007. His performances over the year breathed fresh air into the sport.

Alongside him at Toro Rosso is another quick rookie, but Carlos Sainz has suffered a little more with reliability problems, and hasn't captured the public's imagination in the same way. The way the voting went, Sainz took just 11 per cent of the vote, compared to Verstappen's 84 per cent. Sorry, Carlos, you chose the wrong year to be a Formula 1 rookie... →

PHOTOS: ALASTAIR STALEY/LAT; GLENN DUNBAR/LAT; LORENZO BELLANCA



AWARD WINNER

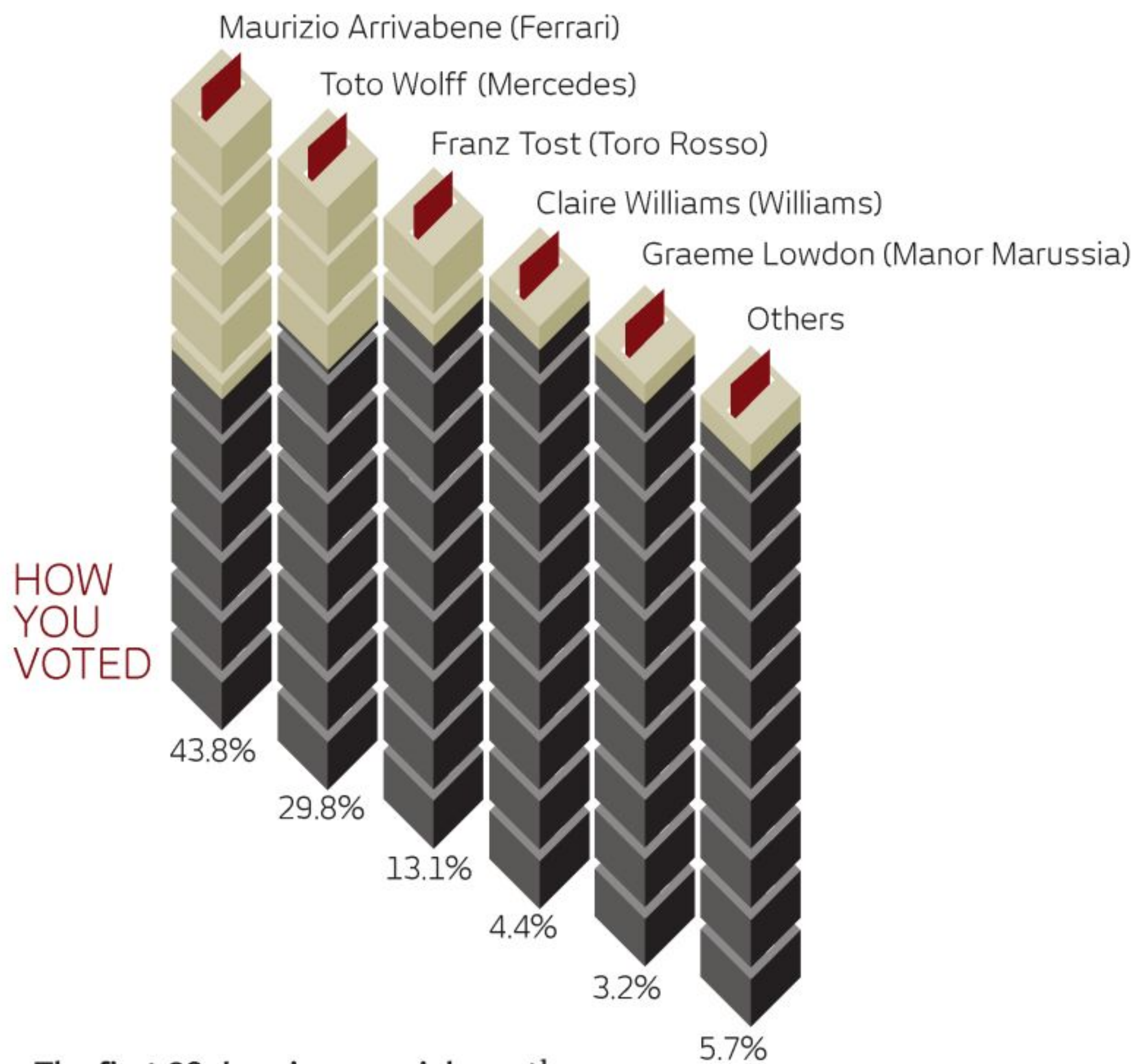
TEAM PRINCIPAL OF THE YEAR



MAURIZIO ARRIVABENE

For me, winning this has been a great surprise and I'd like to thank all the F1 Racing readers for this unexpected award. I thank all of you guys and I hope that I deserve it even more next year. I hope for your support again in 2016 and thanks from all my heart to all of you."

Maurizio Arrivabene
Ferrari team principal



The first 90 days in a new job are the most important. That's the time to make your mark on an organisation, and in the first three months of Maurizio Arrivabene's appointment as the managing director of the *Gestione Sportiva*, he acted unlike any other Ferrari team principal in recent years.

Arrivabene's background is in marketing and sales, and he's been involved in Formula 1 for a while now, sitting on the F1 Commission as the representative of the sport's sponsors, in his role as commercial boss of Philip Morris tobacco.

Following his appointment as Ferrari team principal, he was initially proactive in talking to the media and communicating his ideas about the sport, including the release of a striking image of a future vision for Formula 1 – an aggressive-looking concept car – in a bid to generate debate on the direction of the sport.

He also pulled off another publicity coup when he took senior team personnel and reserve driver Esteban Gutiérrez to sit in the grandstands

during the Barcelona test. It was a reaction to moves by FOM to tighten up the number of paddock passes made available. It was engineered to provoke Bernie Ecclestone, which certainly generated publicity for his cause and made him popular with the fans.

Despite his ferocious glare, Arrivabene is extremely softly spoken and almost inaudible when he speaks to the press post-race on Sunday evenings, but he clearly has the charisma to pull together a team – something that had broken down in the years preceding his arrival.

He knows that the key to success within the team lies in keeping his star driver Sebastian Vettel happy, and part of that will involve providing him with a suitable supporting team-mate. The pairing of Seb and Kimi was a smart-thinking move, and consequently it will be of little surprise to see the Scuderia achieving titles with Arrivabene and Vettel where they failed under Domenicali and Alonso.





AWARD WINNER



TECHNICAL LEADER OF THE YEAR



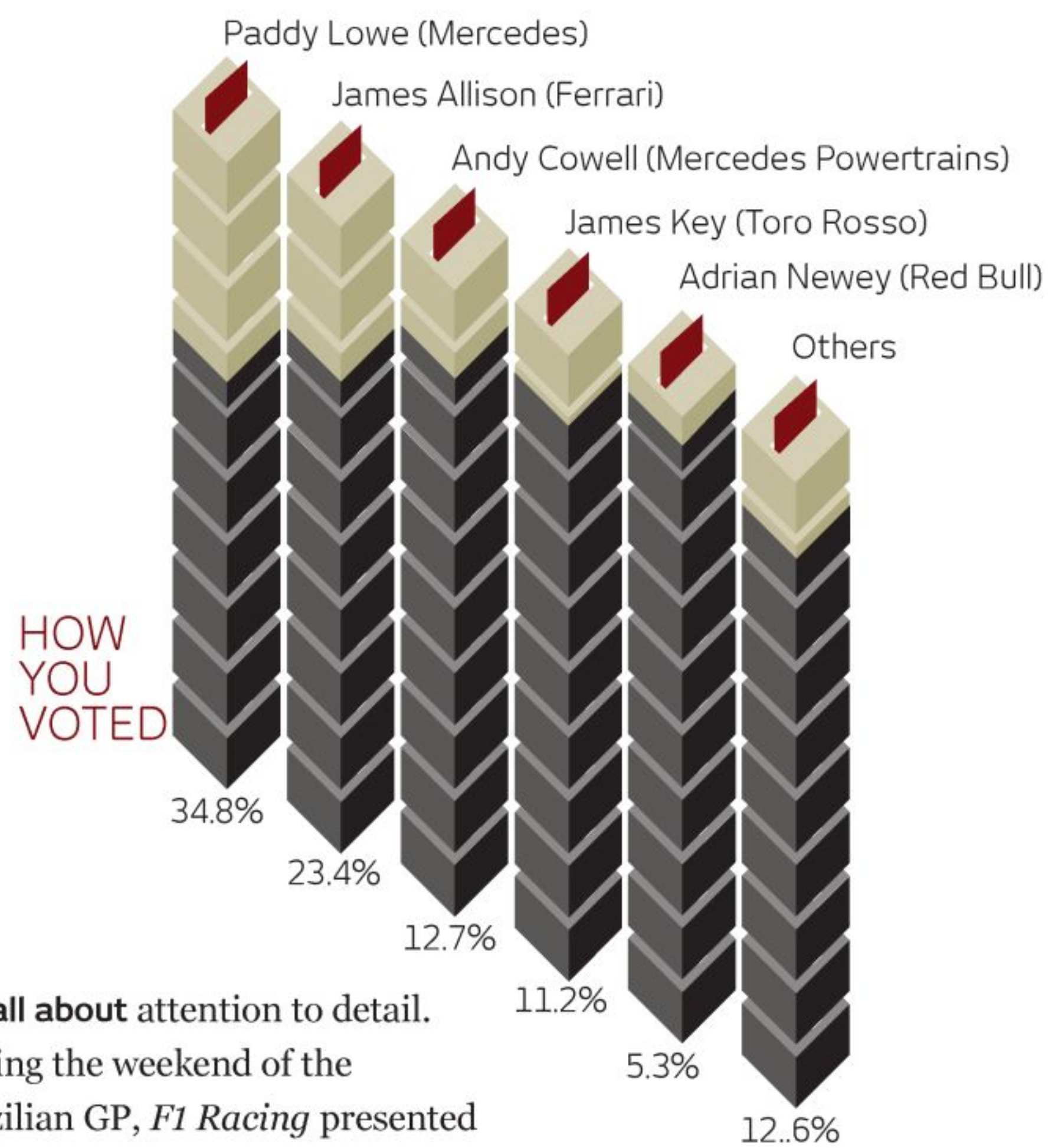
PADDY LOWE



It's a great honour – thank you to everyone who voted. It's not something I'd automatically assume I'd get just because we won the championship, so I'm chuffed. I see Andy Cowell came third and that's great as we are opposite numbers. How we've been able to create a winning car is that combination between Brixworth and Brackley."

Paddy Lowe

Mercedes executive director (technical)



It's all about attention to detail. During the weekend of the Brazilian GP, *F1 Racing* presented Paddy Lowe with his award for 'Technical leader of the year' and asked for a response. His immediate reaction was to notice a tiny difference from the award he'd received 12 months before.

"Have you changed it? This award is for 'technical leader'; last year it was 'technical director,'" said Paddy. The truth is, we had – and he approved, explaining it was a more accurate term, since he *leads* a group to create a world championship-winning machine, rather than directing them. We described our tweak as "continual evolution" and he appreciated our acknowledgement that the dominant W06 was borne out of refinement of the W05.

Lowe also won this award in 2014, while Mercedes engine boss Andy

Cowell had a six per cent share of the vote. But for 2015, Cowell doubled his share to over 12 per cent. Between them, Lowe and Cowell had nearly a 50 per cent share of your votes, indicating not only how strong Mercedes have been this year, but acknowledging the importance of the power unit in this 1.6-litre hybrid turbocharged formula.

You need only look at Red Bull and McLaren's struggles with their power units to understand what a crucial part of the package the engine is. And having everything – chassis and powertrain – virtually under one roof, as Mercedes and Ferrari do, gives the edge over any customer-supplied team. In such a complex sport, every detail counts, as Paddy Lowe will tell you. →



START OF THE YEAR

Hungarian Grand Prix (third to first)



SEBASTIAN VETTEL

I don't know if the first start would have been that good, as if you remember it got aborted. I saw my chance straight away and passed Lewis Hamilton and Nico Rosberg as well. Into Turn 1, I said to myself: 'Brake deep and try to stay in the lead,' and it worked. It lasted for the whole race, so I guess that was crucial."

Sebastian Vettel

Ferrari driver

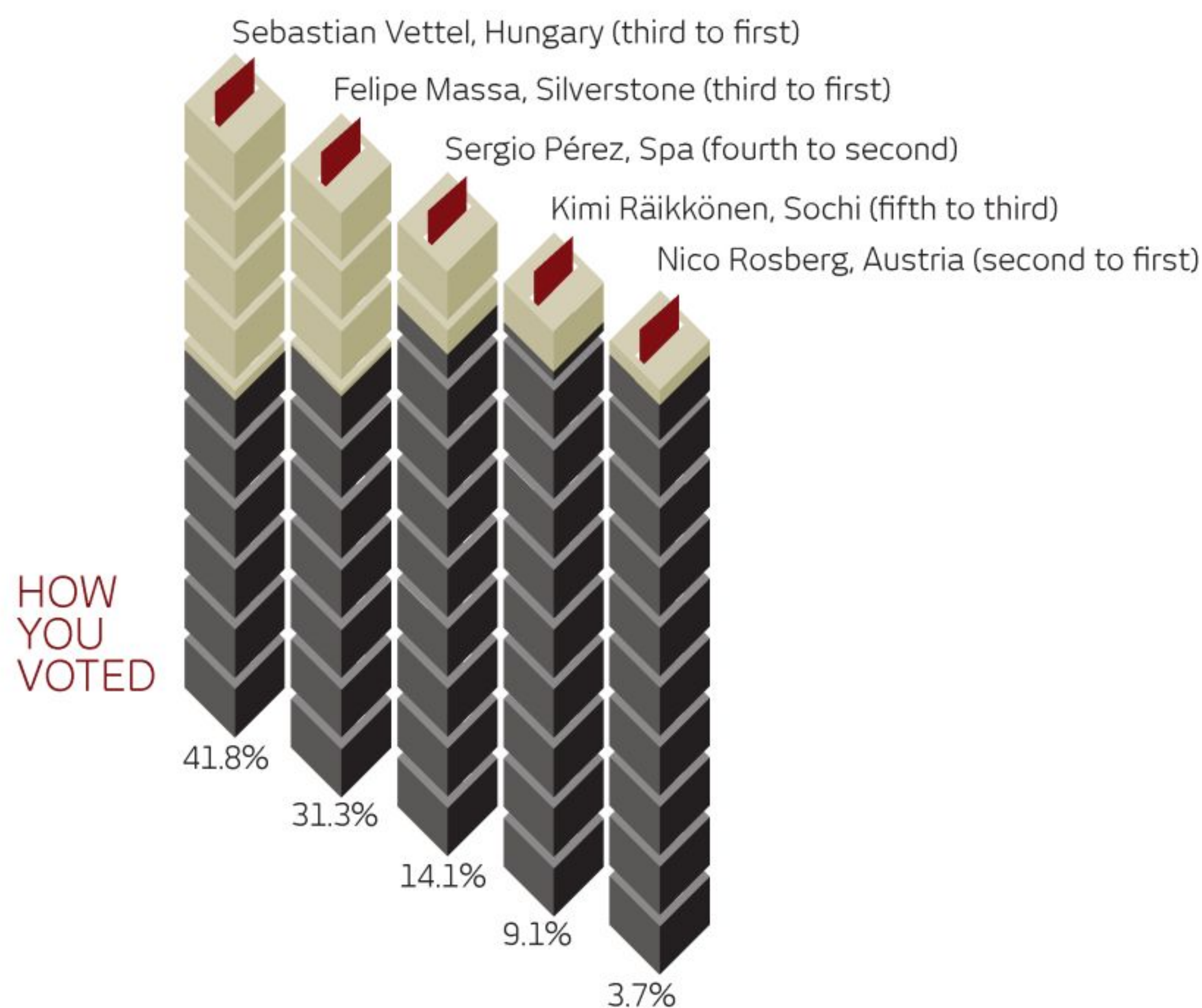
Last year Felipe Massa won this award for his jump from seventh to third at the start of the Bahrain GP. And he nearly won it two years in a row thanks to his launch at the 2015 British GP, when he and team-mate Valtteri Bottas pounced on the Mercedes, giving Williams a one-two during the opening laps of the race. But that move came second in the voting; ahead of him was Sebastian Vettel for his launch from third place to the lead on the run down to the first corner at the Hungaroring.

Everything must click for a start to be perfect; in particular the temperature of the tyres and clutch. The rear wheels need to be travelling about ten per cent faster than the fronts and the pre-start revs need to use the engine inertia to

jolt the rear wheels enough, but not so much as to invoke excessive wheelspin.

Away from the line, the car must be positioned perfectly to muscle around your rivals and brake ahead of them for Turn 1. Vettel did that to perfection in Hungary. When the lights went out, he powered past polesitter Lewis Hamilton, finding a narrow gap between Lewis on his right and the edge of the track to his left.

Vettel, his front wheels ahead of Hamilton's, moved across to take the line for Turn 1, pushing Hamilton into the path of his team-mate. Lewis had to brake, giving Vettel the perfect line to come out of T1 ahead. As at Silverstone, the two Mercedes had been swallowed up – this time by the two Ferraris.





OVERTAKE OF THE YEAR

On lap 11 of the Belgian Grand Prix, passing Felipe Nasr for 11th place around the outside of Blanchimont (Turn 18)

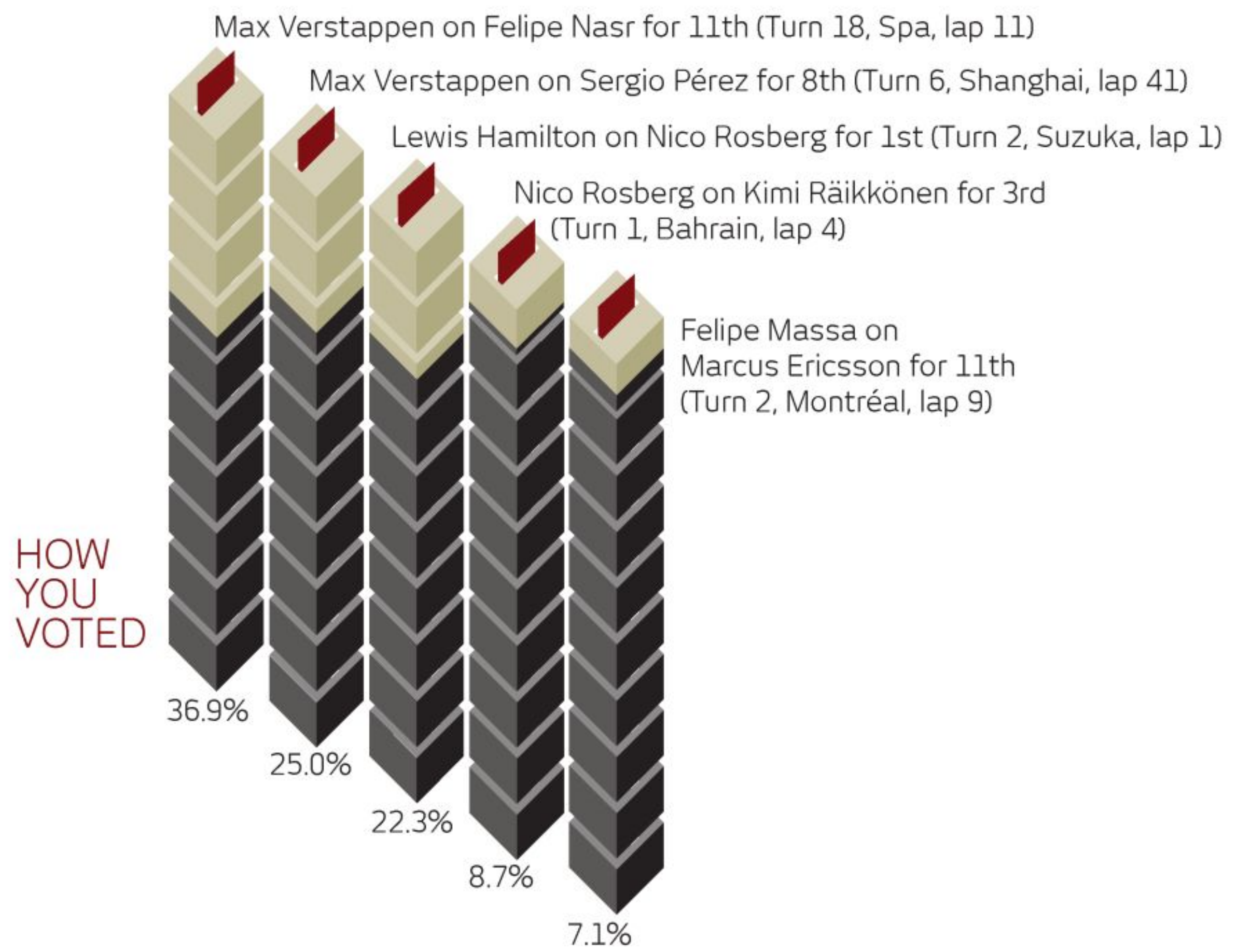


MAX VERSTAPPEN

It's very nice to see that two of my overtakes were first and second in the voting. Honestly, on the track, you just try to overtake people in the best way possible, but to be honoured like this is very much appreciated, especially for me in my first season in Formula 1. I certainly enjoyed doing them on the track."

