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THE WORLD'S BEST MOTORSPORT WEEKLY

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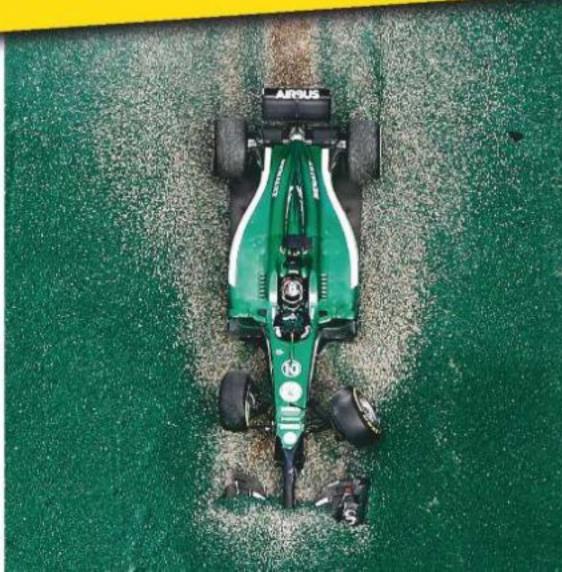




THE STORY OF LEWIS HAMILTON'S TITLE WIN

ELZOIA REVIEW







Model shown is Renault Mégane Renaultsport 275 Trophy-R. The official consumption figures in mpg (I/100km) for the emissions for the range are 174g/km. EU Directive and Regulation 692/2008 test environment figures. Fuel consumption







Renault Mégane Renaultsport core range are: Urban 28.8 (9.8); Extra Urban 45.6 (6.2); Combined 37.7 (7.5). The official CO₂ and CO₂ may vary according to driving styles, road conditions and other factors.



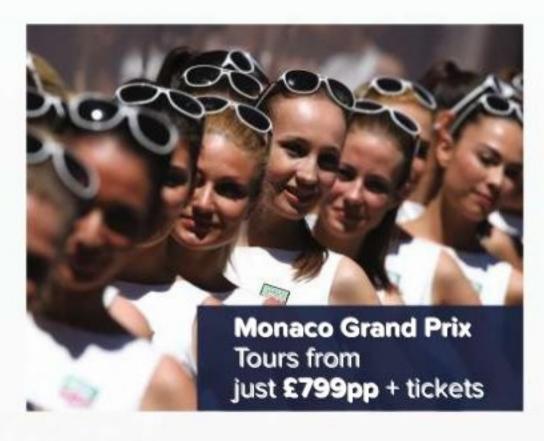




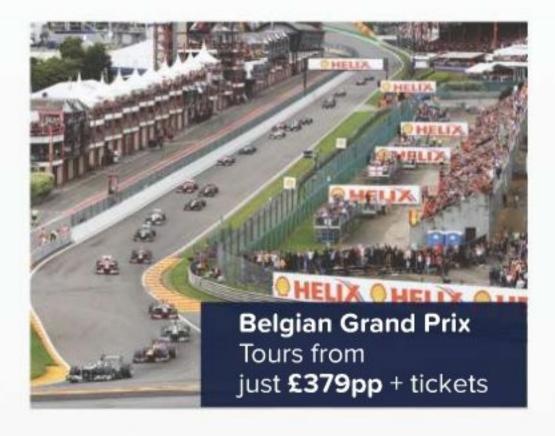
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December 11 2014 - vol 218 no 11

POLE POSITION

Hero of 2014 season deserves all plaudits

MOMENTS BEFORE PRESENTING LEWIS HAMILTON WITH

the AUTOSPORT Award for British Competition Driver of the Year, Martin Brundle enthused about how good the grand prix season had been. The hype of someone with a vested interest? No.

Yes, Brundle is a Sky Sports F1 commentator, but he's also a shrewd, direct and honest observer of the sport. Mercedes dominated and only three drivers won races, but the championship battle that raged between Hamilton and Nico Rosberg was one for the ages. Sure, there are problems — serious ones that must be solved — and you always want to go into weekends knowing that it's more than a two-horse race, but our review of the 2014 season reminds us that there was also some great on-track action.

So what if he had the fastest car; there's no question that Hamilton deserved the championship. When he descended the stairs into The Great Room at the Grosvenor House on Sunday night, the applause was heartfelt and well-deserved.

Among those applauding was the legendary Richard Petty. And if The King reckons Hamilton's achievement is worth celebrating, that's good enough for us.





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COVER STORY

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This week in F1

BIANCHI REPORT CALLS
FOR YELLOW SPEED
LIMIT IN ALL RACING

The accident panel charged with investigating Jules Bianchi's Japanese Grand Prix crash has recommended that yellow-flag speed limits should be rolled out across all forms of international circuit racing.

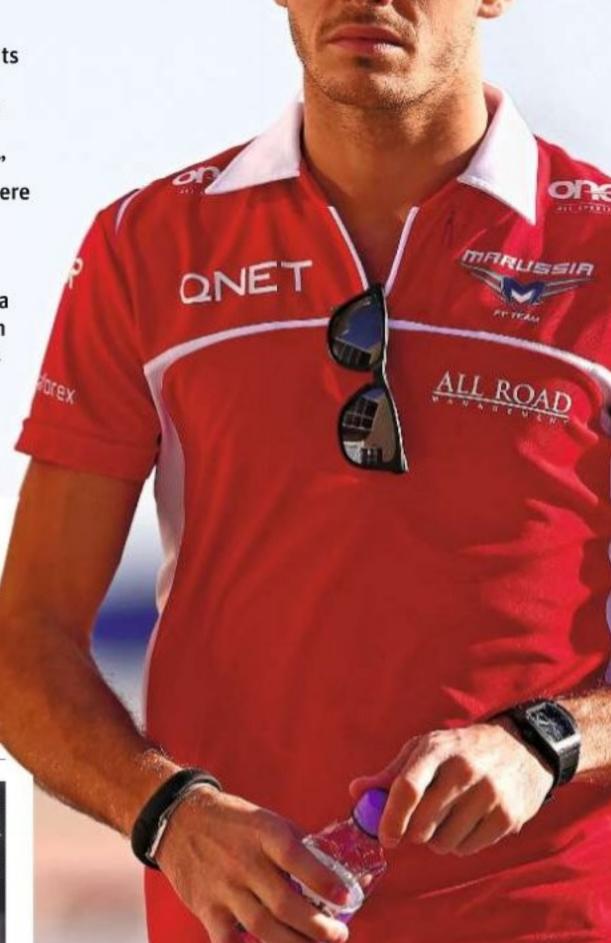
The FIA set up a 10-man panel of experts to review the circumstances of the accident, in which Marussia Formula 1 driver Bianchi suffered severe head injuries. The panel, which included former Mercedes team boss Ross Brawn, ex-Ferrari team principal Stefano Domenicali and double world champion driver Emerson Fittipaldi, drew up a 396-page

report on the crash that was disclosed at a meeting of the World Motor Sport Council last week.