Max Verstappen

Toro Rosso driver



There were many contenders for the best overtaking move of the year and any of them could have been Max Verstappen's. He made the pass of the race in Malaysia, while overtaking his team-mate Carlos Sainz. And at the next race, in China, he made a beautiful, well-judged outbraking manoeuvre on Sergio Pérez at Turn 6 (for eighth place on lap 41 of the race), which came second in the voting.

The winning move, though, was the pass on Felipe Nasr's Sauber around the *outside* of the dauntingly fast Blanchimont at Spa. Earlier in the weekend, GP2 driver Daniël de Jong had proved what happens when you attempt a move at Blanchimont and get it wrong. He touched wheels attempting a pass and was sent hurtling towards the tyre wall at full chat, fracturing his vertebrae in the process.

Back to Formula 1, and on lap 11 of the Belgian Grand Prix, Verstappen

was on the tail of Nasr when he spotted the rear of the Sauber twitch on the exit of Stavelot. He knew that he had a chance to pounce as the two of them approached the rising sweeps towards the end of the Spa lap. As Nasr defended the inside line, Verstappen, running on the softer tyre, pulled out from the slipstream and took the outside line as they approached Blanchimont. He kept his foot nailed to the floor at roughly 170mph and ran side-by-side with Nasr through the corner. As Verstappen drifted wide on to the kerb, Nasr regained the initiative, but Max judged his braking for the Bus Stop chicane perfectly. In a measured move he hugged the inside line – not locking up – and moved ahead into 11th place.

And then someone found him doing exactly the same move in an online simulator game. He'd clearly been practising for it... →



QUALIFIER OF THE YEAR

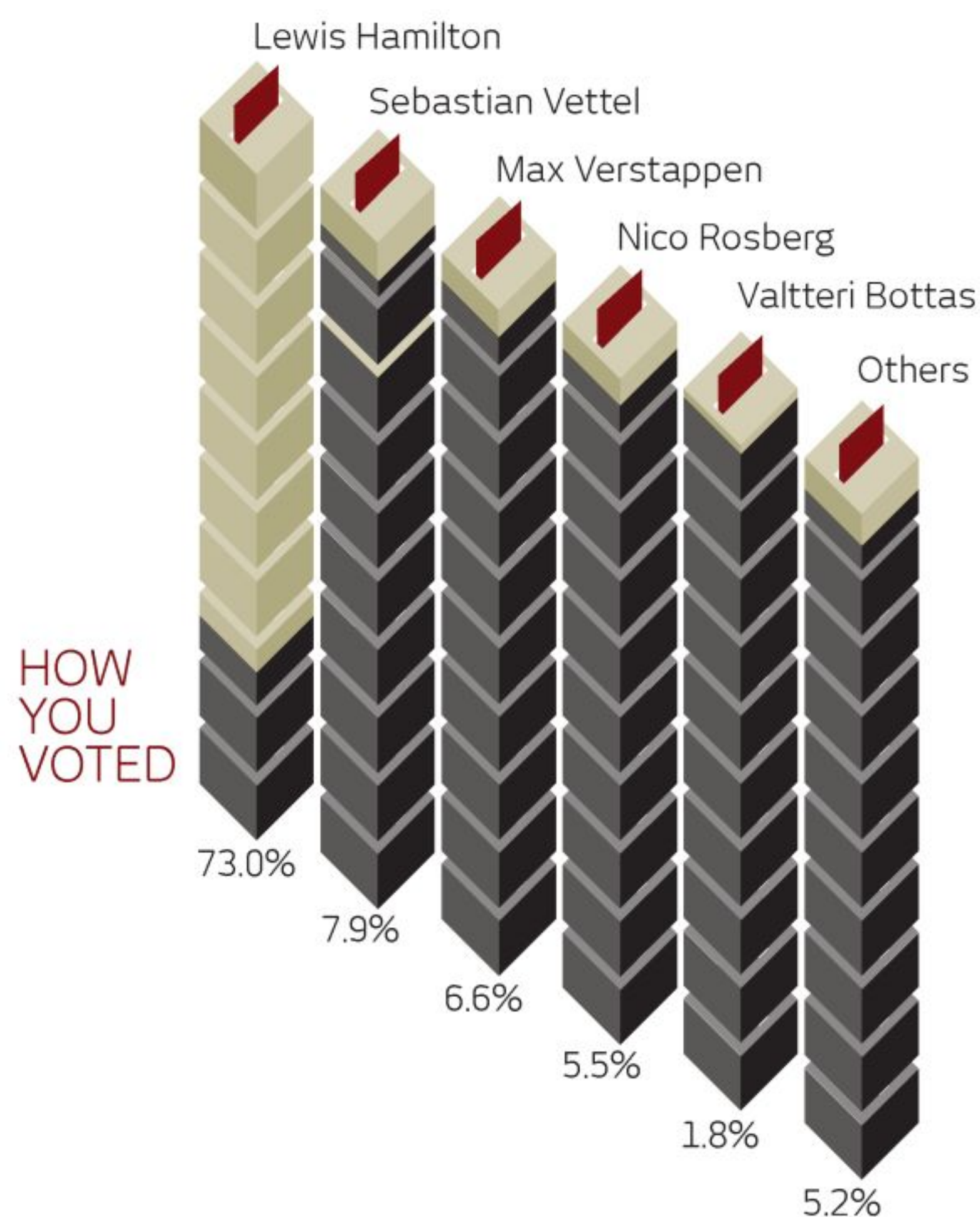


LEWIS HAMILTON



I won this last year – how was that? I didn't really qualify very well last year. Maybe I had some good laps, but I'm grateful for this award again. This year I definitely got a lot of good laps in and you can see a lot of people have recognised that. It's super cool. 'Qualifier of the year': that's definitely been the target, as if you get that, you're halfway to getting 'Driver of the year. Awesome!'

Lewis Hamilton



Twelve months ago we sat down with Lewis Hamilton on a cold winter's day at the Mercedes factory in Brackley, and pitched him your questions [*F1 Racing*, March 2015]. One of our readers asked him why his team-mate, Nico Rosberg, had the edge on him in qualifying, and Lewis drummed his fingers on the table, mulling over his response. Clearly it was an issue that was gnawing away at him.

Lewis explained that set-up work on the car had gone down the "wrong path" too many times over a race weekend, and admitted he'd "got lost" undoing set-up changes made between Friday's running and FP3. He finished off by adding: "That's something I'm going to improve this year."

And sure enough, he did.

He took the first four poles of the 2015 season, and while Rosberg pulled one back in Spain, Lewis then went on an incredible streak, recording

seven consecutive poles. Heading into Singapore, Hamilton was 11-1 up on Rosberg. At the same point the previous year, it was Rosberg who had the advantage, leading 7-5. So Lewis had done what he said he would and improved his Saturday performance.

But post-Singapore, Rosberg pulled it back during qualifying and took six consecutive poles in the final six races of the season. So what brought on the sudden change in the latter stages of this year? One suggestion is that it was related to the events post-Spa, and the decision by Pirelli to set a minimum tyre pressure, which affected Rosberg less than it did Hamilton.

To compensate, Lewis tried various tweaks to his suspension settings, but just as was the case in 2014 he found himself 'getting lost' in his setup again. Despite winning this award, it'll be something this will be an area he'll be looking to improve further for 2016.

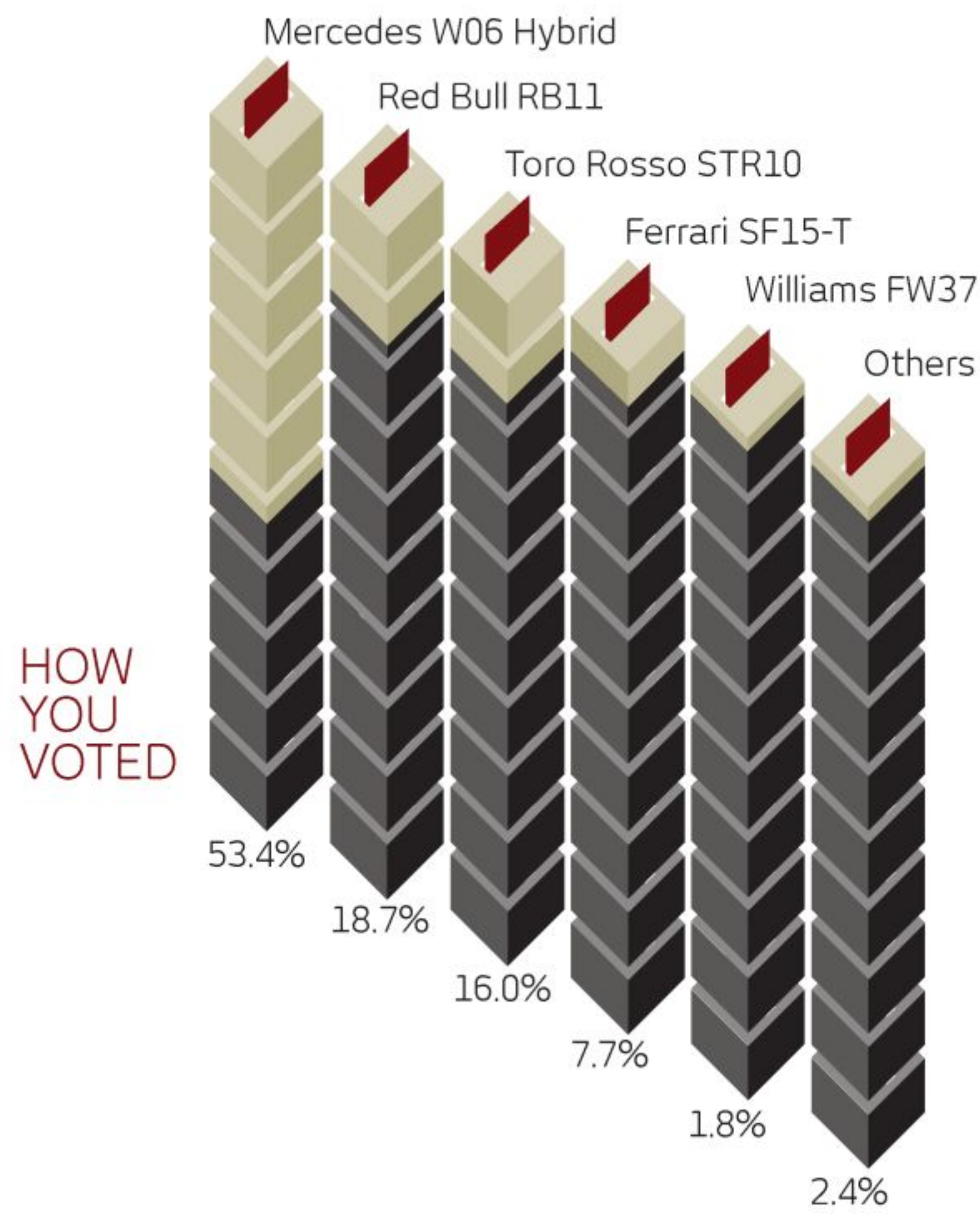




AWARD WINNER



CAR OF THE YEAR



MERCEDES W06 HYBRID



We don't take winning this for granted, so thanks to everyone who voted for their acknowledgment of all that the team have achieved in creating this fantastic car. And I want to add that it's down to the work of some fantastically talented individuals who have helped contribute to this car and power unit."

Paddy Lowe

Mercedes executive director (technical)

With three wins in the first four races of 2015 – and four consecutive poles – Lewis Hamilton was clearly very comfortable in the W06 Hybrid. When asked about his success in this car, he replied: "I'm probably the happiest I've been for a long, long time. I definitely feel more comfortable in this car even though it has the same characteristics as last year's – it's just better."

The key to success in modern F1 is the continual refinement of a winning package. At every race, Mercedes brought small but incremental improvements to the W06. Whether it was two per cent more efficiency in the stiffness of the suspension, an extra point of aero on a front-wing endplate, or slightly more tightly sculpted sidepods to optimise cooling for the power unit, all their tweaks combined to create real gains in lap time.

As Paddy Lowe explains, that is instrumental in staying ahead of the opposition: "Although the W06 is clearly an evolution of last year's car, it is a far better car than the one we had last year, and that's a great credit to the huge effort and innovation of the teams at both Brackley [for the chassis] and at Brixworth [for the power unit]."

"It's always harder to stay in front and to maintain the motivation to keep digging deep, which you have to do. If you stand still in this sport, people do catch up very quickly."

This year Ferrari were closer, with Sebastian Vettel taking three wins. Mercedes will be wary of their threat in 2016, while also striving to keep something in reserve for a new car and a new formula in 2017. In this sport, you can never allow yourself to become complacent. →



DRIVE OF THE YEAR

(Fourth place in Austin)

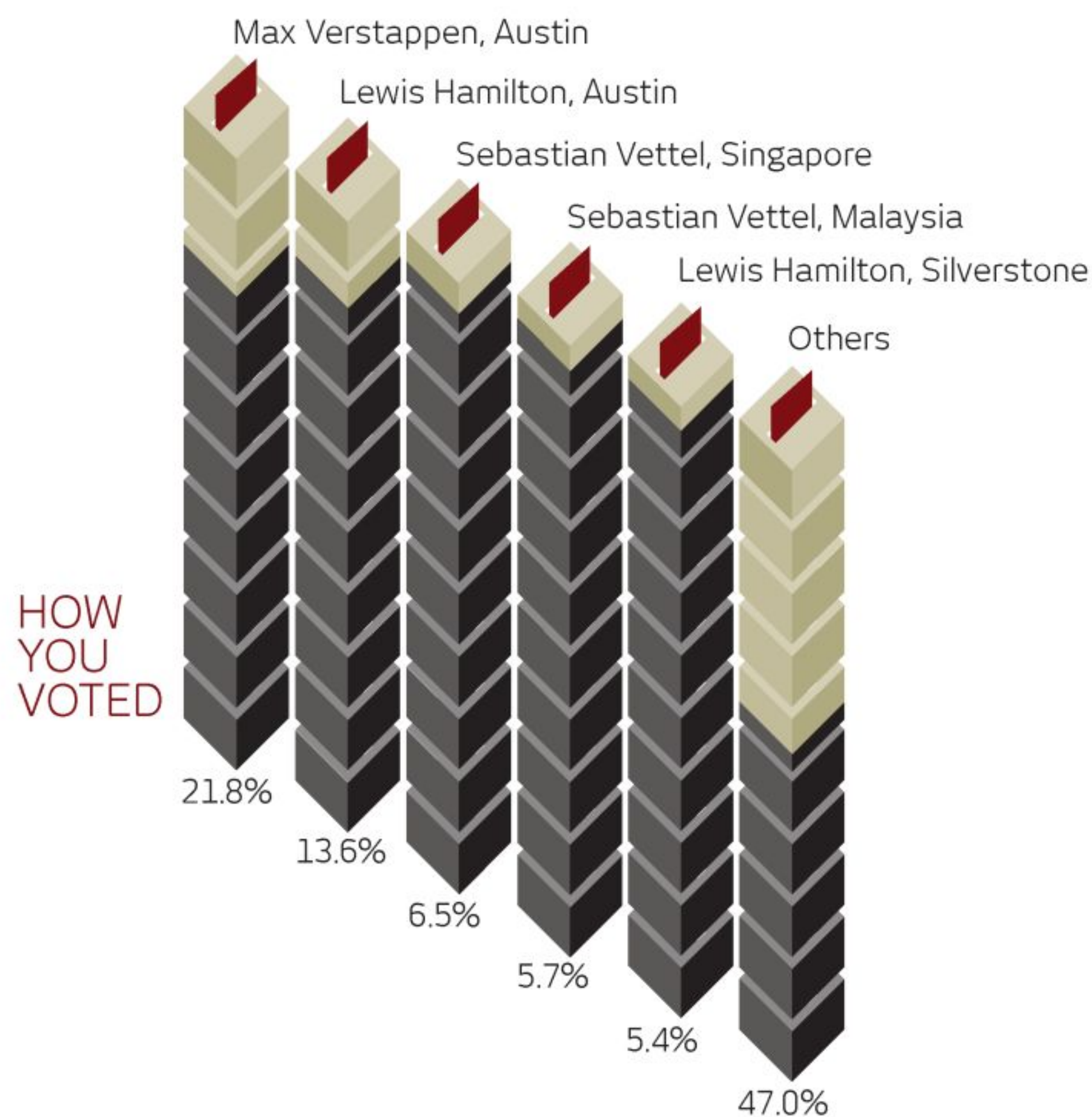


MAX VERSTAPPEN

There were tricky driving conditions, and it was not easy to keep the car on the track. To achieve a drive like that in my rookie year was a great result. The Safety Car didn't really help me as otherwise I think I could have been even closer to a third-place spot. But from the team side we had a good strategy and everything paid off - it was great."

Max Verstappen

Toro Rosso driver



For a rookie, limited track time can be a problem. Given the terrible weather in Texas during the US GP weekend in October, a lack of meaningful running meant Toro Rosso's Max Verstappen was on the back foot at the Circuit of The Americas. To add to his woes, he lost further time with an engine problem in practice. But in qualifying he produced an outstanding effort to make the top ten, as the conditions levelled the technical playing field and allowed his talent to shine through.

Then, on race day, in conditions where even the best struggled with the low grip, he showed supreme racecraft and judgement, again overtaking those around him with confidence and ease. Not many drivers barge past

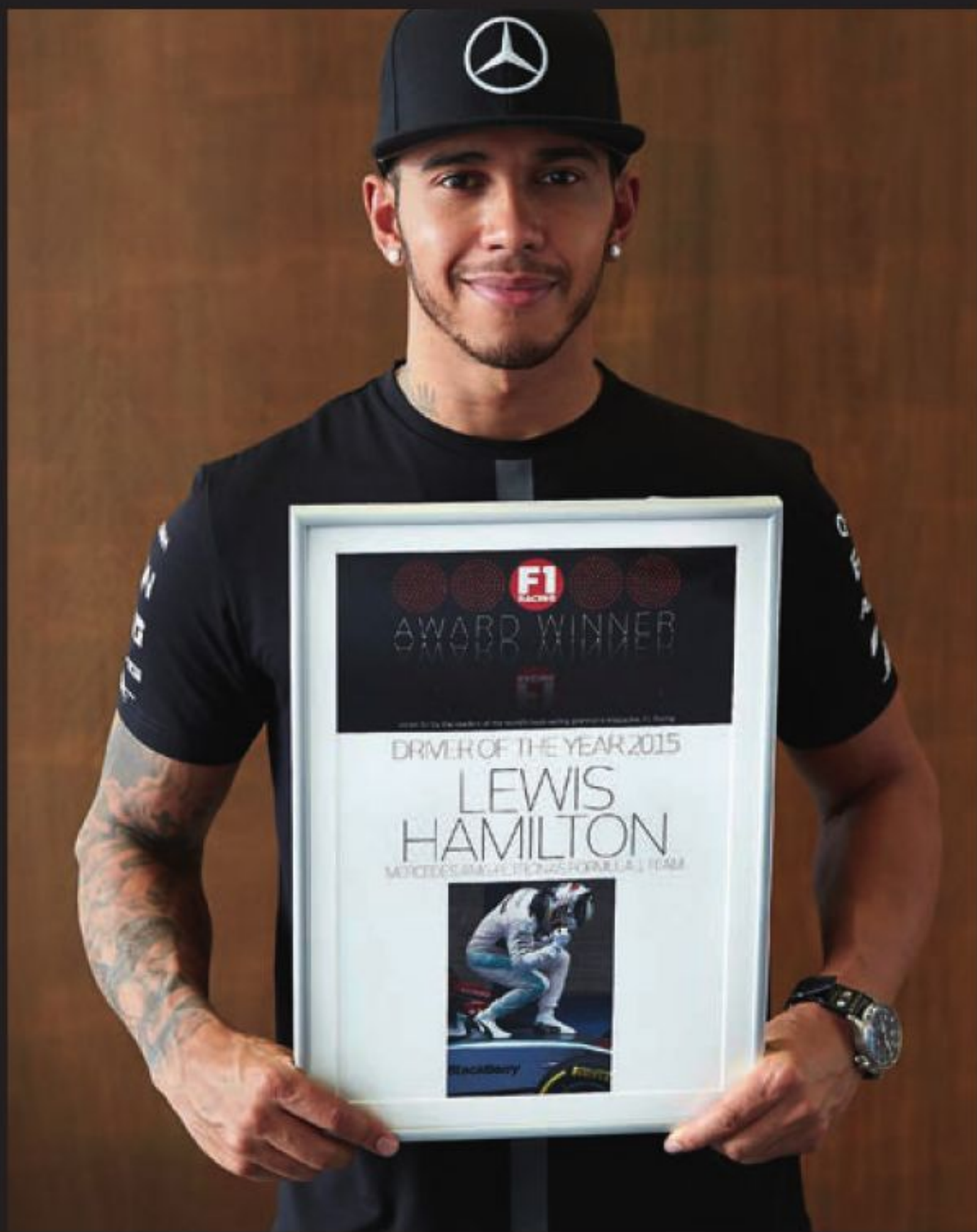
Kimi Räikkönen, but Max fought the Ferrari driver and came out on top. It was enough to make Kimi unusually outspoken about the duel after the race.