It recommends that the rules be revised for 2015 so that speed limits are enforced in yellow-flag zones.

The panel's report into the crash says that Bianchi "did not slow sufficiently to avoid losing control" when he crashed while marshals were recovering Adrian Sutil's stranded Sauber in the closing stages of October's wet Suzuka race.

The report also rules out the idea of implementing closed cockpits on F1 cars, or wrapping mobile cranes in skirts, saying neither would have altered the outcome of Bianchi's accident.



OTHER RECOMMENDATIONS

- F1 races should not start no later than four hours before sunset – unless the event is a night race – to ensure visibility does not deteriorate unduly.
- The F1 calendar should be reviewed to avoid races taking place during local rainy seasons.
- F1's tyre supplier should be granted an annual wet tyre test, to ensure its technology is the best available for any given season.
- The guidelines on circuit drainage should be reviewed.



VISIBILITY CHANGES

Brake-by-wire interfered in Bianchi accident, says report

The brake-by-wire system on Jules Bianchi's Marussia may have played a part in his Japanese Grand Prix crash by preventing him from cutting the engine, according to the accident panel's report.

The report reveals that the brake-

by-wire system on Bianchi's Marussia was "incompatible" with a fail-safe system on F1 cars, which is designed to cut the engine when the driver applies brakes and throttle at the same time. It says this "may have affected" the speed at which Bianchi struck the crane.



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Korean GP returns for 2015

The FIA has announced that the Korean Grand Prix is set to return to the calendar for 2015, pushing the number of races up to 21.

The May 3 Korean race's status was highlighted as 'to be confirmed'. It is unclear if the race is being planned at the Yeongam track that hosted the event from 2010-13. or if it will take the form of the Seoul street circuit idea mooted by former race promoter Joe Chung.

| 2015 FURM | ULA 1 CALENDAK | | |
|------------------|---------------------|--------------|--|
| DATE | LOCA | LOCATION | |
| March 15 | Melbourne | BEA. | |
| March 29 | Sepang | | |
| April 12 | Shanghai | JAN . | |
| April 19 | Bahrain | 1 | |
| May 3 | Yeongam/Seoul (TBC) | × | |
| May 10 | Barcelona | 1 | |
| May 24 | Monte Carlo | A100A | |
| June 7 | Montreal | 141 | |
| June 21 | Red Bull Ring | | |
| July 5 | Silverstone | 100 | |
| July 19 | Nurburgring | MA. | |
| July 26 | Hungaroring | 1 | |
| August 23 | Spa | 2 | |
| September 6 | Monza | MA | |
| September 20 | Marina Bay | bee | |
| September 27 | Suzuka | 100 | |
| October 11 | Sochi | 100 | |
| October 25 | Austin | MR. | |
| November 1 | Mexico City | M | |
| November 15 | Interlagos | 130 | |
| | 9.000 A5000 A7 | the state of | |

FIA won't call for third cars

Formula 1's big teams will not be asked to run a third car by the FIA next season, even if Marussia and Caterham fail to return and boost the grid back up to at least 20 cars. FIA president Jean Todt said: "We can race with nine teams. It is not a disaster. I remember in MotoGP there were 16 motorbikes and it was still a good race."





Superlicence rules are tightened

November 29

Formula 1's superlicence rules will be revised from 2016, with a new minimum driver age of 18 and at least two years' single-seater experience required to qualify. The FIA said drivers would also need a valid driving licence and knowledge

of F1's sporting rules. Qualification through success in junior categories will be rated on a points system, rather than going to frontrunners of various series. Drivers will also need 300km of testing in a current or old F1 car before getting a superlicence.

Yas Marina

- Double points dropped
- Cars held in the pits when races are red-flagged
- Drivers forced to start from the pitlane if team personnel or equipment are on the grid after the 15-second warning signal
- Time penalties for drivers who cannot take full grid punishments for unscheduled engine-component changes, rather than the grid drops being carried over to the next race
- 10s penalties for driving misdemeanours

THE FIA ALSO RATIFIED A NUMBER OF CHANGES TO F1'S RULES FOR 2015

- 10s stop/go penalties for unsafe releases
- Minimum car weight raised by 1kg to 702kg
- Suspension rules tightened to outlaw front-rear interconnected (FRIC) systems

Teams called to fresh F1 costs summit

Formula 1 teams will meet on December 18 in a bid to make a breakthrough in the sport's costs crisis. Other matters, such as increasing the sport's popularity, which was not covered at a recent meeting of the F1 Commission because of time constraints, may also be discussed.

WAIT GOES ON FOR BUTTON

Jenson Button and Kevin Magnussen were still waiting to find out whether they will remain in F1 with McLaren as AUTOSPORT closed for press. A lengthy team board meeting in Woking last Thursday failed to resolve the question of who should partner Fernando Alonso in 2015.



Williams launches new AUTOSPORT Award



AUTOSPORT and Williams have launched a new award to fast-track a university engineering student into F1. The AUTOSPORT Williams Engineer of the Future Award will be presented at the annual AUTOSPORT Awards each December from 2015. The award recipient will be enrolled

in a two-year 'accelerated development programme' with Williams to find a specialist role within the F1 team.









Award Winner

WELL DONE FROM EVERYONE AT BRDC FORMULA 4!













A night at the AUTOSPORT Awards served as a reminder that it's the drivers, not the cars, that really fire fan appeal

he rapturous applause that Lewis Hamilton received as he descended the Grosvenor House Great Room stairs to enter the AUTOSPORT Awards told you everything you needed to know about who are the 'real' heroes of Formula 1.