Verstappen squeezed Räikkönen over the kerb on the outside of Turn 12 as they raced side by side. There was the smallest of touches between the two, arguably judged to perfection by Verstappen, who later also overtook the second Ferrari of Sebastian Vettel. Overawed by racing world champions? Not at all.

He'd already scored an impressive P4 at the Hungaroring, but this time he was even closer to the podium until he was thwarted by Safety Car. It was a better, more fearless, drive in incredibly difficult circumstances.



DRIVER OF THE YEAR



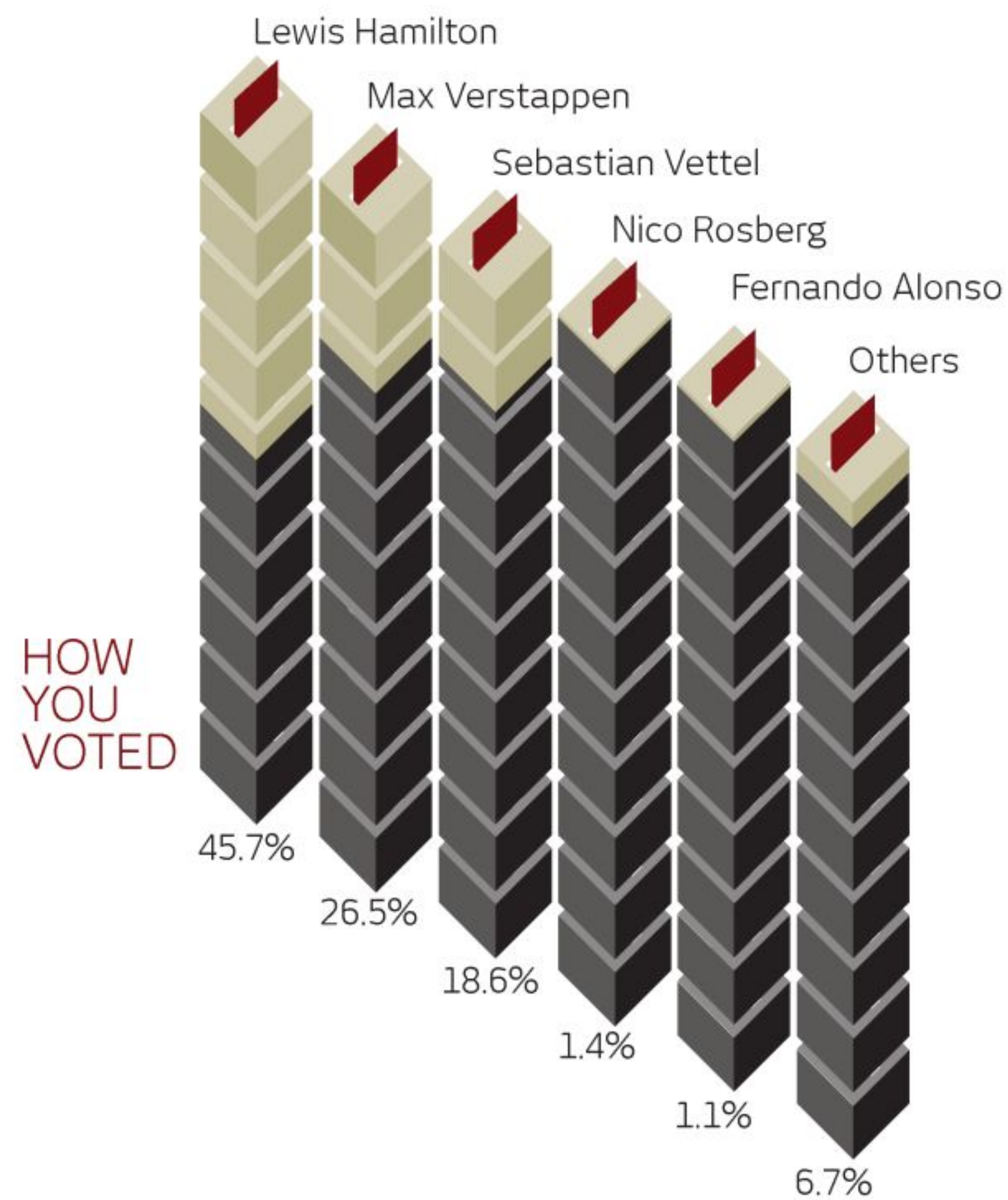
LEWIS HAMILTON



Awesome. Firstly, I'm amazed that the fans would vote for me and I'm very grateful to all the readers. I've grown up knowing this magazine and being one of those readers. It has been amazing, I'm truly grateful. Thank you very much to everyone – and we'll be pushing again for another good year in 2016."

Lewis Hamilton

Mercedes driver



We saw a shift in 2015. Lewis stepped up a gear in so many ways. Out of the car he was more relaxed, more composed and more calm. Inside the cockpit he was measured, assured and supremely fast. In the early part of the season he left Nico Rosberg – who'd spent the winter analysing every aspect of his own game – far behind.

Yes there were the occasional hiccups, such as that Safety Car mistake at Monaco and the problem off the start line in Austria. But both times he came back at the subsequent race – Montréal and then Silverstone – and won comfortably. A mark, perhaps, of a stronger Lewis Hamilton than we had seen in 2014?

By the mid-season break, Rosberg knew he had to find something exceptional if he was to conquer his dominant team-mate, but an engine failure in Monza and a mysterious off-the-pace weekend for the team in Singapore enabled Hamilton to remain firmly in the lead.

Hamilton made doubly certain of his superiority at the first corner at Suzuka and Austin, neatly nudging his team-mate to the edge of the track, while avoiding damaging contact. And he wrapped up his third world title with a stunning drive in the low-grip, semi-slick drama of Austin.

Meanwhile, Hamilton's life off-track has never been more high-profile: the continual flights to the US in his private jet, the constant partying, and his recent admission that he is making music late into the night during grand prix weekends. His team can only reflect that if he's given the freedom to be creative, it will be repaid by stellar performances out on track. It's only if the pendulum swings too far the other way, that it'll become a problem.

There was a suggestion in the races post-Austin that he'd perhaps taken his eye off the ball, but that would be doing his team-mate an injustice. Rosberg is no slouch, it's just that Lewis was *that* good in 2015. →

PHOTOS: ALASTAIR STALEY/LAT; CHARLES COATES/LAT; STEVE ETHERINGTON/LAT





car on the grid is easy, but when your car is unreliable, underpowered or lacks grip, it's a much bigger test. This is where a driver must stay motivated in the face of failure every fortnight.

A good candidate for this award was Fernando Alonso. He tried to press on in a season blighted by woe, but on occasion, he was perhaps too publicly critical to win this award.

SPIRIT OF F1 AWARD



Max Verstappen was also a strong contender. He has already proved himself in a number of other categories, and should be commended for his spirit and many overtaking moves during a season when many drivers complained about not being able to follow in the 'dirty air' of a competitor in front.

But after much consideration, we decided that this award belonged to Daniel Ricciardo. After such a strong breakthrough year in 2014, he was let down badly by his car (read power unit) in 2015, yet he's never stopped smiling despite the adversity. He has at all times demonstrated flat-out passion, an indomitable sense of humour and outstanding commitment to racing in an extremely difficult year. **F1**

DANIEL RICCIARDO



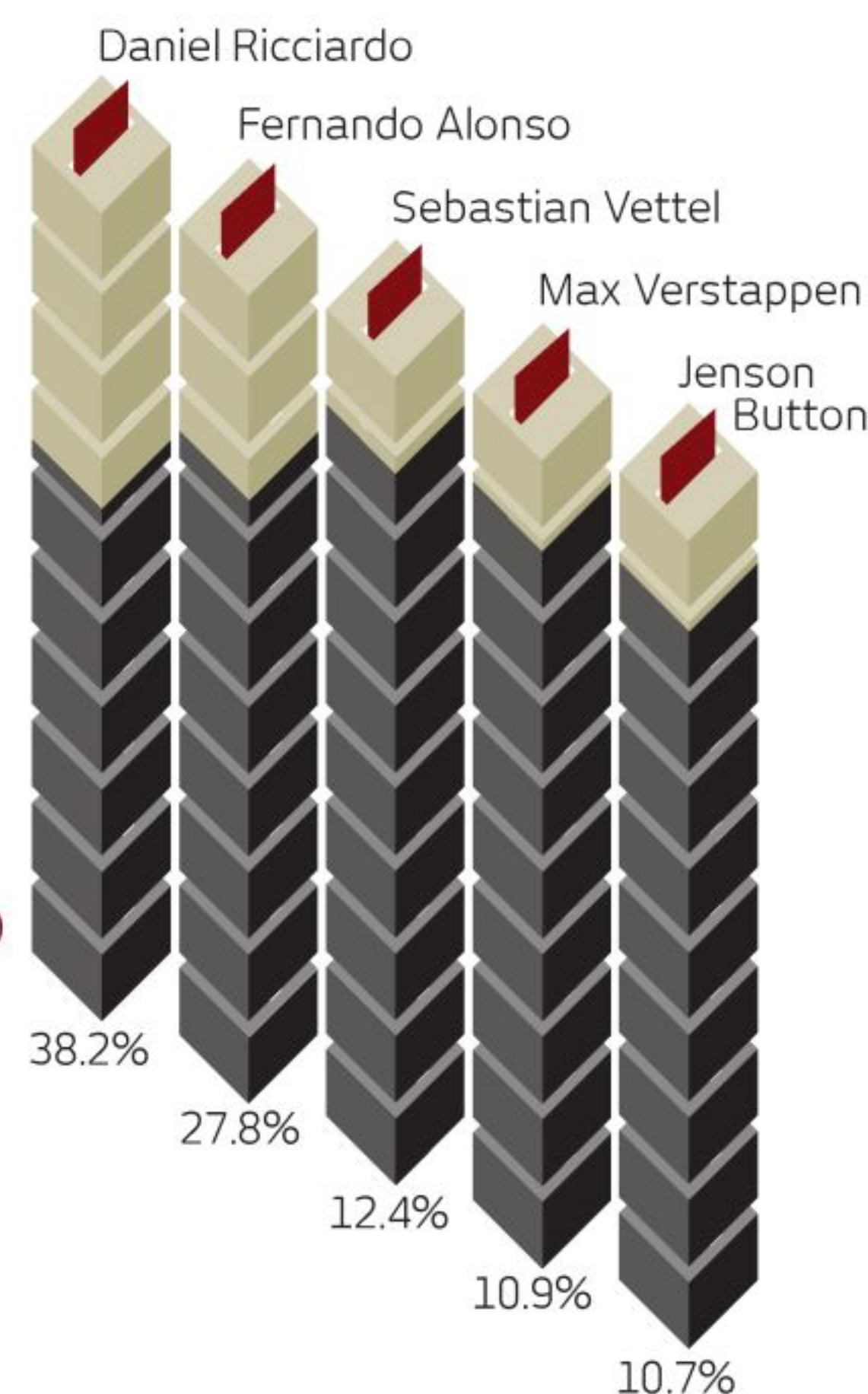
It's easy to be recognised when you have success, but 2015 was tough. I found it frustrating that I wasn't on the podium, but I realised what I needed to do and I think I managed to turn it around. I've honestly had as much satisfaction driving in 2015 as I did in 2014, despite not having such good results."

Daniel Ricciardo
Red Bull driver

For the first time, we felt we needed to honour a driver outside of our regular categories. We wanted to present an award for something that wasn't readily quantifiable by statistics. This one isn't for the number of poles, fastest laps or points accrued; we wanted to honour a never-say-die attitude, and a spirit of true sportsmanship.

An Italian magazine had a similar trophy named after the legendary Gilles Villeneuve and he more than anyone embodied a unique spirit of F1. He wasn't interested in titles: he just wanted to be the fastest driver on every lap of any session on any circuit. Trying to achieve that when you have the best

HOW YOU VOTED





June 18/19

LE MANS 24 HOURS

Self Drive packages with Hotel
or Camping From £79*
Coach Tours & Paris Stop-Overs
From £165*

Indianapolis – 29 May

INDIANAPOLIS 500 MILES

The 100th Edition
4 Nights In Indianapolis
£1,999 Including Grandstand Seats

Melbourne – 20 March

AUSTRALIAN GRAND PRIX

5 Nights Melbourne £1,450*

Melbourne & Sydney
2 Centre Holiday £2,299*

Silverstone – 10 July

BRITISH GRAND PRIX

Tickets, Hospitality
& Hotels

Hockenheim – 31 July

GERMAN GRAND PRIX

Weekends by Coach, Air or
Self-Drive in Historic Heidelberg

From £345*

Shanghai – 17 April

CHINESE GRAND PRIX

5 Nights Shanghai
Direct Flights
£1,499*

TOUR COLLECTION

Motor Racing International



Spa – 28 August

BELGIAN GRAND PRIX

Selection of Tours by Coach,
Air or Eurostar From £389*
Self-Drive Packages From £89*

Barcelona – 15 May

SPANISH GRAND PRIX

Selection of Weekend & Longer
Tours by Air

From £599

Monza – 4 September

ITALIAN GRAND PRIX

Weekends & Longer Tours
Based in Como
From £695*

Monte Carlo – 29 May

MONACO GRAND PRIX

Full Programme of Arrangements
including Flights & Hotels

From £459*

Marina Bay – 18 Sept

SINGAPORE GRAND PRIX

F1's Original Night Race
5 Nights Singapore
£1,499*

Spielberg – 3 July

AUSTRIAN GRAND PRIX

Weekend In Graz £749*

Vienna & Graz
2 Centre Holiday £899*

Budapest – 24 July

HUNGARIAN GRAND PRIX

Weekend By Air £599*

Vienna & Budapest
2 Centre Holiday £759*

Mexico City – 30 October

MEXICAN GRAND PRIX

5 Nights In Mexico City
Direct Flights
£1,499*

www.motorracinginternational.uk.com

The 24th edition of the MRI Tour Collection is now available. Visit our website for full details. As ever, we will be featuring the F1 World Championship, the Indy 500 and the Le Mans 24 Hour Race. A small selection of our vast choice of travel arrangements is outlined above.

Put your trust in the UK's only fully bonded, independent motorsport travel specialist.

* Except Indy 500, prices do not include race tickets which can be supplied by us at additional cost.



Apply NOW for your FREE brochure. Ring our 24 hour dial-a-brochure service quoting reference: 'F1'
01304 612424 info@motorracinginternational.uk.com

YOU ASK THE QUESTIONS

Max Verstappen

The sport's youngest ever competitor on how it felt to finally get his driving licence, and why following team orders shouldn't be *de rigueur*...

WORDS JAMES ROBERTS PORTRAITS ALASTAIR STALEY/LAT

Most teenagers are slightly awkward in frame, and 18-year-old Max Verstappen, tall and spindly, is no exception. His look is deceptively boyish, though, for there is no mistaking the confidence of the ferocious competitor within.

He's very happy on this warm evening in the Brazilian GP paddock at Interlagos. He's just scooped three *F1 Racing* awards, for Rookie of the Year, Overtake of the Year – that amazing move around the outside of Felipe Nasr at Spa's daunting 170mph Blanchimont – plus Drive of the Year for his fourth place in the wet at Austin.

It's clear that you, the readers of *F1R*, have been impressed by Max's speed, determination and enthusiasm in his first year of F1. He hasn't been overawed in his rookie season, largely because he's been well grounded by his father, former F1 racer Jos Verstappen, who is sitting alongside him as this interview commences. Indeed, he sits just within earshot as Max turns his attention to the pile of question cards...

What would you say has been the highlight of your rookie year?

Sian Williams, UK

I would definitely say Austin. It was a great race, I enjoyed it a lot and of course I was able

to secure fourth position – an award-winning fourth position – thanks to the readers of *F1 Racing*. It was very special.

If you could get two current F1 cars configured and equalised to account for weight and body size, would you like to race your father? If so, on what track? And who would win?

Scott Rost, USA

Of course I would like to race my father, that would be very nice. And I would say Spa. Who would win? I don't know. I think that my dad is still very fast, so...

F1R: Have you ever driven against him in anything before?

MV: No, not really. We haven't had a chance to do that yet. Well, we have in video games but there was no chance for him to compete with me – I think that's a generational thing.

Max, what a great first season in F1. Are you surprised at how it has gone?

Andy Willis, UK

A little bit surprised, but you always have to believe in yourself and it can also depend on what car you get. Luckily we've had a great car so

far, so we've been able to fight for points and that helps a lot. You get a lot more attention if you are fighting for points rather than being at the back of the field, especially in your rookie season.

How long will it be before you're in a front-running team? You are obviously future world championship material.

Mark Perrin, UK

It's difficult to answer. I need to keep doing my best here, and hopefully in a few years I'll be able to get the jump up. I don't want to wait too long, but it's difficult to put an exact year on it.

What is the best piece of advice your dad has ever given to you?

Aditya Satriady, Indonesia

Stand with two feet on the ground.

F1R: When did he first say that to you?

MV: It was in karting when I was very young. It is always important, even when you are winning a lot, to remain grounded.

F1R: Has he ever said something and you've thought, 'Hmm, that's not good advice!'

MV: No, not that I remember right now.

F1R: We'll remind you in ten years and we'll see if your feet are still on the ground... →



Who scares you the most? Your dad, Toro Rosso team boss Franz Tost or Red Bull Junior Team boss Helmut Marko?

Thomas Larsen, Norway

No one; I'm quite relaxed.

FIR: No one... really? Who shouts the loudest?

MV: Probably my dad, but the last time was a long time ago. He doesn't need to shout now, I behave very well.

[Jos Verstappen glances down at the question card: "It has to be me," he says. "Especially when he was younger."]

When did you last fall over?

Twan Vrieling, Netherlands

Jos Verstappen: Not drunk I hope!

MV: No. I don't know, I'm sure it was a long time ago, maybe over a year and I think I just missed a step and I was *not* drunk...

Has competing in online 'sim racing' helped your real-life racing in any way?

Jordan Groves, UK

No, it's karting that has helped the most. Sim racing I do for fun. The best experience is from racing itself, which is all a natural feeling.

FIR: Tell us your racing setup at home.

MV: I have a steering wheel connected to the PC, three screens, I have a motion seat and I'm sitting in a position like a formula car. I race an F1 car, but 2011-spec with accurate detail. There are some quick guys out there online and it can be very difficult to keep up with them – but they do it every day. They would be nowhere in a real car, but in a sim they are very fast.

FIR: I heard that sim racing helped you with some of your overtaking moves this year?

MV: I didn't quite say that, it's not absolutely correct. Once I did exactly the same move on the sim that I did on the race track, but all my experience comes from formula cars and karting.

Do you dream about the Dutch Grand Prix returning to the F1 calendar?

Bartłomiej Stryjski, Poland

It's nice to have a 'real' home GP, although I have Belgium as my home race. It would be nice to see a race at Zandvoort if they changed the track, but that's still a long way off. Hopefully it will come, but for now it's not realistic. F1 is certainly alive again now in Holland, but the next step is to convince the government to have the same feeling about it and I think that's a bit far off.

Is there a chance you could go to Ferrari?

Diane Belcher, UK

Well, it's a great team, but at the moment I'm very happy with where I am. I just need to keep pushing, so there's no reason to change teams.

After the 2015 Singapore GP it seemed as if you positioned yourself against team orders. Don't you think it's important to work for the team?