For in a year when technology has been moved to the forefront, and manufacturers have been in raptures over hybrid relevance and fuel efficiency regulations, there is a simple truth that even they have to accept. The cars are not the stars. It is the drivers.

The complex relationship between people and technology came into focus again later in the evening when legendary Formula 1 designer (and John Bolster Award winner) Gordon Murray offered a few of his thoughts on modern grand prix racing. Forty years on from his Brabham BT44 taking its maiden victories, Murray is still fired by the same passions that drove him to F1 in the first place: engineering excellence, innovation and utterly cool technology.

Now, though, his focus is not on designs to find a few tenths of a second over a lap. Instead it's his potentially world-changing iStream — a manufacturing process that could redefine the passenger car market.

"In essence I did [miss F1] when I first stopped, but what we are doing now is much more exciting," he says of his low-weight, low-energy project.

"For the first time ever we are using F1 technology in a mechanism that will benefit the everyday motorist, and



Some technology and engineering directions that are accepted as normal should be questioned.

"The first thing I would ban is telemetry. It is ridiculous," he explains. "When I was growing up, I used to race myself, you had to think about the motor, the gearbox, tyres, and now you get told what to do.

"I wrote an article a few years back on what F1 should be — and it was getting back to basics really."

He sees frustration on the engineering front too which is a legacy of teams having simply become too big.

"F1 has got to be such a big business that you get pigeonholed as an engineer. I know youngsters who have been in the front suspension department for eight years, and they will probably never understand the reason for

"We're at a tipping point where technology has started encroaching on seat-of-the-pants stuff"

that is bringing F1 to a completely new level. It should go on to change all our lives — which is even more exciting than winning the first grand prix or first championships."

Murray has not lost his love of Formula 1 ("I am still a racer at heart: I still want to go racing them one day!") but there are some aspects of it now that are not so attractive to him.

"This is me being old fashioned — but F1 has always been about the drivers' championship really," he says. "It is nice to win the constructors' title but it is a championship for drivers. I don't think we should forget that. Punters root for the drivers, and the teams to a lesser degree — and I think as soon as you start introducing any false rules, or artificial rules, and particularly something based on fuel consumption or fuel usage, I think you start losing a little bit of that.

"I think we have to be a bit careful that we don't lose the whole reason for having Formula 1 racing."

But it is not just specific rules that Murray doesn't like.

the whole car design. That is the way the world is going, and you cannot turn the clock back. But it is not as satisfying as when, for example, I had seven people at Brabham. And everybody knew everything. We were a real team and a real family and it has lost that a little bit."

Sure the world moves on, and it is not realistic to have fewer than a dozen staff members designing and running a contemporary F1 car. But equally, we're at a tipping point where technology has started encroaching a lot on areas that should be seat-of-the-pants stuff for drivers. That's why the radio ban rumblings came up.

Yes, technology is attractive and F1 has been, and should always be, about fielding the fastest and most technologically advanced racing cars out there. But this technical achievement should never come at the expense of letting the best drivers go out there and show us why they are so brilliant.

I'm sure both Gordon Murray and Lewis Hamilton would agree on that.

This week in motorsport



Current British Touring Car champion Colin Turkington's future in the series is in doubt.

Northern Irishman Turkington is on the driver market following the BMW-equipped WSR team's loss of main sponsor eBay – five years since he was forced out of the BTCC after taking his first crown in 2009 when WSR lost its RAC backing.

"I am talking to other teams," he confirmed. "With eBay not being involved it's making it difficult for me to be there." MG has confirmed that it will remain in the BTCC for 2015, but no drivers have been assigned for seats in the Triple Eight-run squad. Race winner Sam Tordoff (right) was set to be confirmed at WSR this week, while double champion Jason Plato is also moving on.



WTCC GETS QATAR FINALE

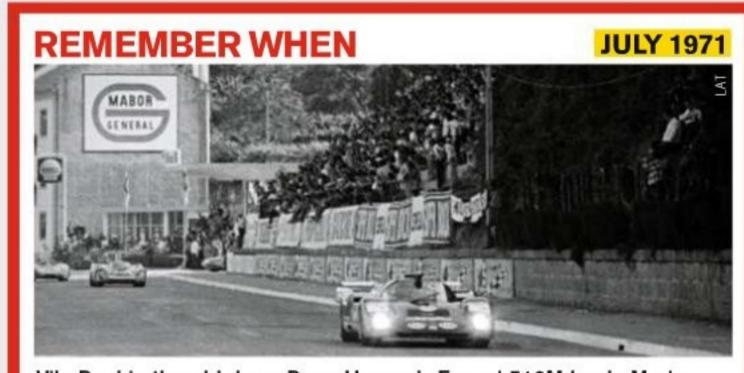
Two new highlights have joined the Nurburgring Nordschleife on the World Touring Car Championship calendar – announced last week – for 2015.

The WTCC's Macau finale slot, which looks set to go to TCR (see page 14), has been taken by a floodlit event on the Losail circuit in Oatar.

Meanwhile, the revamped Vila Real road circuit in Portugal will host a round in July. Vila Real staged international sportscar fixtures in the late 1960s and early '70s, and the track was recently revived for national events.

WTCC 2015

| DATE | LOCATION |
|--------------|----------------------|
| March 8 | Rio Hondo (RA) |
| April 19 | Marrakech (MA) |
| May 3 | Hungaroring (H) |
| May 16 | Nurburgring (D) |
| June 7 | Moscow Raceway (RUS) |
| June 21 | Slovakia Ring (SK) |
| June 28 | Paul Ricard (F) |
| July 12 | Vila Real (P) |
| September 13 | Suzuka/Motegi (J) |
| September 27 | Shanghai (PRC) |
| November 1 | Buriram (T) |
| November 22 | Losail (Q) |



Vila Real in the old days: Rene Herzog's Ferrari 512M leads Mario Cabral (Porsche 917) and winner Jorge de Bagration (Porsche 908).

London race one step closer

London's Formula E fixture in Battersea Park has been given final approval by the local council.

Wandsworth Borough Council's community services overview and scrutiny committee last week approved the plans for the all-electric Formula E Championship to host its season finale in the London park at

the end of June 2015. The event is now subject to a planning permission process, which is likely to take until February.

That application will include the proviso to make the event a two-day meeting should Formula E decide that London will be its proposed European double-header fixture.



VERGNE FOR FORMULA E

Toro Rosso Formula 1 refugee Jean-Eric Vergne joins the Formula E grid in Uruguay this weekend.

Vergne will line up at Punta del Este with Andretti Autosport, in the car raced so far by Charles Pic and Matthew Brabham.

The drive with Andretti is further indication of Frenchman Vergne eyeing a future in IndyCar.

For all the breaking news, isit **AUTOSPORT.COM

Russell weighs up F3 switch

McLaren AUTOSPORT BRDC Award winner George Russell looks likely to contest the Formula 3 European Championship in 2015.

The 16-year-old, winner of this year's BRDC Formula 4 title, tested with Carlin at Silverstone for two days last week and is out for another two days with the British squad at Monteblanco in Spain this week.

"There are lots of offers on the table from numerous teams," said Russell. "It's a case of picking the right place to go now, and this Award will open up a lot of doors."

Should Russell join Carlin, he will line up alongside Gustavo Menezes. The American, who raced with Van Amersfoort Racing this year, was confirmed last week.



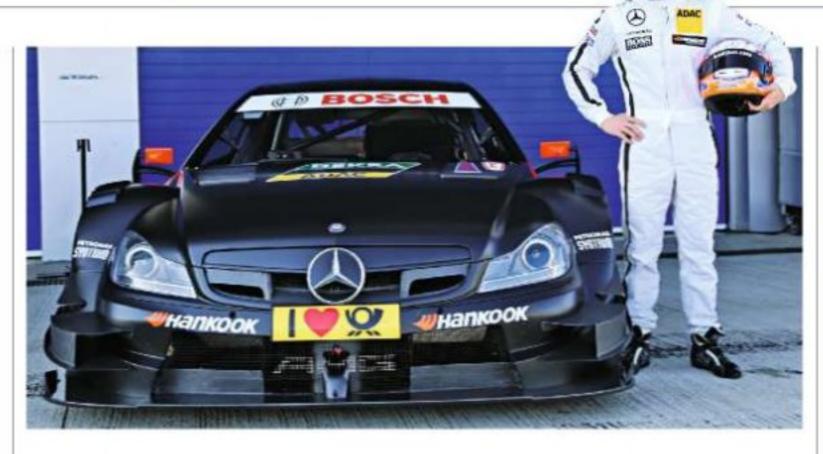


Priaulx back in **Europe in BMW**

Andy Priaulx will head up a BMW factory assault on the European Le Mans Series next season with Marc VDS Racing.

The three-time World Touring Car champion is moving over from the German manufacturer's United SportsCar campaign to race a solo works BMW Z4 GTE in the five-round ELMS with the Belgian squad. His team-mates, who will have to include a silver-rated driver, have yet to be confirmed.

Priaulx said: "I always embrace a new challenge and am proud to be heading up BMW's works team in this exciting series."



DTM goes to double-headers

The DTM will revert to a double-header format for the 2015 season - for the first time in 15 years.

The season features nine rounds, with one race each Saturday, one on Sunday.

All three manufacturers tested new drivers at Jerez last week. Lotus F1affiliated Charles Pic and Esteban Ocon were both in action for Mercedes, along with Macau Grand Prix winner Felix Rosenqvist (pictured above), European F3 race winner Lucas Auer and GT ace Maximilian Gotz.

At Audi, tests were given to GP3 runner-up Dean Stoneman, Blancpain GT champion Laurens Vanthoor, GT star Nicki Thiim, Euro F3 race winner Antonio Giovinazzi, Euroformula Open hotshoe Alex Palou and Italian GT racer Marco Mapelli.

DTM 2015

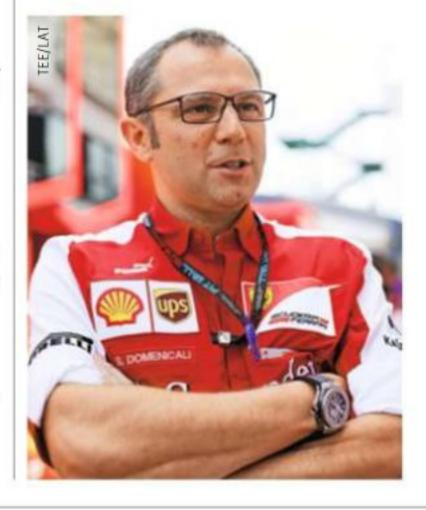
DATE

| DATE | LUCATION |
|----------------|-----------------------|
| May 2-3 | Hockenheim (D)* |
| May 30-31 | Lausitz (D) |
| June 27-28 | Norisring (D)* |
| July 11-12 | Zandvoort (NL)* |
| August 1-2 | Red Bull Ring (A)* |
| August 29-30 | Moscow Raceway (RUS)* |
| September 12-: | 13 Oschersleben (D) |
| September 26- | 27 Nurburgring (D)* |
| October 17-18 | Hockenheim (D)* |
| | F0 / / / / / |

LOCATION

* supported by European F3 (see story below)

BMW has dropped Joey Hand for 2015, meaning that one of the seven drivers it tested at Jerez (see AUTOSPORT last week) is likely to be promoted. It is understood that Audi is unlikely to have any vacancies, although there is one additional Mercedes.



Domenicali's new FIA role

Ex-Ferrari Formula 1 team principal Stefano Domenicali has succeeded Gerhard Berger as president of the FIA Single Seater Commission.

Domenicali inherits the Formula 3 European Championship, which Berger revived in his three-year reign.

F3's newly announced calendar for 2015 has 11 dates. Apart from the DTM support slots (see story above), the series visits Silverstone (April 11-12), Pau (May 16-17), Monza (May 30-31) and Spa (June 20-21).

In brief



KOBAYASHI'S SF TEST

Caterham F1 refugee Kamui Kobayashi was set to test a Super Formula car at Okayama this week. Kobayashi (above) was due a run with a team affiliated to Toyota, the marque that launched his career.