David Lorente, Spain

It's not that I positioned myself against team orders, it's just the way it was. And at the end of the race the team said they were in the wrong, so there is no reason to say I was against them. It turned out to be the right call and I think a lot of people agreed with that. If you are in a different situation, on different tyres to your team-mate, of course there would be no issue about that.

FIR: Didn't you say your father would have kicked you in the balls if you'd obeyed the order?

MV: He probably would have done that. Let's put it this way, I wouldn't have been happy if it had been my son!

In which areas do you think you are better and worse than your team-mate?

Handrianto Soegianto, Japan

Erm....

FIR: Let's start with better.

MV: Not worse... [smiles] I don't know I think that's a very difficult question to answer.

FIR: No, it's not – you've seen the telemetry!

JV: But he doesn't want to tell you!

MV: Yeah, what can I say? You always think that you are better than your team-mate, everyone thinks that. Even when you are far behind your team-mate, you always say that you are better. And to be honest, you don't want to be arrogant about these sorts of things.

You are so fast. What is your secret?

Marcin Sygut, Poland

I'm not going to say that...

FIR: You've seen the telemetry!

MV: You need the talent, but also a lot of hard work and preparation and I've had good advice from people like my dad since I was very young. All those things together make me able to do this.

If you could choose Sebastian Vettel or Lewis Hamilton as your team-mate, who would you pick and why?

Matt Preece, UK

Either of them would be nice, so why not a three-car team? It would be interesting to see how they perform and how they work.

FIR: Have any of the older drivers been helpful in your rookie year?

MV: Of course not. You work for yourself, don't you? I haven't had any advice, but that's fine – if I was 30 and a 17-year-old kid came into the sport. I wouldn't tell them anything! On track, as soon as you start to pull off some good moves and you're fighting against them in a good way, they start to have respect for you and they start to leave you space on the racetrack.

What is your view on the new FIA age limit of 18 for an F1 superlicence?

Roger Sutcliffe, UK

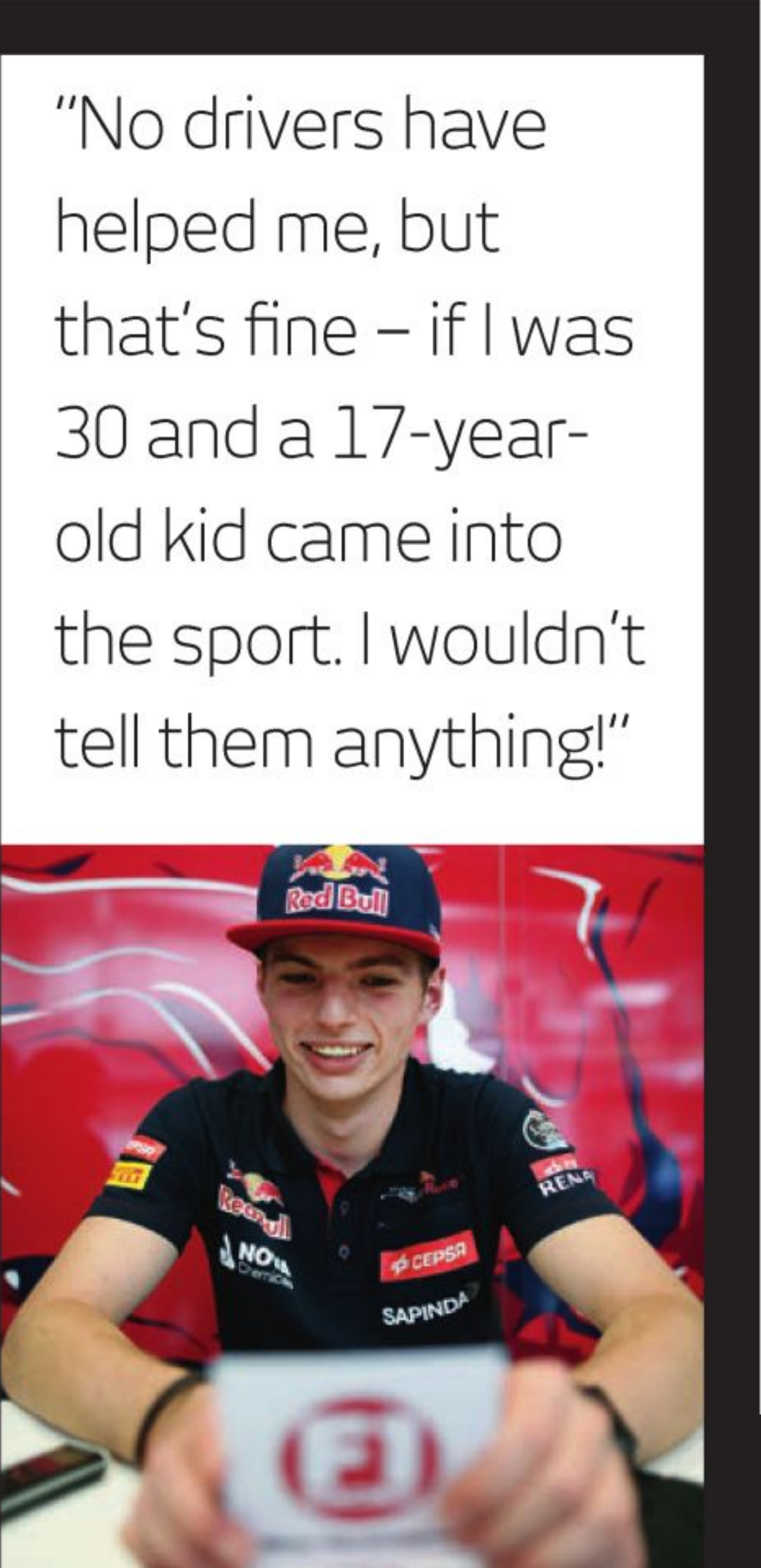
That's probably because of me, but it's hard to say. Obviously for me it wasn't a problem, but maybe in the future if a 17-year-old wants to enter F1 he can't, so that's unfortunate. I don't think we'll ever see a 16-year-old in F1 though, as physically it would be very tough. Also, you need at least one year of lower-category experience because you make mistakes and you don't want to be doing that in an F1 car at over 185mph.

Max, what an incredible collection of karts you and your father have. Do you ever find the time to drive them?

Paul Miller, UK

We have loads of kart frames and chassis. They are mainly karts I used with my friends when I was winning the karting world championship in 2013. My friend Jorrit Pex won it this year with the same carburettor I used. Pex and I raced together and our fathers prepared engines for us. My dad was my mechanic; he built my engines and prepped them on the dyno.

I still have my first kart and the one I won my championship with; we also have pedal cars, quads and mini bikes – I would have raced on two wheels if I hadn't got into cars. I live only 20 minutes from Genk in Belgium, and that's the track I raced on growing up. My dad worked there in the workshop when he was younger, and





What was your first thought after your Monaco crash?

Lee Davidson, UK

I just tried to get out of the car as fast as possible. And then after that, I don't know, I just wanted to have a drink of water as I was a bit thirsty. When the accident was happening it felt as if it was going on for about ten seconds, but of

course it's not like that at all. In the car you hold yourself very tight. My father told me that when you have a frontal impact you should keep your hands on the wheel, so you absorb the force of the crash a bit. That helped me because I only had

a little bruise, but if I'd released my hands from the wheel I would have a lot of bruising beneath my belts. When you have a side impact, if the wheel turns a little bit it can break your thumb or wrist, so you must let go. But head-on, hold it.

in the winter I'll go there a lot with my friends, because it's good to stay sharp and test yourself.

Do you think you could beat Lewis Hamilton in the same car?

Darren Ettrotch, UK

Should I answer honestly, or will I piss off... He's experienced and fast, for sure. Of course I would want to challenge him and would love to be in the same team. I can't say I would beat him, as with the experience he has it would be difficult.

How many F1 races did you watch from the paddock when your father was racing?

Mino Fylaktos, Greece

I remember in 2000 or 2001 when I was four or five, I was sitting in one of his cars in the garage and I can remember the hospitality unit at the grands prix, in Malaysia and Nürburgring as well. I also remember driving a simulator racing game at a race; I was so small, they sat me on cushions. And I recall one of the mechanics babysitting me at a test. He works for Toro Rosso now, so he loves to tell me that he babysat me once.

You only recently got your regular driving licence. Was it strange to drive an F1 car, but not be able to drive on the road?

Dave Armstrong, Canada

I used to sit next to my girlfriend and I was an F1 driver, but she'd have to drive... that was a bit awkward! I used to sit low in the car and hide. I'm happy I turned 18 and I can drive now.

What do you fear the most while driving?

Vishal Kapoor, India

Absolutely nothing. You shouldn't think about crashing or dying. That would be a bad idea as you'd be scared and you wouldn't get the performance out of the car.

Who was the first driver you had a crash with in single-seaters?

Ben Anderson, UK

Autosport magazine's Ben Anderson? That was him, yeah! No, I actually crashed with someone else. I was doing the Ferrari-run Florida Winter Series and my speed limiter and pit limiter were not working. I was trying to change some dials,

then there was a red flag, and someone stopped in the pits and I tapped into the back of him.

FIR: Ben Anderson has been dining out on this story saying it was him...

MV: Well I did have a funny incident with him on track, I would say that he braked just a bit too early. Typical journalist. **F1**

JOIN OUR FAN COMMUNITY

Want to put a question to a big name in Formula 1? Visit www.f1racing.co.uk and join our Global Fan Community, where you'll get to do just that. We'll let you know which interviews are coming up.



Scan this code with your smart phone and you'll be taken straight to our reader panel page

MAURIZIO ARRIVABENE

A SEASON IN THE SUN

Just twelve months after being parachuted into a dysfunctional Scuderia Ferrari team, Maurizio Arrivabene appears to have overseen a miraculous upturn in fortunes. **Pino Allievi** assesses man and method

TRANSLATION
ANTHONY PEACOCK

December 2014. There were just a few days to go before Christmas and Sergio Marchionne, CEO of Fiat-Chrysler Automobiles, was determined not to miss the traditional Ferrari end-of-year lunch for media – despite splitting his life between Detroit and Turin as a result of the recent Fiat-Chrysler deal. The gathering was a congenial tradition, inaugurated by Enzo Ferrari himself in the 1950s, and kept alive by Luca di Montezemolo throughout the 23 seasons of his chairmanship. The occasion was scheduled for 23 December, at around midday, in the famous meeting room at Fiorano that overlooks the track.

Marchionne arrived wearing his trademark black pullover. By contrast Maurizio Arrivabene – making his

first appearance as Ferrari team principal – turned up in a rather striking apricot pastel jumper. Unusual, since in his previous role, heading up Philip Morris sponsorship, he was rarely seen without a blazer and tie at official functions.

It was a day that was different from many others. Marchionne, with the blunt frankness you would expect from a top manager with North American heritage, started it off by saying that Ferrari lay in ruins after a dismal season: “A massive disaster that we absolutely cannot afford to repeat,” was his assessment. Earlier on, speaking privately with the team, he had been even more candid. “I’m not sure if you’re here to finish second, but I’m not,” he stated. “I’m not sure if you’re happy with fourth in the championship, but I’m not.”

These remarks were designed to sting. So when it was Maurizio Arrivabene’s turn to speak, he tried to lighten the mood. “I’m not a magician who can wave a magic wand and make things better overnight,” he pointed out. “Nor am I some sort of saviour who has descended to perform miracles. I’m just an employee in a big job, who will be doing his very best to turn the tide. If we win once, I’ll be happy. If we win twice, it will be a success. If we win three times, it will be a triumph. But if we do badly, then it will be all my fault...” →

PHOTO: LORENZO BELLANCA/FERRARI



“My criticisms provoke the right reactions. Whenever I say Kimi has made a mistake, he doesn’t even try to answer. But you can see it’s hurting him inside; that he wants to make it up to you in the way that he should. And this is something I like”

In truth, neither he nor Marchionne really thought that Ferrari could bounce back as quickly as they have, after a 2014 season so scarce in results that an embittered and jaded Fernando Alonso decided to pack his bags and leave.

During those days leading up to Christmas 2014, there was not a huge amount of light at the end of the tunnel. And another question kept on doing the rounds – within Ferrari as well as externally. This Arrivabene, expert though he may be in communication and marketing – does he really have what it takes to run the team? Does he know enough about F1 to understand the necessary changes that have to be made?

These were the same questions that I had put to Piero Ferrari – the vice president of the famous car firm – in confidence a while before. “I’ve known Maurizio for many years, and I think he’s strong enough to sort everything out quickly,” Ferrari replied. “I’ve spoken to him at great length, he’s got some clear ideas and he’s going to make some changes very soon.”

Maurizio (as he prefers to be known) had actually already started his reform programme a few days prior to that Christmas lunch, by identifying ways to slim down the management hierarchy, avoiding overlapping roles and

discarding people he thought wouldn’t buy into the new way of doing things. As a result, within a short space of time, Luca Marmorini (in charge of engines), Pat Fry (responsible for trackside engineering) and Nikolas Tombazis (leading the design team) were all headed for the door.

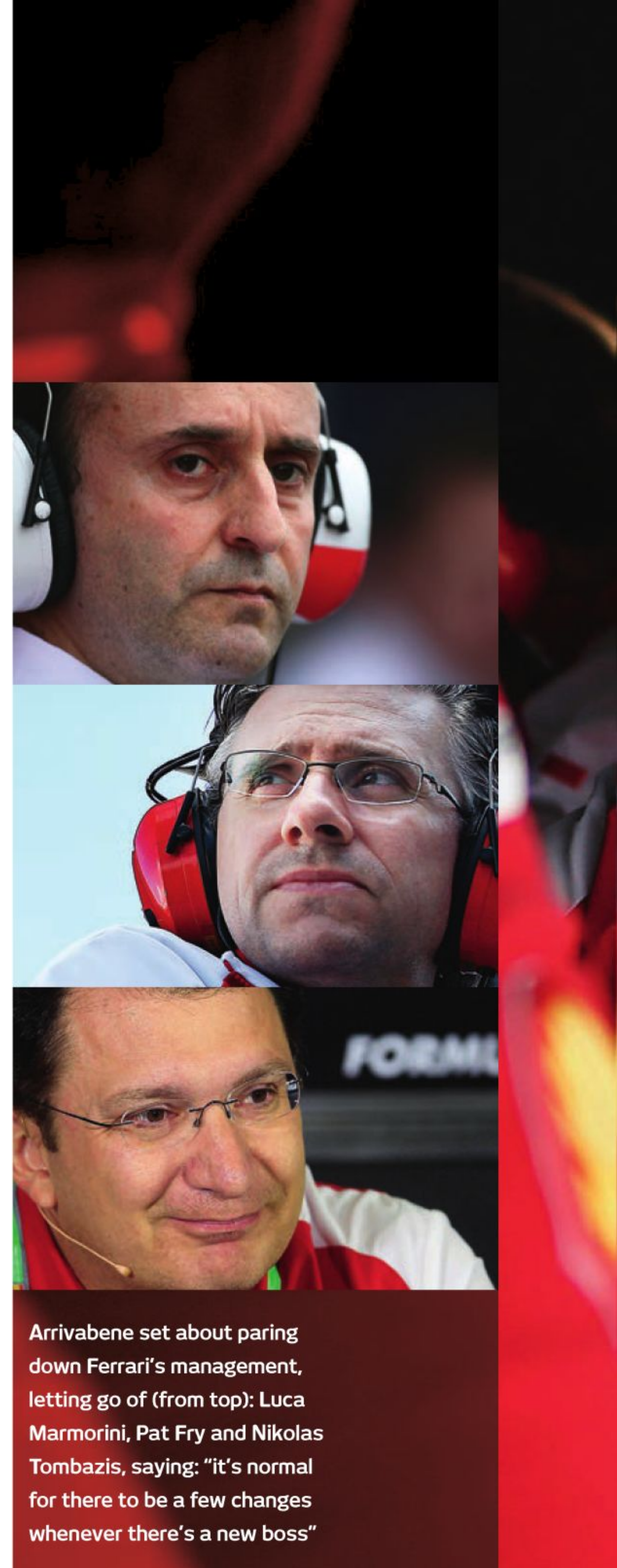
Nobody was hired to replace them; instead their deputies were shuffled into the front line. And that led to the rise of Simone Resta, Mattia Binotto and Lorenzo Sassi, followed soon after by the arrival of Toni Cuquerella and Iñaki Rueda. By attributing clear roles under the implacable authority of James Allison, the internal disputes that had poisoned the 2014 season were swiftly resolved. This was the first important step.

“From the moment we created the new organisation,” says Maurizio, “I saw a fresh team spirit that only got stronger as the races went on and the results came. Now, I’m proud to say that I’m at the head of an extremely efficient team, whose strength lies first and foremost in its people. I don’t really believe in the success of individuals; you can’t achieve anything in Formula 1 on your own. What we’ve ended up with is a whole team of talented, hungry and supremely competitive professionals.”

Stefano Domenicali, Ferrari team principal from 2008-14, found himself in a difficult position during the years in which he ran the Scuderia. Having grown up within the team, he disliked any confrontation with the many colleagues who had become his friends, feeling reluctant to fire them or reduce their roles. He also had a demanding boss in the form of Luca di Montezemolo, who heaped pressure on him yet took decisions over his head. Marco Mattiacci, who took on the poisoned chalice post-Domenicali, lasted just six months as the head of the *Gestione Sportiva*. He lacked racing experience and had taken on a job that was completely alien to his own managerial culture.

Maurizio, however, fitted in straight away because of his excellent relationships with the top management of Ferrari and Fiat, whom he had helped finance through valuable Philip Morris sponsorship. Nevertheless, Maurizio was still sufficiently detached to make dispassionately all the changes he deemed necessary, with the full approval of Sergio Marchionne, who gave him carte blanche to do exactly as he wanted.

As Maurizio explains: “It was necessary to lose some people who had accomplished a number of important things at Ferrari, such as Marmorini, Tombazis and Fry. But on the other



Arrivabene set about paring down Ferrari’s management, letting go of (from top): Luca Marmorini, Pat Fry and Nikolas Tombazis, saying: “it’s normal for there to be a few changes whenever there’s a new boss”

hand, it’s normal for there to be a few changes whenever there’s a new boss. I didn’t actually sack anybody, but I did have to sit down with a number of people to explain why it wasn’t possible to renew their contracts this time. In large companies, if you don’t reach the objectives that have been set for you, you find yourself faced with a problem that needs to be resolved. That’s what I’ve been doing at Ferrari, in exactly the same way I did at Philip Morris.”

This is a man who made his way through the corridors of power, starting at the bottom as a PR man for the Madonna di Campiglio ski resort. Then, thanks to a top result as a co-driver on the 1987 Paris-Dakar Rally – where he finished sixth in a Marlboro-backed Mercedes – he entered the world of Philip Morris: it was onwards and



FACTFILE

Name Maurizio Arrivabene, **Team** Ferrari,
Age 58 **Born** Brescia, Italy

- 2014** Appointed team principal at Ferrari in November, replacing Marco Mattiacci
- 2012** Becomes an independent board member of Juventus FC
- 2011** Appointed vice president of Philip Morris consumer strategy and event marketing
- 2010** Joins the Formula 1 Commission as a representative of all F1 sponsors
- 2007** Rises to the position of vice president of Marlboro global communications and promotions for Philip Morris
- 1997** Joins Philip Morris and begins his involvement with the company's sponsorship of Ferrari

upwards from there. His bullish approach meant that he upset a few people along the way, for which he makes no apologies.

"It's true: I'm not really a diplomatic person at all," he admits. "I don't think twice about telling someone exactly what I think of them to their face, even if that's not always the best idea."

This side of his character is where some of his choice quotes about drivers come from – especially when things aren't going well. "All I do is say the same things everyone else sees," is how he defends himself. "Formula 1 needs sincerity and openness. If I say that a driver has made a mistake during a race, that's not calling into question his absolute value otherwise. And also, my criticisms often provoke what I would call the right reactions. Take Kimi Räikkönen; whenever

I say he has made a mistake, he doesn't even try to answer. But you can see it's hurting him inside; that he wants to make it up to you in the way that he should. And this is something I like."

There have been no confrontations with Sebastian Vettel; only some air cleared at the start of their collaboration, before the season began. "As soon as he arrived with us at Ferrari, he was tempted by the desire to change things," Maurizio recalls. "But then you come across someone – as happened to me as well – who gently explains that you are running too quickly and that perhaps it would be better if you just stopped for a moment, and started again with a bit more humility. That's what I did. And Sebastian, too, wanted to make some changes at the start of his Ferrari career. At that point I

invited him to visit all the different departments within Ferrari, stopping to talk with people and observing carefully what they do. From that day on he fully understood, and became an even bigger Ferrari fan than he was before."

Maurizio immediately grasped who his key reference points should be, choosing technical director James Allison and Sebastian Vettel – with whom he enjoys a relationship of total trust.

There were many pundits (including a number of people within Ferrari itself) who envisaged Kimi Räikkönen being replaced by Daniel Ricciardo from 2016, but Maurizio made sure that Kimi's contract was honoured, knowing that the arrival of Ricciardo would not have gone down well with Vettel. And another fact worthy of note: Maurizio has never personally been →

Ferrari team principals since the death of Enzo Ferrari in 1988



Cesare Fiorio (1989-1990)

Races 32 Wins 9
Win % 28.13 Poles 3
F.Laps 9 Titles 0



Claudio Lombardi (1991-1992)

Races 16 Wins 0
Win % 0 Poles 0
F.Laps 2 Titles 0



Sante Ghedini (1992-1993)

Races 32 Wins 0
Win % 0 Poles 0
F.Laps 0 Titles 0



Jean Todt (1994-2008)

Races 255 Wins 106
Win % 41.57 Poles 90
F.Laps 99 Titles 13



Stefano Domenicalli (2008-2013)

Races 94 Wins 12
Win % 12.77 Poles 4
F.Laps 11 Titles 0



Marco Mattiacci (2014)

Races 19 Wins 0
Win % 0 Poles 0
F.Laps 1 Titles 0



Maurizio Arrivabene (2015-)

Races 19 Wins 3
Win % 15.79 Poles 1
F.Laps 3 Titles 0



PHOTOS: GLENN DUNBAR/LAT; SAM BLOXHAM/LAT; STEVE ETHERINGTON/LAT; ALASTAIR STALEY/LAT; LAT ARCHIVE; LORENZO BELLANCA/FERRARI; SUTTON IMAGES

Arrivabene has chosen never to appear on the podium himself, instead nominating (from top): Diego Ioverno in Malaysia; James Allison in Hungary; and Modesto Menabue in Singapore



up onto the podium after a race victory, leaving the honour to Diego Ioverno (responsible for pitstops) in Malaysia; James Allison in Hungary; and engine engineer Modesto Menabue (the only person to have been employed by the *Gestione Sportiva* while Enzo Ferrari was still alive) in Singapore. These were far from random choices: they would have been planned some time in advance, and it's for those reasons as well that Maurizio has already engendered so much respect and goodwill inside his team.

"My approach to my colleagues comes from the heart," he says. "An engineer or a mechanic has got nothing to worry about if I shout at them: that's just part of my character. The time to start worrying is if I don't talk to them any more: that means I've no time to waste on them." In the

office, his door is always open – but that doesn't always mean he is available to talk. "It's enough to stick your head round the door and observe the look on my face to understand whether it's a good idea to come in or not," he explains.

He's a tough man, without a doubt, who doesn't believe in compromises or half-measures. But he always assumes his responsibilities and listens to – as well as solves, if the situation warrants it – the problems faced by others. Thanks to all of this, he's managed to instil a firm and unwavering sense of discipline at Ferrari that didn't exist before. Initial reaction to him was nervous, but now the consensus is one of approval. Those who tried to curry favour using the well-worn tactic of sycophancy were soon found out. "It didn't happen with many people, but it did with some," Maurizio confirms. "However, I can smell arse-kissers a mile off, so I tend to keep them at arm's length."

After taking on his new role, Maurizio moved from Lausanne in Switzerland to Parma, reducing his daily commute to Maranello to around 100 miles. He brought with him the art books he reads avidly, as well as the novels and biographies of prominent people that pack his bookshelves. He loves modern art, furniture and design, visiting as many art exhibitions as he can. And now, of course, he's much closer to his holiday home in Forte dei Marmi, which he visits in the summer: when Ross Brawn was at Ferrari, they were regulars at the same beach.

The three victories from 2015 have been the result of hard work from the team and also the fruit of all the intense preparation that took place over the winter. "The biggest progress came from the power unit: so from Mattia Binotto's group, who did an exceptional job," says Maurizio. "But even when it came to chassis and aerodynamics, despite starting off with a car that was essentially an evolution of the 2014 model, we managed to eliminate quite a few old issues, such as a lack of traction and the difficulty of getting the tyres up to temperature straight away. It's actually the 2016 car I'm really looking forward to in terms of truly turning the tide. Mercedes are very strong: they work hard and keep on winning, but our objective is not just to go racing every weekend in the hope of finishing second. It's far from easy, but we're going to try to beat Mercedes. We've got lots of ideas and we know what we can do differently. We'll start 2016 with a slightly different structure, in which we've drawn some inspiration from football."

"An engineer or a mechanic has got nothing to worry about if I shout at them: that's just part of my character. The time to start worrying is if I don't talk to them any more: that means I've no time to waste on them"

Maurizio is a huge fan of Juventus FC, and sits on the squad's board of directors. He goes on to explain: "In football some people are on the pitch and others are on the bench. In the end though, everyone is indispensable when it comes to obtaining the final result."

He enjoys an excellent relationship with Marchionne, since the two men have the same direct approach to problem-solving. They also recognise that people have the right to make a mistake. But only the one. This principle of course applies also to Maurizio himself – a fact of which he is well aware. "I've got a four-year contract with Ferrari, so I have three years left," he points out. "Unless I'm fired first..."

He says it, though, with the smile of a man who knows that's not about to happen. His rapport with Fiat and the Ferrari board is a lot more solid than that of his predecessors. It will become even closer if Maurizio manages to bring the drivers' title, which has been missing since 2007, back to Maranello. But what if he doesn't? "In that case, Mr Marchionne will not be happy at all, and he'll be quite right not to be."

He smiles once more. This time with slightly less conviction. **F1**

• *Pino Allievi is a veteran Formula 1 correspondent for La Gazzetta dello Sport*



PICTURES OF THE YEAR

F1 Racing's lensmen from **LAT Photographic** were trackside at every test session and at all 19 grands prix in 2015. Here we present a selection of their finest images from across the season



PHOTO: 2015 BAHRAIN GP, SUNDAY 19 APRIL. STEVEN TEE/LAT. 200MM LENS, 1/15SEC AT F20



1 LIFE'S THE PITS

Where Spa-Francorchamps, Belgium

When Sunday 23 August

For any F1 mechanic, the speedy tasks conducted in a pitstop still constitute some of the most pressurised moments of a grand prix weekend. Here the Red Bull team come together in balletic symphony to change all four wheels and tyres in a blink-and-you'll-miss-it three seconds



2 ANOTHER GOLDEN YEAR

Where Monza, Italy

When Sunday 6 September

Rounding the famous Parabolica curve at Monza, Valtteri Bottas casts a long shadow on the fabled asphalt. This was another strong year for the resurgent Williams team, and at Monza his team-mate Felipe Massa took a third-placed podium finish while Bottas crossed the line in fourth



3 ROOM WITH A VIEW

Where Mexico City, Mexico

When Sunday 1 November

This old baseball stadium in the Magdalena Mixhuca public park was the perfect site through which to weave a modern-day grand prix circuit. Thousands of motorsport-mad Mexicans loved the spectacle as F1 returned to their country for the first time in 23 years

4 HATS OFF TO MEXICO

Where Mexico City, Mexico

When Sunday 1 November

Despite the race taking place on the festival weekend of 'The Day of the Dead', the atmosphere at the first Mexican GP since 1992 was alive and kicking. Nico Rosberg triumphed ahead of Lewis Hamilton and Williams' Valtteri Bottas (who was quick to remove his large sombrero)



Steven Tee

Managing director of LAT Photographic and F1 Racing's principal photographer

Camera Canon EOS-1DX
GP debut San Marino 1984
F1 races covered 544

1 200mm lens, 1/8th at F25
2 35mm lens, 1/4000th at F4
3 15mm lens, 1/1000th at F6.3
4 35mm lens, 1/1000th at F7.1

5 85mm lens, 1/800th at F2.8
6 35mm lens, 1/320th at F4.5
7 200mm lens, 1/1000th at F8
8 600mm lens, 1/250th at F6.3



5

BACK TO THE START

Where Albert Park, Australia

When Sunday 15 March

Rewind to Melbourne and the start of the 2015 world championship campaign. Lewis Hamilton is contemplative on the starting grid as he prepares to defend his drivers' title. He's already made the best possible start, putting himself on pole position for the season-opening Australian Grand Prix



6

A JOKE OF A YEAR

Where Sakhir, Bahrain

When Saturday 18 April

After missing the first race, due to a mysterious crash in pre-season testing, Fernando Alonso started the year in high spirits, despite his car's poor form and reliability. But his good humour was increasingly tested as 2015 went from bad to worse...



8

CAR PARK FULL

Where Shanghai, China

When Sunday 12 April

At the end of the Chinese Grand Prix all the drivers pull into parc fermé to have their machines scrutineered to ensure their technical legality. Which makes this almost certainly one of the most expensive car parks in the world... →



7

FLYING HIGH

Where Albert Park, Australia

When Saturday 14 March

Viewed from above at the season-opening grand prix in Australia, the Mercedes cuts a lonely path on the temporary road course. Alongside it is Albert Park lake, just a few miles from the urban centre of Melbourne and close to the beaches of St Kilda





1 FERRARI'S NEW SAVIOUR

Where Monza, Italy

When Sunday 6 September

When Sebastian Vettel switched from Red Bull to join Ferrari last winter, many wondered whether he could succeed where Fernando Alonso had failed. Three victories in 2015 and a podium at Monza (pictured) gave us an indication that, just maybe, the good times are about to return to Maranello



2 RAINDROPS KEEP FALLING

Where Austin, USA

When Friday 23 October

Texas isn't exactly renowned for its rainfall, but the weekend at the Circuit of The Americas in Austin was one of the wettest F1 has ever known. Qualifying was postponed until Sunday when the showers eventually abated and Lewis Hamilton raced to the win and his third world title



Glenn Dunbar
F1 photographer

Camera Canon EOS-1DX

GP debut British GP 2004

F1 races covered 191

1 200mm lens, 1/1000th at F3.2

2 50mm lens, 1/3200th at F1.4

3 24mm lens, 1/5300th at F1.4

4 200mm lens, 1/200th at F2.8

5 200mm lens, 1/1300th at F2.8

6 600mm lens, 1/500th at F5.6



4

HOMETOWN HERO

Where São Paulo, Brazil

When Sunday 15 November

Fourteen seasons into his Formula 1 career, Felipe Massa is still capable of putting in strong performances and his longevity has been extended thanks in part to the upturn in performance of the Williams team. Here, he's preparing for yet another home race

5 STRIKE A LIGHT

Where Austin, USA

When Sunday 25 October

The appalling weather at Austin forced qualifying to take place on raceday morning. Sauber's Felipe Nasr runs his titanium skid block over the kerb, sending into the air a shower of sparks that break through the pervasive gloom

3 BRAZILIAN WAVE

Where São Paulo, Brazil

When Friday 13 November

While the Paulistas are getting excited about the appearance of home hero Felipe Massa on the Brazilian GP grid, his Williams mechanics mirror the crowd's Mexican wave right back at them



6

HAPPY AND VICTORIOUS

Where Silverstone, Great Britain

When Sunday 5 July

Despite losing out at the start to the Williams, Lewis Hamilton pulled himself back into contention at Silverstone to win the British Grand Prix in front of his home fans for a third time →





THE LONGEST DAY

Where Spielberg, Austria
When Saturday 20 June

Like so many of his compatriots in motorsport, Finland's Valtteri Bottas is a man of few words. But during the Austrian GP weekend he opened up to reveal how much he was missing home, since Finland was celebrating its annual summer solstice holiday that weekend

1



SMOKE & MIRRORS 2

Where Marina Bay, Singapore

When Saturday 19 September

It's nearly 9pm and the temperature and humidity in the equatorial province of Singapore are just as uncomfortable in the evening as they are by day, so Red Bull's Daniil Kvyat relishes this blast of ice-cold air



3

FLASHPOINT

Where Suzuka, Japan

When Sunday 27 September

As Nico Rosberg turns in to the first corner at Suzuka, it looks as though he has the upper hand. But further around the bend, his team-mate Lewis Hamilton will sneak inside, drift wide, and force Rosberg off the edge of the track. Cue further acrimony between the pair...



Alastair Staley
 F1 photographer

Camera Canon EOS-1DX
GP debut Australia 2009
F1 races covered 60

1 600mm lens, 1/1000th at F4.5
 2 600mm lens, 1/320th at F4
 3 600mm lens, 1/1000th at F6.3
 4 600mm lens, 1/6th at F18

5 50mm lens, 1/4000th at F4.5
 6 200mm lens, 1/1000th at F5.6
 7 300mm lens, 1/100th at F6.3



SATURDAY NIGHT FEVER 4

Where Marina Bay, Singapore
When Saturday 19 September
The floodlit streets of Singapore provide photographers with plenty of opportunities to get creative. With a slow shutter speed, here you can see the rake of sparks thrown up by Valtteri Bottas's Williams



FORZA FERRARI! 6

Where Hungaroring, Hungary
When Sunday 26 July
A demon start for Sebastian Vettel propelled him straight into the lead as he overtook both Mercedes drivers on the run down to Turn 1. It was a memorable win for Ferrari and Vettel's second of three during his first year racing for the Scuderia

KING LEWIS III 5

Where Albert Park, Australia
When Sunday 15 March
Sunday evening in Melbourne and shortly after the end of the race, the sun is beginning to set in southern Australia. After taking his first victory of the year, Lewis Hamilton emerges from his Mercedes garage to celebrate with his fans



7 ELDER STATESMEN

Where Spielberg, Austria
When Saturday 20 June
For nearly four decades these two men, Frank Williams and Ron Dennis, have been central to the sport. It's been a while since either Williams or McLaren have won a world title, but one thing they've never lost is their fighting spirit →





1 STREET FIGHTER

Where Marina Bay, Singapore

When Friday 18 September

On the brightly lit streets of Singapore, the Force India of Nico Hülkenberg roars into view. He's had plenty of experience driving in the hours of darkness, thanks to his Le Mans 24 Hours win earlier in the year

2 THIRSTY WORK

Where Monaco, Monte Carlo

When Sunday 24 May

A strategic error by Lewis Hamilton when the Safety Car was deployed effectively handed the Monaco GP win to his team-mate Nico Rosberg, who is seen here sharing the champagne with his mechanics



3 PARTY TIME

Where Monza, Italy

When Sunday 6 September

As soon as the chequered flag signals the end of the Italian Grand Prix, the passionate *tifosi* exit the grandstands and swarm onto the track to join in the celebrations

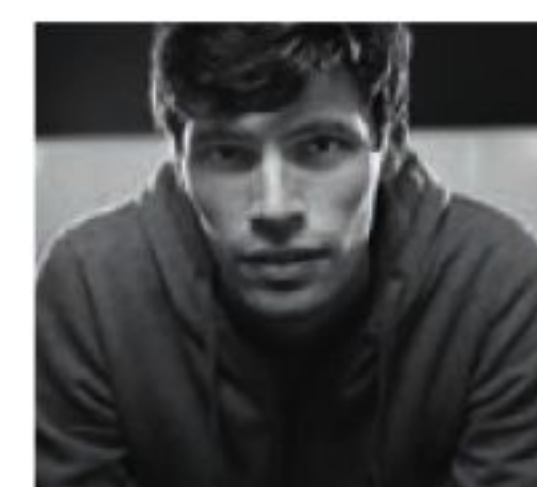


4 RED, WHITE AND GREEN

Where Monza, Italy

When Sunday 6 September

It's just ten minutes before 2pm on a late summer's Sunday afternoon, and the Italian air force is putting on a colourful display over the royal park of Monza, ahead of the start of the Italian Grand Prix



Sam Bloxham

GP2 Series photographer

Camera Canon EOS-1DX

GP debut Belgium 2013

F1 races covered 23

1 200mm lens, 1/5th at F8

2 35mm lens, 1/400th at F5

3 500mm lens, 1/800th at F8

4 200mm lens, 1/1000th at F8



1 A RETURN TO FORM

Where Barcelona, Spain

When Sunday 10 May

After Lewis Hamilton had taken the first four pole positions of 2015, Nico Rosberg had to find something special to overcome the rout. He did so at the Spanish GP, converting his first pole of the year into his first win of the year

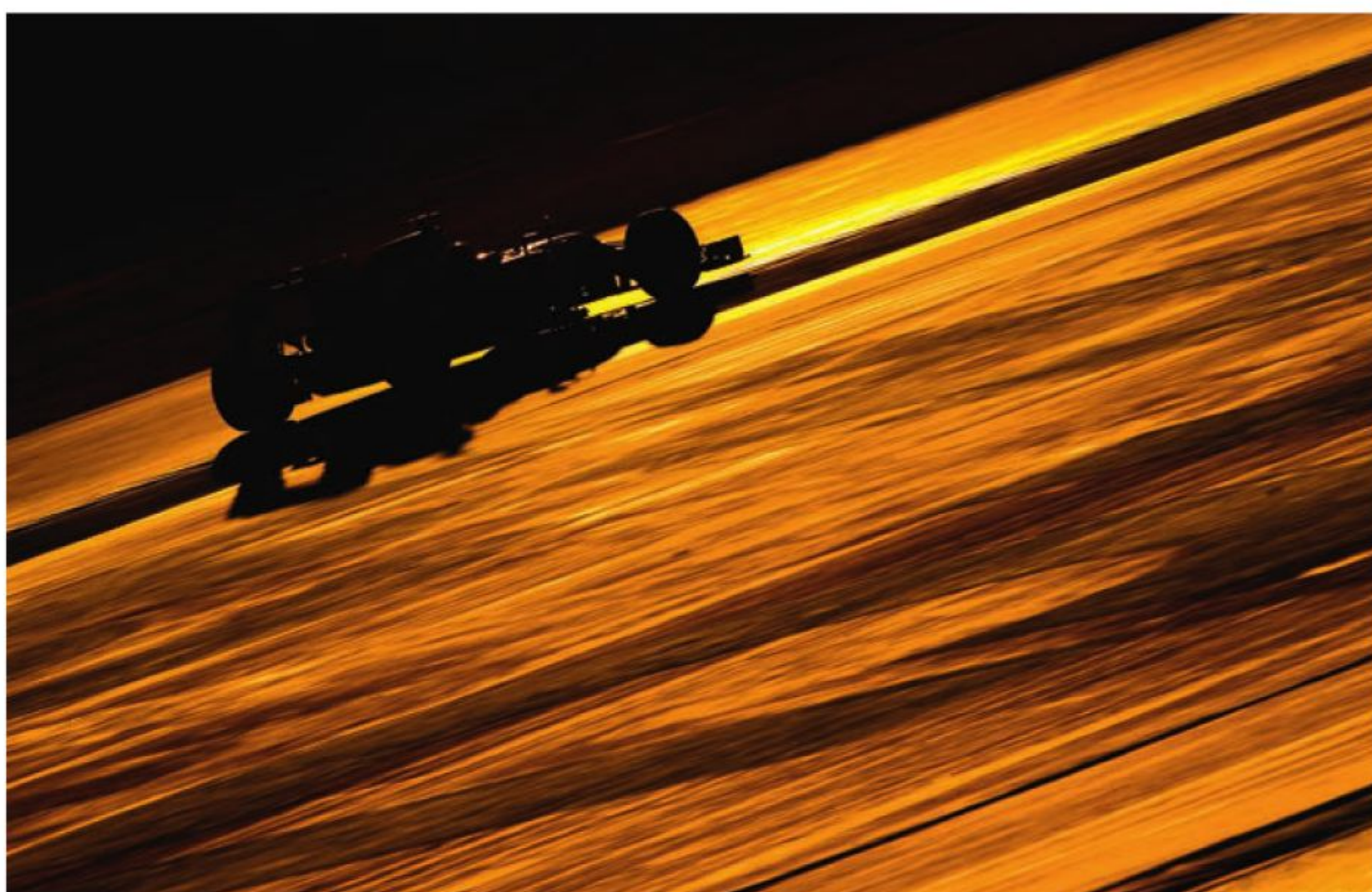


3 NO SMOKE WITHOUT IRE

Where Barcelona, Spain

When Saturday 21 February


Jenson Button hammers the brake pedal to lock up in pre-season testing in his McLaren-Honda. Braking issues aren't the team's biggest problem though – that's the underperforming Honda engine...