ACO'S ASIAN TASK

The Automobile Club de l'Ouest has taken over the running of the Asian Le Mans Series from the Chinese-based S2M sports marketing group. The ACO plans a three-race schedule starting in the late summer for next year ahead of a five-round 2016 series.

WALKINSHAW GT RUN

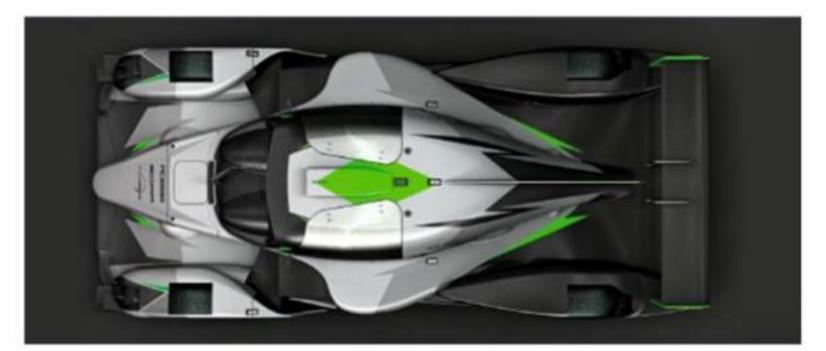
The Walkinshaw name returns to international sportscar racing in this weekend's Gulf 12 Hours when 21-year-old Sean drives a Ferrari 458 Italia for Dragon Racing in Abu Dhabi. The son of Tom Walkinshaw, he is aiming to switch from the F3-based Euroformula Open to the Blancpain Sprint Series in 2015.

NEW F3 ENGINE RUNS

The new Tomei-built ThreeBond Formula 3 engine had its shakedown run at Silverstone last week. Alexander Sims gave the powerplant its first miles in a T-Sport Dallara.

AUSSIE RULE CHANGES

Australia's V8 Supercars series is to open up to allow six-cylinder, four-cylinder and turbocharged cars from 2017. The cars will remain front-engined, rear-wheel drive, right-hand drive and four-seaters.



LOEB MOVES TO LMP3 ARENA

Sebastien Loeb Racing has signed up to be part of a joint venture to produce a new LMP3 prototype.

Multiple World Rally champion Loeb's team has joined forces with German design house ADESS AG and French composites group SORA to create LAS Motorsport, which is aiming to put its new Nissanpowered coupe on the grid for the start of next year's European Le Mans Series.

The Loeb team will be in charge of the development and assembly, ADESS the design and homologation and SORA production of the composite components.

Loeb will not run a car in the ELMS, but series LMP2 regular Greaves Motorsport has announced that it will field a Ginetta-Juno LMP3. Radical European Masters champion Bradley Smith is the first confirmed driver.

The next two-litre revolution?

It's been two decades since the Super Touring code was adopted across the world. Now the prime movers in TCR are planning another tin-top hegemony. By MARCUS SIMMONS



hould the concept work as its originators intend, TCR will have the biggest impact on touring car racing worldwide since the 1990s days of Super Touring. It's easy to draw parallels too: Super Touring was for two-litre machinery pushing out approximately 300bhp; TCR will be for two-litre cars (albeit turbocharged) developing around the same power.

The biggest difference between the two is that, while Super Touring was aimed at manufacturers, TCR's focus is on tuners and teams, albeit with blessing from the car makers — much like the hugely successful GT₃ category.

Grand Prix support slots in Malaysia, China and Singapore are the headline-makers from the TCR International Series' 12-round calendar for its inaugural season. And, although it hasn't been announced yet, a deal to take the World Touring Car Championship's place as the historic Macau Guia race is known to be a formality.

While these are great feathers in the cap for WSC Ltd, the TCR organiser led by former WTCC promoter Marcello Lotti, such events are a slight paradox for a concept that was intended to build



a new pyramid for touring car racing. Rather than progress methodically from the pyramid's base, the races at Sepang, Shanghai, Marina Bay and Macau have provided a golden peak before the rest of it's been built.

The use of the word 'concept' is intended as, apart from the SEAT Leon Racer that is the basis for the Spanish make's revived Eurocup, no TCR car has yet been seen in the flesh. Not only that, but in the time taken to write this article the name changed from TC3 to TCR. (This is in the wake of the FIA's separate

new touring car pyramid, formalised last week, being for TCN-1 and TCN-2, with WTCC cars being TC1. The name change thereby avoids confusion).

But listen to the talk, and there could be some very exciting developments ahead. So far, TCR has made small progress in its pyramid-building, with a regional series being started in Asia in 2015 and a national one in Portugal. For 2016, AUTOSPORT sources have suggested that the number of regional and national series for TCR could be approaching double

"There's a need for a low-cost and simple category that has a worldwide relevance"

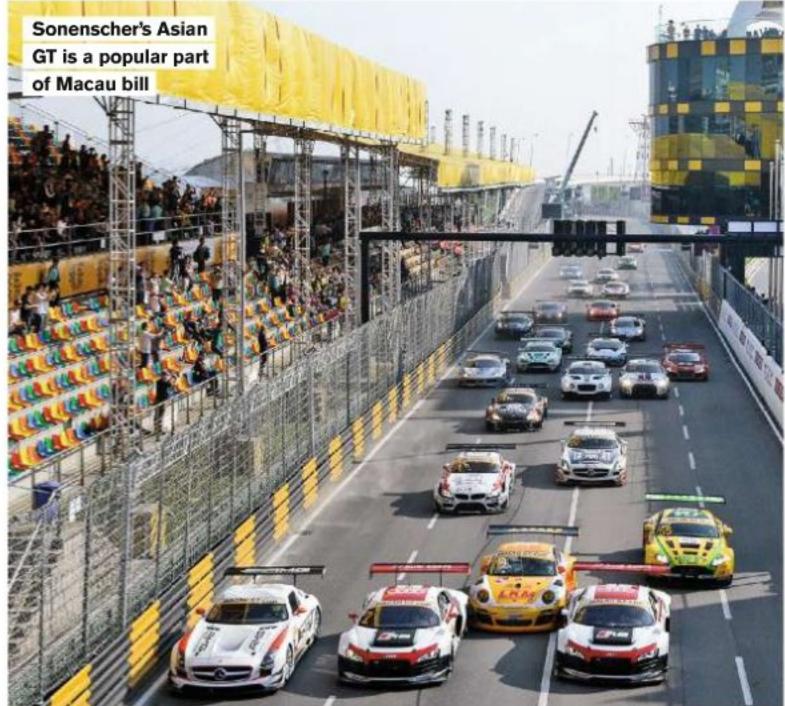
David Sonenscher, Motorsport Asia

figures — if that's the case, we have several announcements to expect in the coming months.