4 GOLDEN SHOT

Where Barcelona, Spain

When Sunday 22 February

One of the best things about winter testing is the longer runs the cars can put in, combined with the shorter daylight hours. Here, Daniil Kvyat emerges from the shadows in his Red Bull 

2

THE CHALLENGER

Where Barcelona, Spain

When Sunday 22 February

Nico Rosberg spent last winter working on every aspect of his game to beat his Mercedes team-mate Lewis Hamilton. Even so, he came up short in 2015 and will undoubtedly be spending this winter analysing new ways to try to beat him



Zak Mauger

LAT photographer / digital technician

Camera Canon EOS-1DX

GP debut Italy 2014

F1 races covered 5

1 24mm lens, 1/16th at F16

2 600mm lens, 1/5th at F29

3 600mm lens, 1/400th at F5.6

4 300mm lens, 1/160th at F16





Meet the men who *really* run F1



NOT THE USUAL SUSPECTS

Each team runs like clockwork thanks to these ten largely anonymous men. As team managers, they're responsible for logistical operations on race weekends – but you're only likely to hear about them if something goes wrong

WORDS MATT YOUSON PICTURES STEVEN TEE/LAT

IS FORMULA 1 A BUSINESS THAT OPERATES EFFECTIVELY?

It may be surprising to many to hear that there's a very good case for saying yes. While the sport often has a torrid time at strategic level, operationally it's in rude health: expanding calendars, odd destinations and complex new power units are all efficiently dealt with. Crews and kit appear in the right place at the right time, cars go out on track at the appointed hour. How? Because at this operational level, F1 is the world of the team manager.

Team managers are the regimental sergeant majors of F1, usually rising through the ranks of garage crew to take up a seat on the pitwall. Occasionally, as in the case of Stefano Domenicali (ex-Ferrari team boss) or former McLaren man Dave Ryan, now racing director of Manor Marussia, the team manager will rise to even greater prominence. More commonly, the faces will be familiar to regular F1-watchers even though the names may not. Despite being one of the few jobs in the sport to require an FIA licence, team managers are big players within the paddock and largely anonymous outside it.

This description makes Toro Rosso team manager Graham Watson smile: "When it all turns to shit we're the guys who step up and sort it out. When it's fine, we're never talked about. Anonymity is good – if my name isn't mentioned, it probably means everything is going well."

Watson differs slightly from the standard model, having started out as a mechanic with Ford in the World Rally Championship. He moved to Benetton in the mid-'90s, then to BAR. He was part of Brawn GP's title-winning team in 2009 before moving to Caterham in 2010 and then into the team manager's chair. The bigger the team, the busier the manager, he explains.

"I used to sit at Caterham thinking it must be fantastic to be in a bigger team with lots of support, spending your Sundays competing for points rather than worrying about blue flags. With hindsight, that was a bit naïve! There's more expectation at a bigger team; everything becomes more critical. Staying on the right side of the regulations, or having a 2.5s pitstop instead of a 3.5s pitstop might be the difference between scoring a point or not, which might be the difference between finishing seventh in the constructors' championship or eighth. That's a lot of pressure – but the chances are, if you work in F1, you enjoy the high-pressure situations."

The role covers a lot of ground. It overlaps, and sometimes replaces, the function of a



sporting director, a logistics coordinator and a trackside operations director. It involves everything from being the rules-and-regulations expert on the pitwall, to ensuring the crew get fed and watered. The team manager will also be the point of contact with the other teams and the FIA, he'll have an in-depth knowledge of car-build procedures and will often run pitstop practice. There are, however, no definitive guidelines for what the job entails.

"It's different in each team," says McLaren team manager Dave Redding. "The position tends to be held by people who have been there a reasonable amount of time and know the organisation, the people and the job. Some team managers are slightly more technical and more involved with the engineering. Others have a more commercial background. The job is shaped to the individual. But all of us have certain accountabilities: are the team operating safely? Are the cars built right? Is the work being done to the correct standard? Are we upholding the brand image with the state of our garage?"

Redding – universally known as 'Otis' – is another Benetton alumnus. Having learnt his trade as an apprentice at a Ford garage, he

came into F1 in the late 1980s, originally working on Benetton's gearboxes. After a mid-'90s spell with McLaren, latterly as Mika Häkkinen's mechanic, he moved to Stewart Grand Prix as chief mechanic before returning to McLaren.

Part of the team manager's job is a constant chasing of improvements, with pitstop practice being the prime example. "We did a lot last year with pitstops but we have to keep evolving because this year it won't be good enough," says Watson. "We have a new Ferrari power unit, and the expectation is that it's going to make us more competitive. Our pitstop performance last year won't cut it if we're racing for fourth or fifth. We're always setting goals, but perhaps the ultimate goal is to have people walk past our garage and look in at our team as their reference – rather than us walking past their garages and wishing we operated like that."

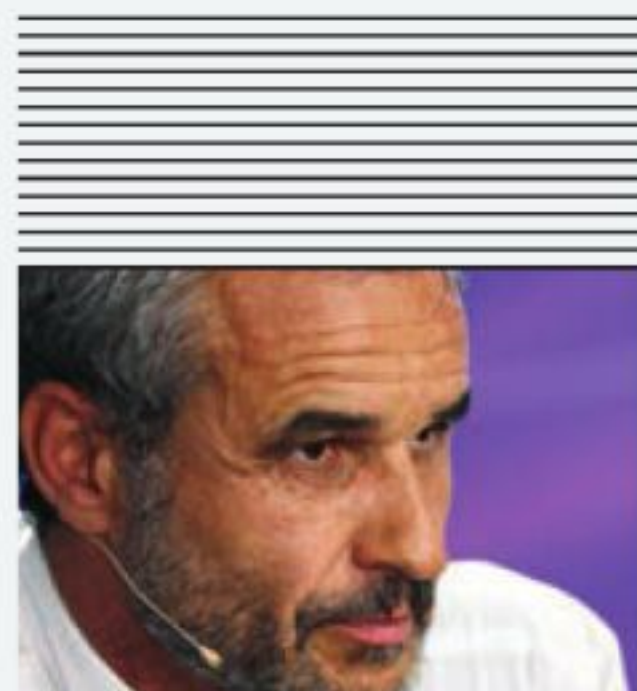
There are several contenders for 'reference team', and on any given weekend it might be

In whom we trust: Williams' Steve Nielsen and Red Bull's Jonathan Wheatley (above); Lotus's Alan Permane (right) and Mercedes' Ron Meadows (below right)

WHO'S WHO?



1



Name Beat Zehnder
Age 50
Then Started out as a mechanic for Sauber's sportscar team before moving to the F1 team. He later became their logistics manager and then chief mechanic.
Now Team manager, Sauber F1

2



Name Alan Permane
Age 48
Then Joined Benetton in 1989 as an electronics engineer, and was assistant race engineer, race engineer and then chief race engineer though the Benetton, Renault and Lotus eras.
Now Trackside operations director, Lotus F1 (soon to be Renault again)

3



Name Steve Nielsen
Age 51
Then Trained to be a policeman, but left to join Lotus as a truckie. He moved to Tyrrell, working his way up to team manager, and then had stints in the same role at Arrows, Renault, Caterham and Toro Rosso.
Now Sporting manager, Williams F1

4



Name Dave Redding
Age 50
Then Served his apprenticeship as a mechanic at a Ford dealership, and was later an F1 gearbox mechanic at Benetton, a mechanic at McLaren, a chief mechanic at Stewart GP, and systems engineer and then assistant race engineer at McLaren.
Now Team manager, McLaren



that McLaren, Mercedes or Ferrari outperform their rivals across a range of metrics. Red Bull will likewise consider themselves in the mix and for their team manager, Jonathan Wheatley, the job of running an established, high-performing team becomes one of finding the incremental

improvements so beloved of successful coaches across a wide range of sports.

"When the team are working well, there aren't huge gains to be made," he says. "But there *are* marginal gains and that's what I look for: the next advantage, however tiny. It might be a bit of kit that makes things a little easier, or the travel plan that buys the guys an extra hour in bed. It's difficult to quantify in terms of race performance, but at the end of the year you see it. It shows up in fewer minor injuries, or more consistency in pitstops, or how well you cope with late nights or working in desert temperatures."

Wheatley is yet another former Benetton mechanic. Like Redding, he started out at a garage (in his case, a Ferrari specialist) before moving to Benetton in 1991. He was part of the crew that managed a 3.2s pitstop for Riccardo Patrese at the 1993 Belgian GP, which stood as the record until refuelling was outlawed from 2010. Wheatley's Red Bull crew now hold that distinction, stopping Mark Webber in 1.923s at the 2013 US GP. He admits that standing by and letting others get on with the job can be hard.

"Sometimes I pick up a wheel gun and have a go in pitstop practice – but despite being →

"WE'RE ALWAYS SETTING GOALS, BUT PERHAPS THE ULTIMATE GOAL IS TO HAVE PEOPLE WALK PAST OUR GARAGE AND LOOK IN AT OUR TEAM AS THEIR REFERENCE"

GRAHAM WATSON



WHO ARE THEY?

5



Name Graeme Lowdon
Age 50

Then Founded Eiger Racing (Formula Renault), took a commercial role at Manor, founded Nomad Digital and was CEO of Virgin Racing. He then became CEO and sporting director of Marussia before he was replaced by Dave Ryan at the end of 2015
Now Not currently employed in F1

6



Name Graham Watson
Age 48

Then Began his career as a Ford World Rally Team mechanic, then became an F3000 mechanic, a Benetton F1 test team mechanic, a race team mechanic, a BAR-Honda mechanic and then Caterham F1 team manager
Now Team manager, Scuderia Toro Rosso

7



Name Jonathan Wheatley
Age 48

Then Started out as an apprentice mechanic at DK Engineering (a Ferrari specialist garage), then became a Benetton race team mechanic, a test team chief mechanic and a race team chief mechanic.
Now Team manager, Red Bull

8



Name Ron Meadows
Age 51

Then He was an apprentice mechanic at Tom Walkinshaw Racing, which he followed up with spells in F3000 and IndyCar before moving to Brackley, where his F1 roles included team manager and sports director.
Now Sporting director, Mercedes

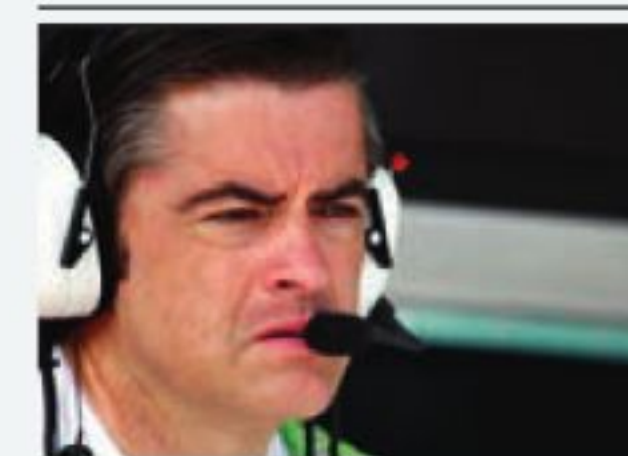
9



Name Massimo (Max) Rivola
Age 44

Then An Economics and Business graduate of Bologna University, he joined Minardi's marketing department, and later became their team manager. He was Ferrari team manager until the end of 2015.
Now Will run Ferrari's driver development programme from 2016

10



Name Andy Stevenson
Age 48

Then Joined Jordan as a mechanic first in F3, then F3000, then F1. Moved up to number one mechanic, then test team chief mechanic, race team chief mechanic, and then team manager through the Midland, Spyker and Force India eras.
Now Sporting director, Force India



Jonathan Wheatley oversees Red Bull pitstop practice: "I have a go, but I wouldn't make the Z team now"

the job or do the job – but you can't do both."

This is common for the managers: "Most people in F1 are impatient," concedes Redding. "You have to grow out of wanting to do every job yourself and accept that the guys on the cars now are the experts. I'm still involved in how the cars are built and prepared, and during the race I control the pitstops and crew – so I still get a buzz out of that. I'm hands-on in a different way.

"It's just the way it is," elaborates Watson. "The guy holding the spanner is probably doing a good job – better than you could because you're out of touch – it's human nature that the older you get, the better you were."

Today's team managers have more weighty matters to consider. There's a team managers' meeting on Thursdays at 4pm on every race weekend, and they also attend the drivers' briefing on Fridays. Unlike the amateur dramatics that colour the gatherings of team

part of the quickest stop of a previous era, I realise I wouldn't make the Z team now. Joan Villadelprat [former team manager of Benetton] once said: "You can either manage

the job or do the job – but you can't do both."

This is common for the managers: "Most people in F1 are impatient," concedes Redding. "You have to grow out of wanting to do every job yourself and accept that the guys on the cars now are the experts. I'm still involved in how the cars are built and prepared, and during the race I control the pitstops and crew – so I still get a buzz out of that. I'm hands-on in a different way.

"It's just the way it is," elaborates Watson. "The guy holding the spanner is probably doing a good job – better than you could because you're out of touch – it's human nature that the older you get, the better you were."

Today's team managers have more weighty matters to consider. There's a team managers' meeting on Thursdays at 4pm on every race weekend, and they also attend the drivers' briefing on Fridays. Unlike the amateur dramatics that colour the gatherings of team

principals, team-manager meetings tend to be productive. Agreements are reached; things get done. In addition to the minutiae of the grand prix, that may include items such as influencing the make-up of the following year's calendar, arranging the winter testing schedule, or simply voicing collective concern over a proposed rule or regulation that sounded good to, for example, the Strategy Group, but came with real-world problems that were perhaps not fully considered.

"I guess we tend to have a better relationship across the teams than at any other level, just because we see each other at least twice a weekend," says Redding. "Technical directors or other officials don't interact that much. Ours is quite a small community. When there's a tricky or contentious situation, rather than going in cold it helps to have a relationship with the person you're about to have an argument with."

The consensus among the team managers is that 2016 represents a big challenge. More races than ever before, six back-to-backs, a new flyaway, and a likely increase of in-season testing. If this year passes without incident; if you don't hear of logistical nightmares or pitlane catastrophes; if *nothing* hits the fan, chances are the team managers have done the job well. **F1**

"WE HAVE A BETTER RELATIONSHIP ACROSS THE TEAMS THAN AT ANY OTHER LEVEL, BECAUSE WE SEE EACH OTHER AT LEAST TWICE A WEEKEND" DAVE REDDING



AUTOTOUR
EVENTS

GP - TOUR PACKAGE

JULY 2nd – JULY 9th

"RALLYING AGAINST CANCER"

120 CARS - 3000 MILES - 9 CIRCUITS – 7 COUNTRIES – 7 DAYS

**ONLY
£714
per person**

Auto Tour Events are dedicated to organising high quality motorsport tours across the globe. As avid motoring enthusiasts, we aim to build packages in which our customers always come first.

- o Brands Hatch – Launch Party
- o Magny Cours – Track Tour confirmed
- o Monaco – Obviously we can lap the circuit!
- o Monza – 2 laps confirmed + Track Tour
- o Autodromo di Modena (Ferrari Test Track) – 3 hours on track exclusive to Auto Tour Events
- o Red Bull Ring – Track Tour confirmed
- o Hockenheim – Track Tour confirmed
- o Nurburgring – 1 lap for each car
- o Spa – 2 laps confirmed + Track Tour

RESERVE YOUR PLACE WITH A 20% DEPOSIT ONLINE NOW

Tel: 01226 381227 Mob: 07803 545 870 Email: info@autotourevents.com

www.autotourevents.com



SYSTEM
STORE
SOLUTIONS LTD

Workshop Design Specialists

SETTING THE STANDARD IN MOTORSPORT WORKSHOP DESIGN & STORAGE



From race teams to private garages, from new-builds to listed buildings.

We provide everything from single cabinets to a total design, layout and installation service, including project management, consultation, technical advice and no obligation site surveys.



- ✓ Garages & workshops
- ✓ Modular tool cabinets & workstations
- ✓ Shelving & cupboards
- ✓ Home & private garages
- ✓ Customised worktops
- ✓ Bespoke solutions



01622 859522 | SALES@SYSTEMSTORESOLUTIONS.COM | SYSTEM-STORE.COM



Dial 'F' for

FANGGIO

Formula 1 was reborn in 1954, with exciting new cars raced by up-and-coming young drivers. Yet the undisputed king of them all was a middle-aged Argentine with bandy legs

WORDS STUART CODLING PICTURES LAT ARCHIVE

To the general public in the early 1950s, grand prix racing was more about the drivers and the nations they represented than the cars themselves. That's how the world championship made do through two seasons (1952-53) as a Formula 2 competition, without the sort of mass outcry you might expect today if the contents of the F1 grid were replaced overnight with GP2 machinery.

But tastes were evolving and national boundaries blurred as new stars rose and began to assert themselves. By the end of the decade, manufacturers would have a greater incentive to excel: one star driver would have swapped horses ruthlessly – from Maserati to Mercedes, to Ferrari, and then back to Maserati again – in his quest for dominance, and British drivers racing

in both national green colours and Italian *rosso corsa* would have faced off against one another for championship honours.

As Formula 1 itself prepared for a reboot in 1954, the world championship emerged from its Formula 2 run in much better health. Ferrari, and star driver Alberto Ascari, had monopolised the wins, but the competition was much closer than it would have been had F1 been able to stagger on unchanged.

Maserati had gained credibility as a competitive force, thanks to employing the likes of Juan Manuel Fangio and José Froilán González, while the less costly and rarefied machinery had enabled new stars to emerge: Jean Behra in a Gordini, Stirling Moss with ERA, Connaught and HWM, and Mike Hawthorn in a Cooper-Bristol. →

“The change of engine formula – to 750cc supercharged or 2.5-litre normally aspirated – had been signalled well in advance. For drivers keen to strut their stuff on a grander stage, this could not have come soon enough”

What was now needed, which the rebirth of F1 promised, was for these star names to be combined with bespoke new machinery from a greater range of manufacturers. The change of engine formula – to 750cc supercharged or 2.5-litre normally aspirated – had been signalled well in advance and Mercedes and Lancia were developing completely new cars to suit. For drivers keen to strut their stuff on a grander stage, this could not have come soon enough.

“In 1952 I drove the ERA, which was dreadful,” says Moss. “It was supposed to be very sophisticated and clever. It was *awful*. The first time I raced it, the engine seized on the first lap. There was a lot of fuss about the project but it achieved very little, and I was disappointed to see other drivers doing better in much more basic cars. It taught me a valuable lesson: that even the cleverest concepts would not work without the money, manpower and organisation to develop them.”

1954's new F1 machinery amply demonstrated that dictum. Enzo Ferrari sought to carry on as frugally as possible, modifying the Tipo 500 F2 chassis that had propelled Alberto Ascari to the 1952-53 world championships and enlarging its four-cylinder engine by half a litre. Maserati offered the new 250F by former Ferrari men Gioacchino Colombo and Valerio Colotti, based on Maserati's existing F2 machine but with a much-modified straight-six engine.

Its spaceframe chassis, a robust network of steel tubes, was a clear step on from the primitive (but more easily and cheaply manufactured) ladder-frame designs still in favour elsewhere. But, in a classic case of overpromising and underdelivering, Maserati's assurances of full works support to privateers in lieu of running an out-and-out factory team generated demand the company couldn't fulfil, and the first cars out of

the door were literally hacked-about F2 chassis with the new engine shoehorned in.

Lancia's technically daring D50 boasted a V8 engine designed to accept some of the chassis loadings, and side-mounted fuel tanks for better weight distribution and aerodynamics, but money and development traumas made it the stuff of myth until the final round of the 1954 season (much to the chagrin of Ascari, who had jumped ship from Ferrari to drive for Lancia's works team). Even the better-organised and comparatively well-funded Mercedes didn't have their W196 ready until July's French Grand Prix.

So, of the 18 cars entered for the season-opener in Buenos Aires, nine were Maseratis and six were Ferraris. Home hero Fangio, who had cut a deal with Mercedes letting him race with other teams until the W196s were ready, parked himself and his protégé Onofre Marimón in the cockpits of the two 250Fs. Maserati's paying customers had to make do with F2 chassis modified to take the new engine.

In spite of the lack of diversity there was plenty of action, particularly in the opening laps as Fangio battled for the lead with a trio of Ferraris piloted by his former team-mate Giuseppe Farina, Mike Hawthorn and José Froilán González. A sharp rainstorm, the depositions of which quickly began to dry, added to the drama both during the race and afterwards. Ferrari lodged a protest over the number of mechanics attending to Fangio's car at his final pitstop for a set of hand-cut tyres, and, confident he would be disqualified, signalled for Farina and González to back off during the run to the flag. Fangio crossed the line first and the result stood; he was, after all, on home soil...

Five months passed between world championship grands prix – discounting May's Indianapolis 500, which no Europeans entered



– and while neither Mercedes nor Lancia were ready, Maserati had cleared some of the manufacturing backlog. One of the privately entered 250Fs on the grid at Spa for the Belgian Grand Prix contained Moss, although even then his sights were on greater things.

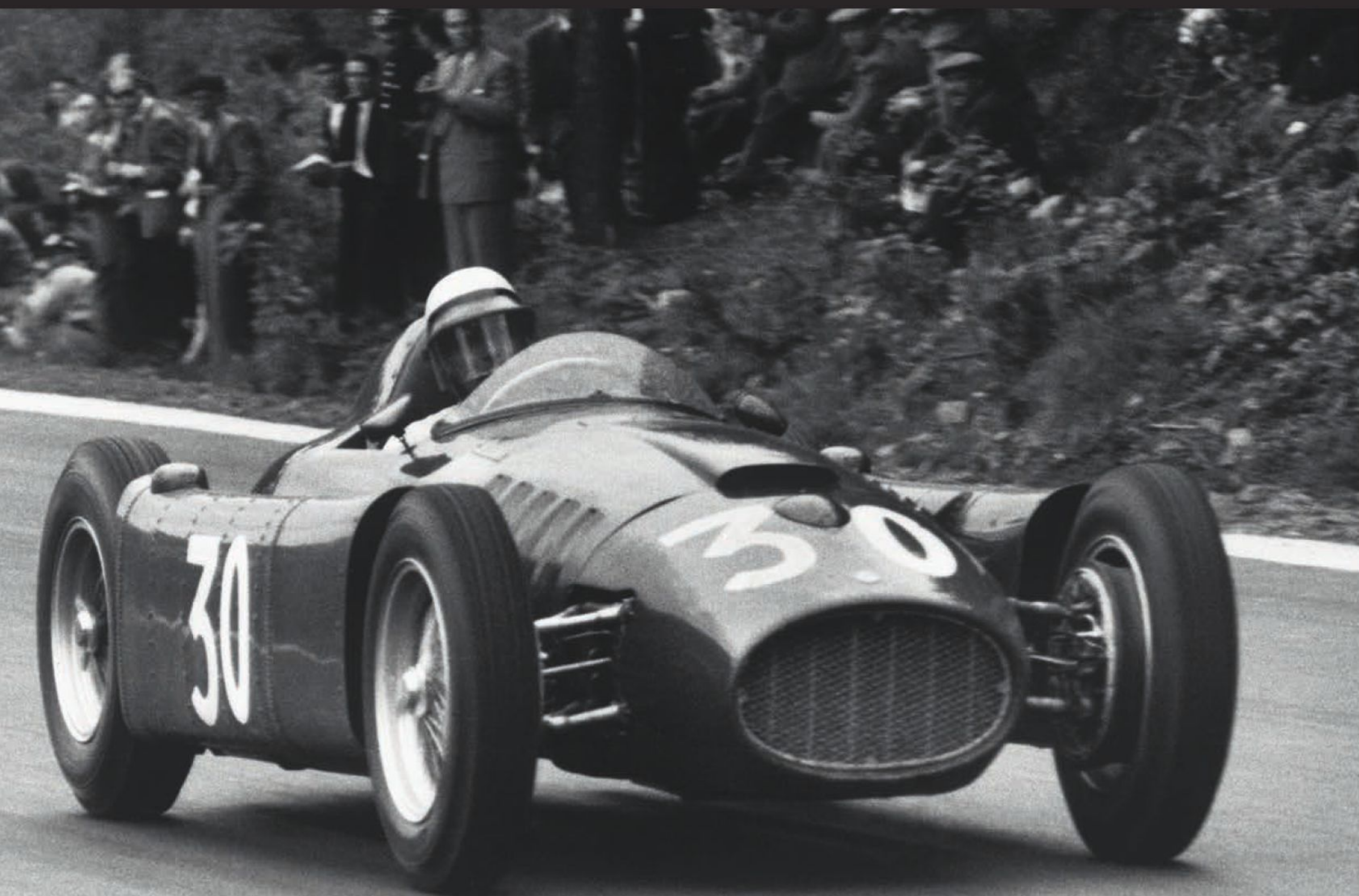
“Everyone wanted to get in at Mercedes,” he says. “My father had gone to see [team manager Alfred] Neubauer, saying: ‘Can't you give Stirling a try-out?’ And Neubauer said: ‘We've seen what he can do, but only in small cars. We need to see him in a proper car before we can evaluate him.’ So they left Stuttgart and went down to Italy. It was very difficult to get Ferraris in those days, but Maserati were prepared to sell them a car.

“The 250F was an incredible step forward. The roadholding was far superior, particularly on the Pirelli tyres, and it was beautifully balanced – as good as any F1 car ever built with a front engine. As soon as I drove it for the first time, I could tell it was faster than anything I'd been in before. It was a quantum leap forward for me, going from something that was made from bits of this and bits of that to something that was custom made.”

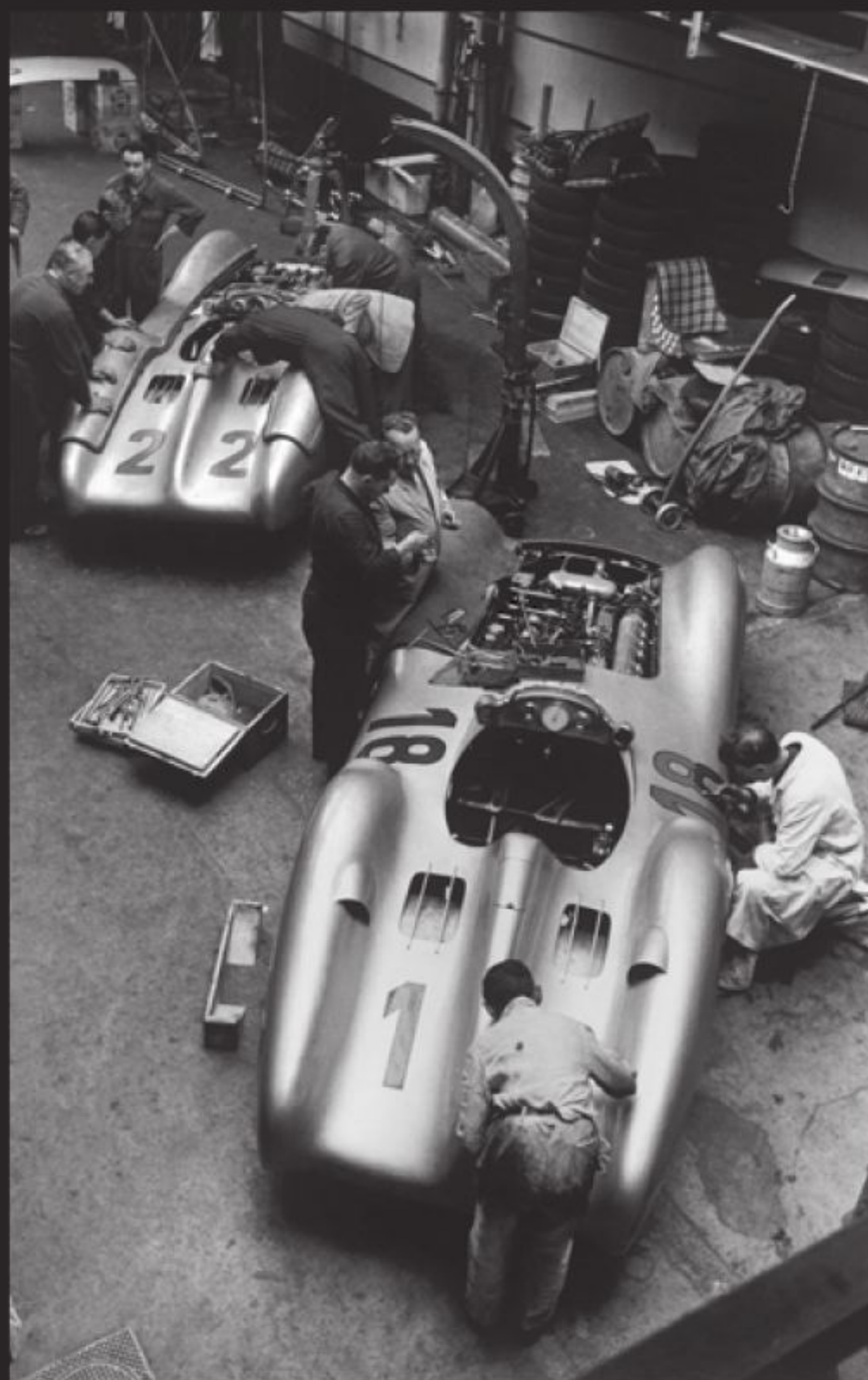
Moss finished third, albeit a lap down, behind the victorious Fangio and Ferrari's Maurice Trintignant. But everything was about to change. From now on, if you wanted to win a world championship race, you would have to be driving a Mercedes. That much was obvious from the →



After two years running to Formula 2 regulations, F1 came back with a vengeance in 1954, and a new wave of powerful machinery was unleashed. This included the Maserati 250F (driven by Onofre Marimón, left) and the Lancia D50 (driven by Eugenio Castellotti, below)



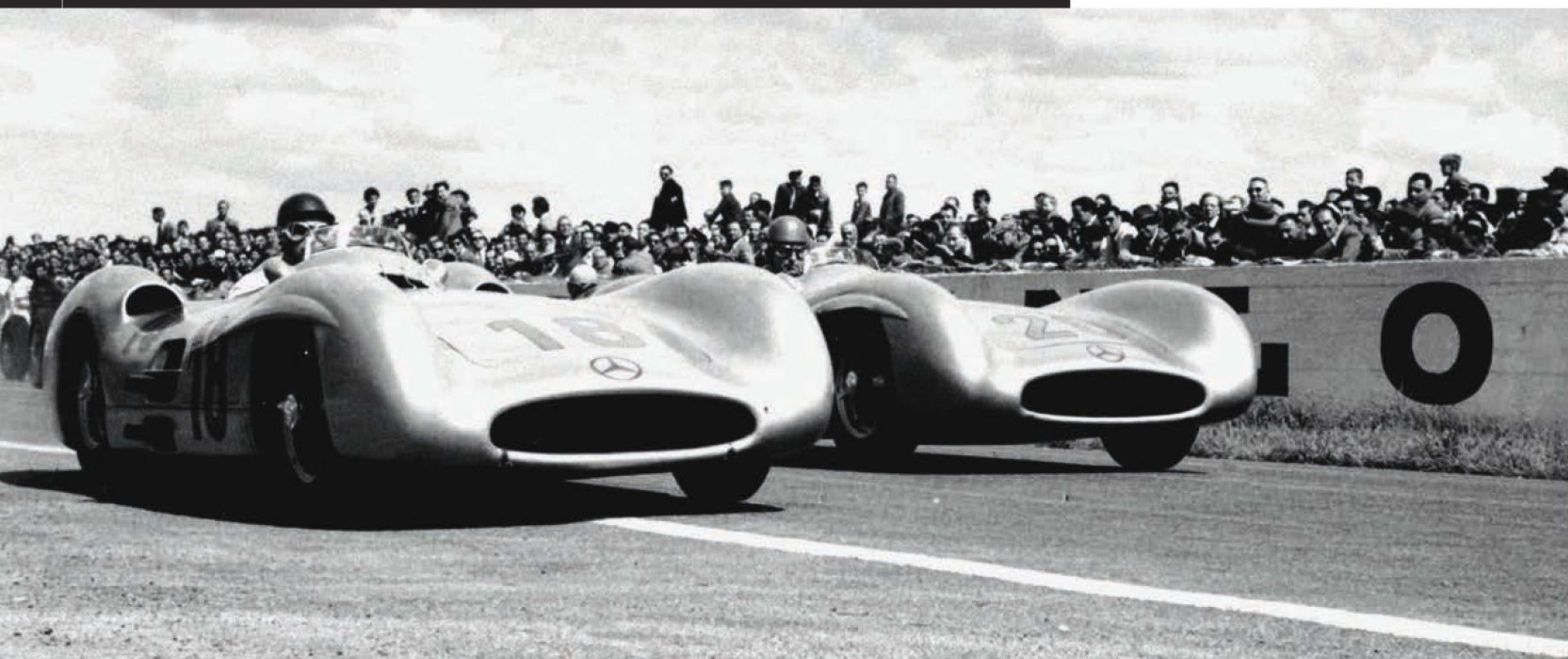
The cutting-edge Mercedes W196 was the car everyone wanted to race. Attended by a professional crew, its streamliner bodywork wrapped around a stress-tested space-frame chassis, it was unveiled at Reims, where its drivers, Juan Manuel Fangio and Karl Kling (bottom) took a dominant one-two



moment the immaculately presented Mercedes transporters pulled up at Reims two weeks later and disgorged the otherworldly W196s, attended to by a clean and well-drilled crew. The game had moved on again.

Besides the new professionalism Mercedes brought to logistics and preparation, the W196 was largely state-of-the-art. Unveiled at Reims, a mostly flat and flat-out triangle of open roads in big-sky champagne country, it wore all-enclosing 'streamliner' bodywork. Beneath that, its stress-tested spaceframe chassis was a cut above the 250F's, and its desmodromic-valved straight-eight engine was both fuel-injected – a major advance – and laid over at an angle to reduce the car's frontal area. Its drum brakes were not cutting edge (the science of disc brakes was still in its infancy), but they were mounted inboard so as to lower unsprung weight. If it had a weak point, it was the use of swing axles at the rear, which enabled each wheel to be suspended independently, but at the cost of snap oversteer under extreme loadings.

With Lancia's D50 still not ready, Alberto Ascari secured a ride with Maserati, and his 250F



"Fangio and Kling were so far ahead that they could put on a spectator-pleasing charade of pretending to dice for the lead. In reality, once their cars were 30 seconds ahead, Mercedes would signal to their drivers to hold station"

made for an incongruous sight on the three-car front row alongside the W196s of Fangio and Karl Kling. But as the leading Mercedes roared away, it was González who managed to make a nuisance of himself, inserting his scarlet Ferrari between the two silver cars on the opening lap. Minutes later he was out of the running, his



engine a smoking wreck as the Mercedes pulled to an unchallenged one-two.

Fangio and Kling were so far ahead that they could put on a spectator-pleasing charade of pretending to dice for the lead; in reality, once their cars were 30 seconds ahead, Mercedes would signal to their drivers to hold station. Only six of the 21 starters made it to the finish, with most retirements caused by engines expiring under the strain of trying to keep up. The only glimmer of hope was that the third W196, driven by Hans Herrmann, also ran into engine trouble.

That hope did not last long. González and Mike Hawthorn secured a Ferrari one-two at Silverstone, but the 625 chassis was underdeveloped and its four-cylinder engine outclassed; its performance was flattered by wet weather on race day, while Fangio found the weight of his streamliner bodywork a hindrance, and harder to place around the corners with no line of sight to the inside-front wheel. The scars on his W196's nose attested to collisions with the oil barrels used to demarcate the corners.

Since the next round was at the twisting, unforgiving 14-mile Nürburgring Nordschleife, Fangio deployed all his clout to push Mercedes to finish the open-wheel version of the W196. This being their home race, Mercedes entered four

cars, with pre-war hero Hermann Lang as a special guest, though only three open-wheelers were ready in time. Herrmann drew the proverbial short straw, yet still managed to qualify his 'streamliner' W196 in fourth.

Practice brought tragedy as Marimón speared off the track, with fatal consequences, at the ultra-fast Fuchsröhre section. Nevertheless, Fangio set pole position and on race day batted away an early challenge from the fearless González to win. The race lasted nearly four hours; it was a supreme act of physicality for the short, stocky, bandy-legged Fangio, then aged 43, as well as one of great skill. Three weeks later, on 22 August, he won the Swiss Grand Prix at Bremgarten and tied up the world championship with two of the nine rounds to go.

Mercedes' dominance might not have lasted as long as it did. At the final round, on the Pedralbes street circuit in Barcelona, Lancia arrived. The D50's unusual packaging made it nimbler than its rivals, and Ascari planted his on pole. His clutch failed after ten laps, but he had announced Lancia as a major rival to Mercedes for 1955, even with the very determined Moss now driving one of the Silver Arrows.

It would not come to pass. Lancia's challenge evaporated two races into 1955: the four-car

With the W196's weighty streamliner bodywork obscuring the line of sight to the inside-front wheel (top), Fangio used his clout to push for an open-wheel version, which was brought out at the Nürburgring (above)

entry fell foul of mechanical failure and accidents in the January opening round in Buenos Aires, then, four months later, at round two in Monte Carlo, Ascari was just about to take the lead in the closing laps when he crashed at the chicane and ended up in the harbour. Ferrari's Maurice Trintignant was the beneficiary, followed home by Ascari's team-mate Eugenio Castellotti.

This was the beginning of the end for Lancia in F1. Four days later, Ascari was testing a Ferrari sportscar at Monza when he suffered a fatal accident at the corner that now bears his name. Lancia now had no lead driver, and, equally pressingly, no money. Come the Belgian GP on 5 June – a Mercedes one-two for Fangio and Moss – the creditors were picking over what was left of the once-great marque, and the D50s ended up in the hands of Ferrari.

A week later Mercedes were also in turmoil after Pierre Levegh crashed his 300SLR into the crowd, killing 83 spectators, during the →

HISTORY TIMELINE

1954

The world championship is a Formula 1 competition again after two seasons using Formula 2 machinery. New rules call for 2.5-litre naturally aspirated or 750cc supercharged engines, but new cars from Mercedes and Lancia are not ready until later in the season and Juan Manuel Fangio cuts a deal with Mercedes to let him drive a Maserati until then. Alberto Ascari attempts to follow suit, with less success, as Lancia development work drags on.

1955

Mercedes continue to dominate with Fangio and Stirling Moss, as Lancia's challenge evaporates following the twin shocks of insolvency and Ascari's death. Eugenio Castellotti sets his only pole in Belgium, which is Lancia's last race as a constructor. Maserati's attempts to step up to the plate include their own variant on Mercedes' 'streamliner' body style at fast circuits. Jean Behra finishes fourth at Monza but his car catches fire as it crosses the finishing line. Moss becomes the first British driver to win the British GP but returns to Maserati when Mercedes stop motor racing.

1956

Fangio moves to Ferrari, now running the ex-Lancia D50s. But some drivers fail to obey team orders and Fangio secures the drivers' title (from Moss, in a Maserati) only when team-mate Peter Collins sacrifices his own chances at Monza. Meanwhile, British prestige project BRM continues to underwhelm. "Best thing for it," says Tony Brooks after his P25 burns to a cinder at the British GP.

1957

Maserati return as a works team with a redeveloped 250F, acquiring Fangio's services, while Ferrari fail to develop what was the D50 (now named the Ferrari 801) sufficiently to keep up. Moss moves to British constructor Vanwall (see next month's instalment for more on that) and takes three wins to Fangio's four. But times are changing: Maserati, struggling for funds, announce the end of their factory team. Meanwhile, Jack Brabham takes sixth place at Monaco in a rear-engined Cooper, and struggling British team Connaught Engineering go into receivership – many of their assets are bought by a motorcycle dealer and sometime F3 driver from Kent by the name of Bernard Ecclestone...



Fangio's final grand prix victory (far right), at the 1957 German GP, at the age of 46, was also his greatest. He's pictured after the race (above) with Ferrari runners-up, Peter Collins (left) and Mike Hawthorn (right)

Le Mans 24 Hours. Following motorsport's most catastrophic accident to date, a devastated Mercedes announced that they would withdraw from motor racing at the end of the season.

Of the seven championship races in 1955 – six if you discount the Indy 500 – Fangio won four. Suspension failure ruled him out at Monaco, and at Aintree for the British GP he came second-best to team-mate Moss. Or did he? Even Moss says he cannot be sure if his victory was not stage-managed with great subtlety by the champion. Fangio, who combined ruthlessness with modesty, took the secret to his grave.

Mercedes signed off with a win – for Fangio, naturally – at Monza, and the now three-time champion quickly alighted on the best seat for 1956: one of the ex-Lancia D50s now being run by Scuderia Ferrari. Cash-strapped Enzo had accepted the windfall – courtesy of his

“After a disastrous pitstop left him in third place and nearly a minute behind at the Nürburgring in 1957, Fangio broke the lap record nine times in ten laps in his Maserati 250F to overhaul the Ferraris of Collins and Hawthorn for the win”



Fiat backers – and had been tinkering with the cars since they came in to his hands in July 1955. After a couple of fallow seasons, Scuderia Ferrari – aligned around works drivers Fangio, Castellotti, Luigi Musso and Peter Collins – would now be the team to beat.

Fangio’s season got off to an inauspicious start. He won in Buenos Aires, but only after taking over Musso’s car when his own broke down. He then damaged his car early on at Monaco, but after a peculiar sequence of musical chairs – he gave his car to Castellotti, who had gone out with clutch failure, then took over from Collins – he was classified second to Moss, who had returned to the Maserati fold.