Motorsport Asia, which will promote the Asian series alongside its GT3-based championship, has been crucial in the legitimising of TCR. Firstly, MA has a long history of running Formula 1 support races, such as the Asian Porsche Carrera Cup and Formula BMW series. As well as running the Asian TCR series, MA will therefore be instrumental in the operations of TCR International when it joins Bernie Ecclestone's circus for its eastern rounds.

"It was very much the plan from the initial stages to put grand prix supports on," says MA boss and ex-racer David Sonenscher. "We did look at supporting more than the Asian GPs, but it just so happens that we ended up with all the F1







races being in Asia. Obviously what I bring to the table is my experience and contacts in Asia - I've been working in that market for 20 years, so I guess that helps when we're looking at the global strategy.

"It helps that we've done the F1 programme for a long time with Formula BMW and Carrera Cup, so we know the system and they know us. Marcello has a good relationship with Mr Ecclestone, and obviously we fit in comfortably. My company has a long experience working in that environment it makes putting it together that much simpler."

Sonenscher also not only has a long relationship with the Macau organisers - initially with the Formula Asia 2000 single-seater category, via Formula BMW and latterly with his GT series being the foundation for the ever-growing GT Cup race – but he also put together the event at the new international-standard Buriram circuit in Thailand. Here, TCR International will race alongside TCR Asia (which otherwise has an entirely separate calendar) and GT Asia on a Motorsport Asia bill.

Away from Asia, TCR has replaced WTCC at Austria's scenic Salzburgring, and there are further

European races at Valencia, Algarve and Monza. The calendar is completed by a visit to Sochi in Russia and a South American double-header comprising the former Argentinian GP venue in Buenos Aires and the brand-new Chilean track of Codegua.

On the national and regional side, Sonenscher is convinced that TCR ticks all of the right boxes not only for Asia but also for the many areas around the world that are struggling to get viable touring car series up and running.

"WTCC is a great championship, but it's very manufacturer-based and very big budgets," he says. "I

| TCR CALENDAI | R | |
|--------------|-------------------|--|
| DATE | LOCATION | |
| March 29 | Sepang (MAL) | |
| April 12 | Shanghai (PRC) | |
| May 3 | Valencia (E) | |
| May 10 | Algarve (P) | |
| May 24 | Monza (I) | |
| May 31 | Salzburgring (A) | |
| June 21 | Sochi (RUS) | |
| July 26 | Buenos Aires (RA) | |
| August 9 | Codegua (RCH) | |
| September 20 | Singapore (SGP) | |
| October 25 | Buriram (T) | |
| November 22 | Macau (PRC)* | |
| | * to be confirmed | |

found from my Asian Touring Car series that I stopped a few years ago that we just couldn't keep up with the costs. We needed something and it's the same for national championships in a lot of places there's a need for a low-cost and simple category that has a worldwide relevance.

"Young drivers can come in and race the same type of car from national to regional and then international, and then could maybe go to WTCC after getting their grounding here. What's the difference from doing Formula 4, Formula 3 and GP2 before going to F1?"

But with only three months to go until the opening double-header at Sepang, things are still very... conceptual. Even so, Lotti's TCR International has 20 of its 24 entry slots filled, and Sonenscher's Asian series has 21 sign-ups. "You'll see things move very fast from this point forward," Sonenscher predicts. "I've never had the kind of interest from competitors that I've got in this. The Balance of Performance stops crazy spending, and it will be very much down to the drivers and teams to do a good job without major development. It's great for touring car racing as a whole." M

ON THE GRID?



Ford

Onyx Race Engineering, which ran Focuses in the WTCC as Arena, is developing a TCR Focus.



Honda

Leading Swedish team West Coast Racing will enter Civics built by factory Honda WTCC team JAS.



Mercedes

Talks with the marque's motorsport house AMG are well advanced for 2016, say TCR officials.



Opel

The Astra OPC is expected on the grid by TCR's organisation.



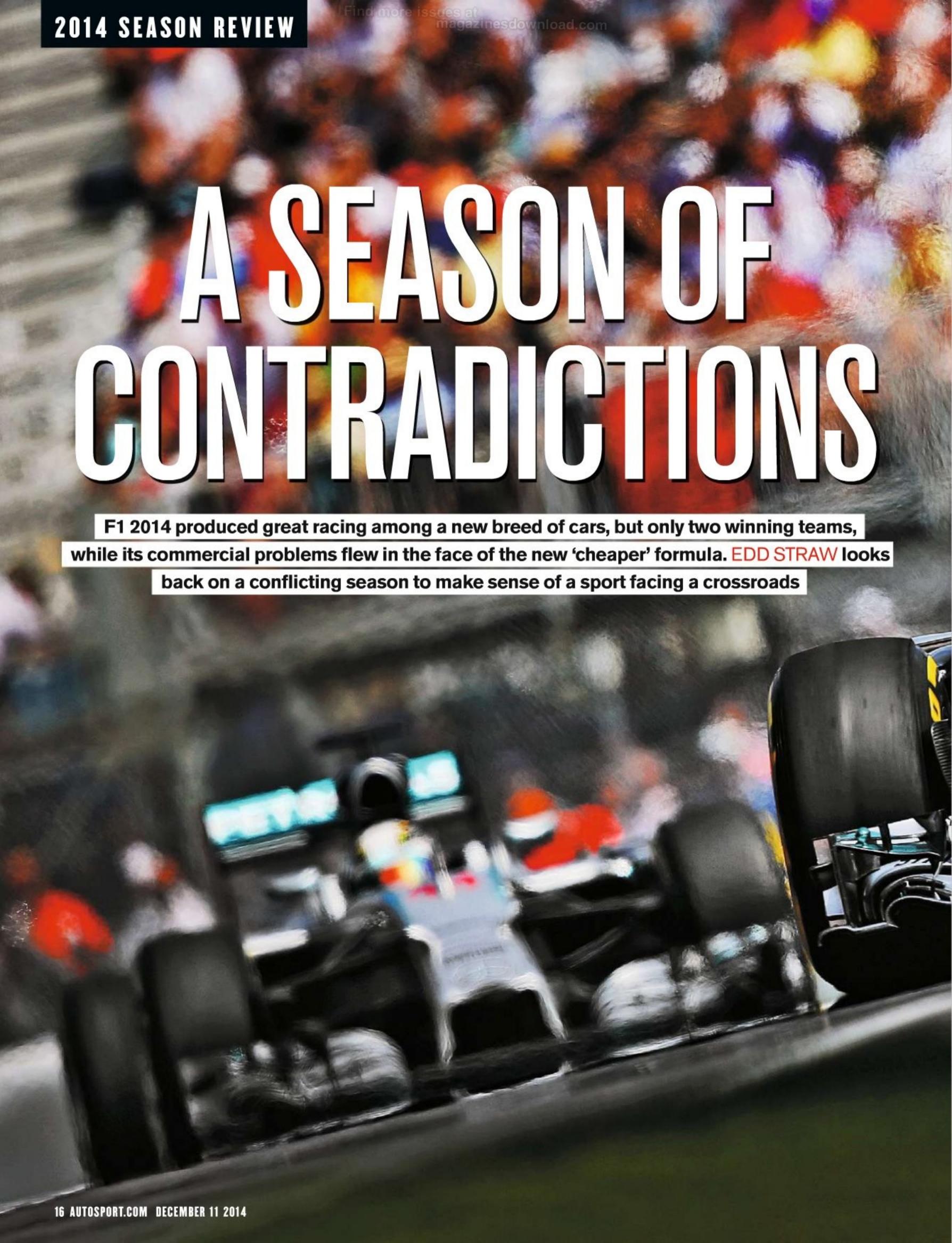
SEAT

Italian squad Target Competition expands from the SEAT Leon Eurocup to run the Leon Racer in TCR. Extra examples of this model could tide the series over until other makes are enticed in.



Volkswagen

Long-time WTCC loyalist Franz Engstler's team switches codes to run a trio of Golf GTis.





his was a season of contradictions. It was a season of fantastic racing, but dominance by Mercedes. A season of financial hardship, but bigger spending than ever. A season of the cars moving closer to what fans have lobbied for, but ever-louder complaints about the direction of the sport. At times, it was difficult to know whether we were living through a great season or a dire one, a triumph of pure racing over commercialism or the first

step on the path to oblivion. How to make any sense of that one?

For all its problems, at the very heart of Formula 1 is what happens on track. No matter what arguments and politics are raging off the track, what happens for a couple of hours on a Sunday afternoon is the important part. On paper, it sounds dull that only two teams -Mercedes and Red Bull - won races and that Daniel Ricciardo was the only driver other than title protagonists Lewis Hamilton and Nico Rosberg to taste victory. But this was a season that will be looked back on as a damned good one in years to come.

The title race went down to the wire, something that has happened in less than half of the world championships that have been

contested since 1950. The battle between Lewis Hamilton and Nico Rosberg was a rarity, one in which a pair of team-mates were closely enough matched that nobody could be sure who would have the upper hand on any given weekend. From early in pre-season testing, it was clear that the battle for the drivers' championship was going to be an intra-Mercedes affair. So, right from the off in March's Australian Grand Prix, their battle assumed the form of an eight-month title run-in.

Yet their rivalry did not assume the form that was widely expected. Rosberg proved the more effective qualifier, beating Hamilton 12 times on Saturday; Hamilton proved the better racer, winning 11 grands prix to Rosberg's five. This made their battle endlessly fascinating, part





F1 2014: RACE-BY-RACE REMINDER

Australia



Rosberg; 2 Magnussen; 3 Button Hamilton takes pole position but thanks to a spark-plug-related problem drops a cylinder before the start and retires. Daniel Ricciardo is excluded from second over fuel-flow issues with his Red Bull.

Malaysia 🕮

1 Hamilton; 2 Rosberg; 3 Vettel

Hamilton dominates from pole position, with Rosberg unable to match his team-mate's pace. Vettel qualifies second but can't stay ahead of Rosberg in the race.

Bahrain N



1 Hamilton; 2 Rosberg; 3 Perez

Hamilton holds off attacks both early and late on in the race from Rosberg during a spectacular battle. Perez drives superbly to take the Force India team's secondever podium finish.

THE YEAR IN FOCUS

action and part psychological thriller, with both getting the upper hand at various points in the season. As early as the Bahrain GP, where first Hamilton complained about Rosberg having studied his data from the previous two races after the German took pole, and secondly Rosberg used a restricted-engine mode to attack Hamilton late in the race, things started to get tense. In that race, Rosberg was also unhappy with the way Hamilton had defended. This played a big part in what would prove to be the decisive moment of the season at Spa, four months later.