Transmission failure ruled him out at Spa, but this time he remained on the sidelines and Collins claimed the win. Collins won again in France after Fangio pitted with a leaking fuel

pipe, but Fangio won in Britain and Germany, leaving the world title in the balance between him, Collins and Moss in Italy, the final round.

Ferrari’s race fell apart. Castellotti and Musso tore off in a duel that pushed Castellotti’s car past breaking point. Fangio’s steering broke on the 19th lap, and as Moss took the lead, Musso refused to hand his car over to Fangio. Only when Collins came in and gave up his car – along with his chances of winning the championship – could Fangio return to the fray and pick up enough points to claim title number four.

For 1957 Fangio decided Maserati was the better option, in doing so earning the eternal ire of Enzo Ferrari. In the redeveloped 250F he won four rounds, and what would prove to be the final grand prix win of his career was also undoubtedly his greatest. After a disastrous pitstop left him in third place and nearly a

minute behind at the Nürburgring, he broke the lap record nine times in ten laps to overhaul the Ferraris of Collins and Hawthorn for the win.

Fangio was 46. Did he run out of motivation, having won the world championship five times? Or had the accumulated stresses of racing, of seeing so many friends die, worn him down? He finished fourth in the 1958 season-opener in Buenos Aires, driving a privately entered 250F, then skipped the next three European rounds and pulled out of an attempt to qualify for the Indy 500. At Reims he appeared again, crossed the line in fourth, and, as he climbed from his 250F, said to his mechanic, “It is finished...” 



FREE

**ADIDAS
RACE BAG
WORTH £29.99**

WHEN YOU
SUBSCRIBE
TO *F1 RACING*



**PLUS
SAVE UP TO 46%
ON THE COVER PRICE**

ORDER ONLINE AT

www.themagazineshop.com/tfone-feb16

Quoting the promotional code **M0216P** for print only or **M0216B** for print and digital access. Offer ends 10 March 2016

OR CALL 0844 8488 826

Calls cost 7p per minute, plus your phone company's access charge

PICK AN EDITION

SUBSCRIPTION OFFER



PRINT EDITION

Get six issues of *F1 Racing* for only **£22.99** (M0216P)

● **FREE GIFT**

Adidas race bag

● **GREAT SAVINGS**

Save 23% on the cover price

● **SPREAD THE COST**

Pay just £22.99 every six issues

● **FREE P&P**

Every issue delivered direct to your door

● **EXCLUSIVE DEALS**

Subscriber-only offers and discounts



PRINT AND DIGITAL EDITIONS

Get six print and digital issues for just an extra **£2.99** (M0216B)

● **FREE GIFT**

Adidas race bag

● **GREAT SAVINGS**

Save 46% on the cover price

● **SPREAD THE COST**

Pay £25.98 every six issues

● **UNLIMITED ACCESS**

Read wherever and whenever you like

● **EXCLUSIVE DEALS**

Subscriber-only offers and discounts



YES

I would like to subscribe to *F1 Racing*, paying £22.99 every six issues and saving 23% on the cover price. Please send me my **FREE** Adidas race bag

YES

I would like to add digital to my *F1 Racing* subscription for an additional £2.99 and pay £25.98 every six issues. Please send me my **FREE** Adidas race bag

This is a **new subscription** **renewal**

YOUR DETAILS BLOCK CAPITALS PLEASE (must be completed)

Mr/Mrs/Ms	First name
Surname	
Address	
	Postcode
Telephone	
Email	
Mobile	

DIRECT DEBIT DETAILS

(Instructions to your bank or building society to pay by Direct Debit)

To the manager	Bank/building society
Address	
	Postcode

Name(s) of account holder(s)
Sort code
Branch/building society account number
Reference number (for office use only)



Originators ID No. 850699

INSTRUCTIONS TO YOUR BANK OR BUILDING SOCIETY

Please pay **Haymarket Media Group** Direct Debits from the account detailed in this instruction, subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may stay with **Haymarket Media Group** and, if so, details will be passed electronically to my bank/building society.





Signature	Date
-----------	------

PLEASE RETURN THIS FORM TO:
F1 Racing, FREEPOST RSBU-TALE-BXJT,
PO Box 326 Sittingbourne, Kent ME9 8FA

For special international rates:
Please call +44 (0) 1795 592 990 or visit www.themagazineshop.com

Terms and conditions:
This offer is open to UK residents only. Calls cost 7p per minute, plus your phone company's access charge. Overseas rates are available on +44 (0) 1795592 990. Please allow 35 days for delivery of your gift and first issue. The gift will be sent under separate cover from the magazine. Should we run out of gifts, you may be offered an alternative gift - there is no cash alternative. If you subscribe to a bundle offer, you will be emailed instructions on how to access your digital subscriptions within 24 hours of your order being processed. Direct Debit rates are valid for one year, after which they are subject to change. Should prices change, we will inform you in writing. We ask that you enter into a Direct Debit agreement with the intention that your subscription will continue for a minimum period of 12 months, even if the frequency of payment is for a shorter period. However, you will still have the right to cancel your Direct Debit in accordance with the Direct Debit Guarantee. Should you wish to cancel your subscription it will be cancelled on expiry of the current term, which will not be refundable other than in exceptional circumstances. If a gift is included as part of the subscription offer, we reserve the right to request the return of the gift. Details of the Direct Debit Guarantee are available on request. Savings are based on the standard UK print cover price of £4.99 and the UK digital cover price of £2.99. Offer ends 10 March 2016. **Haymarket Media Group Ltd** uses a best-practice layered Privacy Policy to provide you with details about how we would like to use your personal information. To read the full privacy policy please visit our website www.haymarket.com/privacy or call us on 01795 592986. Please ask if you have any questions as submitting your personal information indicates your consent, for the time being, that we and our partners may contact you about products and services that will be of interest to you via post, phone, email and SMS. You can opt out at any time by emailing datacontroller@haymarket.com or by calling 01795 592986.

Inbox

 @F1Racing_mag
 facebook.com/flracingmag
 letters.f1racing@haymarket.com
 F1 Racing, Bridge House,
 69 London Road,
 Twickenham, TW1 3SP



NOTICES

**GET
F1 RACING
WHEREVER
YOU ARE**



**FULL
DIGITAL
EDITION
ON SALE
NOW**

- Read it on your PC, Mac or iPad
- Identical to print edition
- On sale the same day as the print edition

GO TO:
www.f1racing.co.uk/digital-edition/

**NEXT
MONTH...**



**2016 SEASON
PREVIEW**

**All the drivers. All the teams.
All the tracks. It's our
unmissable guide to F1 2016**

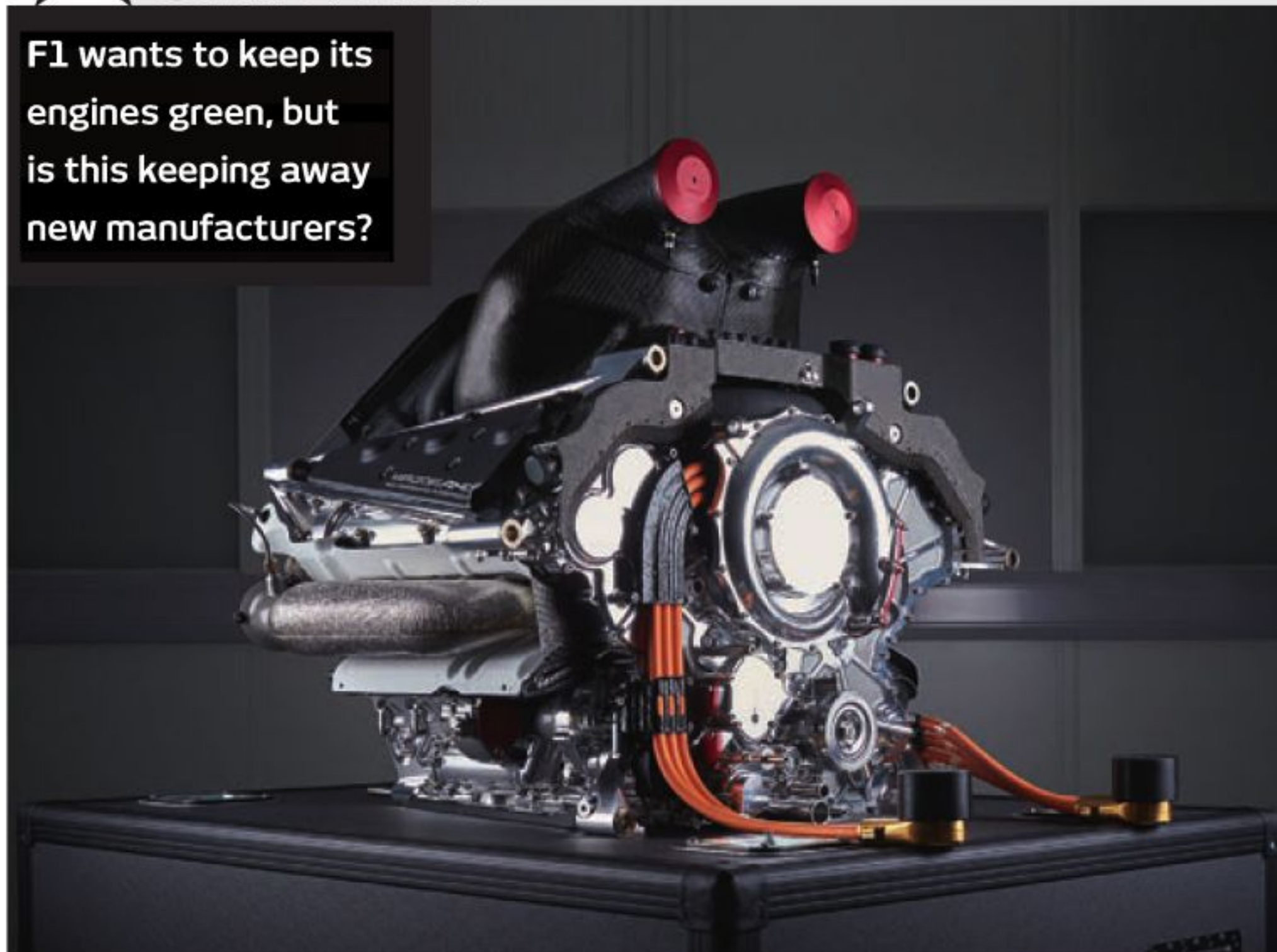
Plus...

- > DC runs the rule over this year's contenders
- > Lewis vs Nico – round three
- > The F1 paddock put their questions to Jenson Button
- > Haas F1: the new kids on the block are out on track at last*

**MARCH
ISSUE ON SALE
3 MARCH**

★ STAR LETTER

F1 wants to keep its engines green, but is this keeping away new manufacturers?



Is it time for a one-engine formula?

Formula 1 is always rewarding to watch, but it currently has room to improve. This opinion was echoed by Christian Horner on the BBC during the 2015 Abu Dhabi Grand Prix, when he stated that the competitive edge has been lost to the engine-based formula. I understand that F1 organisers want to keep the green hybrid engines, but this is preventing new engine manufacturers from joining the fray.

How about this for a possible solution: have one engine supplier at a time on a two-to-three-year contract, with suppliers bidding for the new contract. They'll then pay a premium joining rate in return for huge positive media attention and advertising rights.

The advantage for the fans? A return to competitive F1, and the talented Max Verstappen racing wheel-to-wheel amid a revived McLaren-Ferrari-Red-Bull rivalry. Any team can have a good day and be seen on the podium and driver talent will shine through once more.

Pete Gosling
By email




SILVERSTONE
STAR PRIZE

Pete Gosling wins a pair of three-day general admission tickets to the 2016 Formula 1 British Grand Prix. For more details, visit www.silverstone.co.uk/events. Hotline number: 0844 3728 300

Simplicity itself

Stunning, simply stunning. That's my opinion of the 1989 McLaren MP4/5B featured in 'Now that was a car' (*F1 Racing*, January 2016).

Over the years, rule changes have made the cars increasingly ugly, culminating in the 2014 breed. It baffles me how they can create cars that not only look terrible but are unable to race in close proximity to each other.

The rule makers could do a lot worse than to take a long hard look at pages 40-41 of your January issue before finalising the 2017 regulations, taking note of the simplicity of the MP4/5B's design.

Michael Skeet
Southampton, UK

Why the radio silence?

I have been fortunate to attend a number of GPs over the past two years, and, for me, F1 remains a great sport. A way to improve the experience for the paying spectator, however, would be if we could hear the commentary on FM radio.

This is already available at some races, but others do not have this option and it makes a significant difference. One of the advantages of the new power units is that you can actually hear the radio commentary.

Mike Bishop
By email

History in the making

I was impressed by the first instalment of the new 'History of F1 series' (*F1 Racing*, January 2016). Stuart Codling's text hit the right balance, while satisfying with enough insight and detail. Classic shots from LAT helped, too. If the remaining 11 instalments maintain the standard, we are in for a treat.

Paul Jeffrey,
By email

“THIS IS COOL, BECAUSE IT’S ABOUT ACCESS-ALL-AREAS
FOR EVERYONE ATTENDING.”

CHRIS EVANS



LIMITED TICKET ALLOCATION TO THE WORLD'S
MOST EXCLUSIVE RACE MEETING



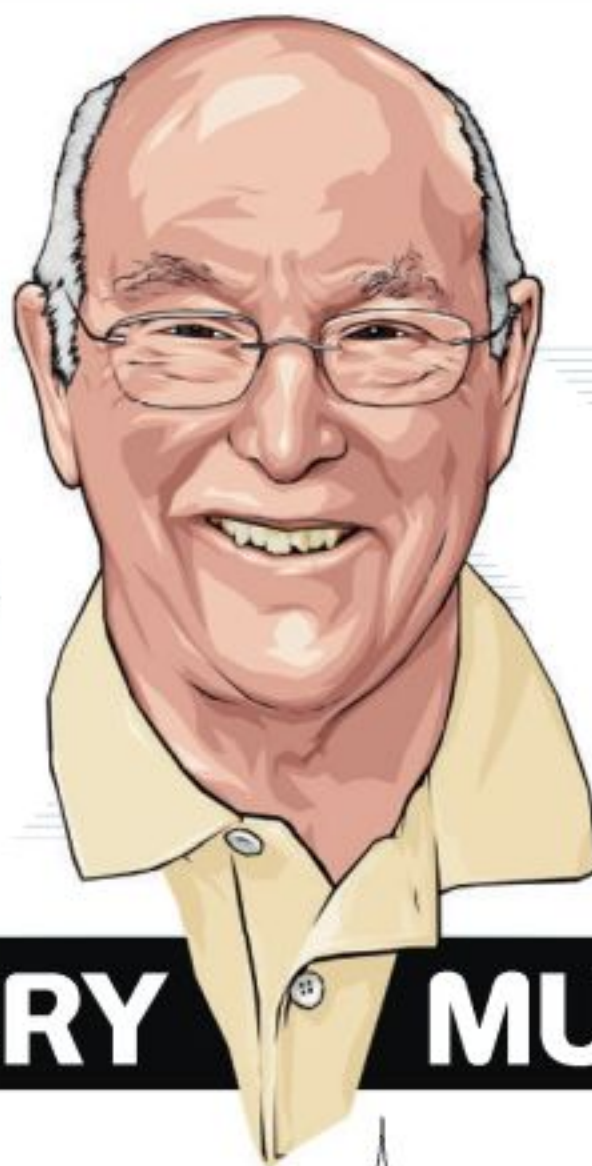
19-20 MARCH 2016

For more information visit www.goodwood.com/74MM

74TH GOODWOOD
MEMBERS'
MEETING

74

MURRAY WALKER



UNLESS I'M VERY MUCH MISTAKEN...

“This winter is critical for one of the greatest partnerships in the history of Formula 1 – McLaren-Honda”

In spite of having two champion drivers, 2015 was an appalling year for these two giants of the sport, and my heart has bled for them. With only two top-six places from 19 races to show for their considerable efforts, now is crunch time. Will they continue to languish at the back when the new season begins or will they have learned from their failure and become competitive?

It all seems like a bad dream to me. I've seen McLaren grow from a twinkle in Bruce's eye to become superb multiple championship winners, and I was in the Isle of Man for the motorcycle

TT races in 1954 when a fact-finding mission of Japanese (headed by a chap named Soichiro Honda) arrived to suss out what they needed to do to compete. They returned in 1959 to win the team prize, and since then they've dominated every category of motorsport from 50cc motorcycles to touring cars, sportscars, IndyCars and F1. So when McLaren's Ron Dennis announced that Honda were producing a “jewel of an engine” for their return to F1 with McLaren there was an assumption that Mercedes, Ferrari and the rest had better watch out.

We couldn't have been more wrong. Honda started years after their rivals with the design of the most complex power units in the history of F1 and were hampered by limited testing. They underestimated the magnitude of their task, produced a less than optimum design (not helped by McLaren's insistence on inhibiting aero constraints) and never caught up. The result was that no matter how much McLaren improved the car – and they did – it never had enough power to get the job done.

So what are the chances of a better 2016? Considerable, I believe, and here's why. Honda have lost face in a big way. Like Renault, they have spent vast amounts of money, which has been counterproductive. They've tarnished their image with technical misjudgement and racing failure and that hurts. Glowing memories of Keke Rosberg, Nelson Piquet, Nigel Mansell, Alain Prost and Ayrton Senna winning race after race and title after title have been replaced by those of Fernando Alonso and Jenson Button demeaningly struggling at the back of the grid.

So the midnight oil will be burning 24/7 in Japan this winter as Honda strive to put things right. But they have bright people, unrivalled research and development facilities, deep pockets, years of experience and determination. They've also had a year of learning to align their very different culture with that of McLaren. If you put all that together you can expect results.

My one reservation is that Honda are in it for the long haul, whereas McLaren need success *now*. Not just to be able to hold their heads up high again, but for commercial reasons, too. With the loss of sponsors Vodafone, TAG Heuer, Hugo Boss and, if rumours are to be believed, Johnnie Walker, the team's finances must surely have been adversely affected.

Plus, of course, the fact that if McLaren and Honda make progress over the winter, their rivals will, too. But, whatever, I'm expecting a rejuvenated McLaren to grace the grids in 2016. They are one of the truly great teams of F1 and if Williams can revive their fortunes, as they so brilliantly have, then I like to think that McLaren can do so, too. Fingers crossed – I'd hate to see the superb talents of Fernando and Jenson being frustrated by inadequate machinery for yet another year. **F1**



“I'd hate to see the superb talents of Fernando and Jenson being frustrated by inadequate machinery for yet another year”



The bar just got raised.

Introducing the AlcoSense Pro breathalyser

Launch Offer
£129.99
~~£149.99~~
Offer ends
31/1/16



“★★★★★ Impressively accurate”


THE SUNDAY TIMES

Using a smaller version of the **SAME fuel cell alcohol sensor as several UK Police breathalysers**, the AlcoSense Pro offers levels of accuracy, reliability and functionality not seen at this price point before.

With AlcoSense's Patent Pending technology, it's also feature rich and unbelievably easy to use. Travelling cross-border? Just select the country/region from the menu and the Pro does the rest. Curious how long it will take until you're sober? the Pro will tell you. Blow incorrectly during a breath test, BlowCoach™ gives you real-time feedback and tells you exactly how to correct it.

Find out more or purchase at your local Halfords, or online at alcosense.co.uk/pro

Available at Halfords Nationwide

**that's helpful that's
halfords**

alcoSense
PERSONAL BREATHALYSERS

Order securely at alcosense.co.uk or call **0800 195 0088**



SEAT

THE ALL NEW LEON ST CUPRA 290

CAPABLE, WHICHEVER
WAY YOU LOOK AT IT



TECHNOLOGY TO ENJOY



587 LITRE BOOT

Room for an active lifestyle.



290PS CUPRA ENGINE

Guarantees precision-driving fun.



CUPRA DRIVE PROFILE

Dynamic driving at your fingertips.

Model shown is a Leon ST CUPRA 290 with optional Sub8 Performance Pack, CUPRA Black-Line and Nevada white metallic paint.

FOLLOW US ON: **SEAT.CO.UK**

Official fuel consumption for the SEAT Leon ST CUPRA in mpg (litres per 100km); urban 31.7 (8.9) - 33.2 (8.5); extra urban 50.4 (5.6) - 51.4 (5.5); combined 41.5 (6.8) - 42.8 (6.6). CO₂ emissions 158 - 154 g/km. Standard EU test figures for comparative purposes and may not reflect real driving results.