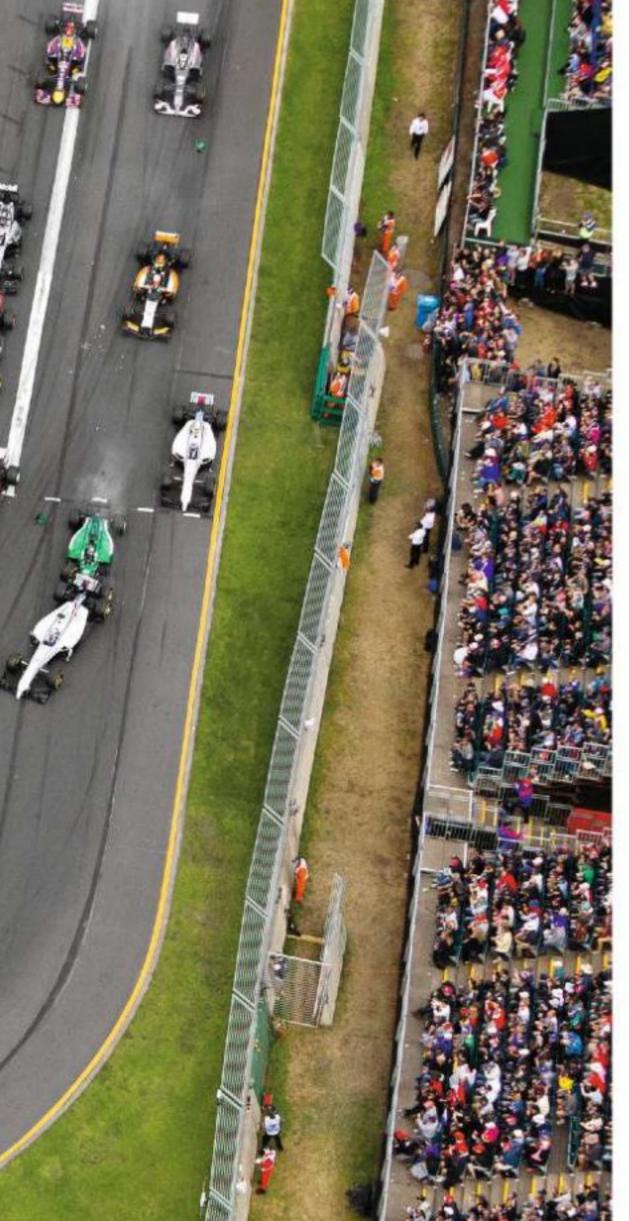
It seemed the pair was on a collision course to mutual annihilation. In Monaco, where Rosberg had provisional pole position in his pocket after the first runs in Q3 and then, very conveniently, went off up the Mirabeau escape road on his

second, preventing Hamilton from attacking by triggering the yellow flag, the rivalry stepped up a notch. It seemed inconceivable that this battle would not boil over.

But it did take a while. What followed was a period in which Hamilton started making needless errors in qualifying trying to deal with Rosberg's pace. At this point in the season, Rosberg started to look the more likely champion. Fast, effective and cunning, his remarkable drive to second in an ERS-less Mercedes in Canada underlined how canny a driver he was. When Hamilton suffered a brake failure during Q1 in Germany, and then an engine expiry at the same stage in Hungary, everything seemed to be going Rosberg's way as F1 headed into its August holiday.

Then came Spa. The manner in which Mercedes handled the fall-out from the collision between Rosberg and Hamilton on the second lap of that race is covered in depth elsewhere in this issue, but there's no question that it transformed the dynamic between the pair. After Spa, Hamilton became markedly more serene, happy to end up second to Rosberg in qualifying in the knowledge that he would have the advantage in the races. In the closing stages of the season he was close to unstoppable, with Rosberg starting to make needless errors in his desperation to defeat his title rival.

At Monza Rosberg led and twice went off after errors under braking. At Sochi he had done the hard work on the run to the first corner, then bafflingly hit the brakes way too hard and his







China

1 Hamilton; 2 Rosberg; 3 Alonso

Rosberg drops to seventh at the start and gives Hamilton a clean run to a third consecutive victory for Mercedes (right). He is able to climb back to second ahead of Alonso with ease.

Australia: Mercedes and

Red Bull out front was a

portent of things to come



Spain

1 Hamilton; 2 Rosberg; 3 Ricciardo

For the second race in succession, Hamilton has to repulse late pressure from Rosberg, winning by just six tenths. Ricciardo takes his first real F1 podium finish for Red Bull.

Monaco Monaco



1 Rosberg; 2 Hamilton; 3 Ricciardo Rosberg's yellow-flag-triggering off in qualifying angers Hamilton, and lays the foundations for a crucial second win on his home streets. Ricciardo excels on his way to third.

hopes of victory evaporated in a puff of Pirelli tyre smoke. At Suzuka he led but couldn't live with Hamilton's pace in the wet in a tail-happy Mercedes, finishing second. At Austin he had the race under control, only for a slow start to the second stint, combined with pressing the wrong button while seeking a defensive dab of ERS power, to let Hamilton pass him. These were all races that Rosberg had put himself in the position to win, all races in which Hamilton simply did a better job.

Those errors are why Rosberg always needed fate to intervene and derail Hamilton in Abu Dhabi. Instead, it was his own car that let him down, losing ERS and condemning him to a lapped finish outside the points. It was not the right way for it to end, but nobody serious

argued with the outcome: Hamilton had been the better of the two and was a worthy champion.

In those late-season races, Hamilton had everything under control. Not only did he use less fuel than Rosberg, a consequence of his smoother driving style, but he showed himself perfectly capable of managing the demands of the new 1.6-litre turbocharged V6 engines. This was the year during which Hamilton really bought into the idea that the work he did off track would only serve to augment his sheer speed on it.

It's important not to overlook the achievement of Mercedes in producing such a dominant car/ engine package. With its chassis base in Brackley and engine headquarters just up the road in Brixworth, there was always the suspicion that

Mercedes would thrive under the new regulations. Yes, it had the financial resources and the facilities to do the best job, but the extent of its dominance was testament to just how good a job it did. Not only was the powerunit package the class of the field (it was reliable too, with not one Mercedes-powered driver picking up a penalty for busting the fiveengines-per-season rule), but the car was also far better than it was often given credit for.

Arguably, the driver who stood out above both of the title contenders was Daniel Ricciardo. His pace over a single lap was never in doubt, but he arrived at a down-at-heel Red Bull still only a partially known quantity. Those in the team knew he had the speed, but did he have the racing chops? He proved, spectacularly, that







1 Ricciardo; 2 Rosberg; 3 Vettel Energy-recovery-system failures hit both Mercedes entries, with Hamilton subsequently retiring with rear-brake problems. Ricciardo passes Rosberg

late on for his maiden career win.

Austria -



Rosberg; 2 Hamilton: 3 Bottas Williams locks out the front row with Felipe Massa on pole, but Rosberg and Hamilton work their way past the pair. Bottas takes his first career F1 podium finish (right).



Britain



1 Hamilton; 2 Bottas; 3 Ricciardo Hamilton's decision to abort his final qualifying run on a drying track backfires and leaves him sixth on the grid. But he charges to second, and Rosberg's gearbox failure hands him victory.

he did. In fact, he saved his most impressive performances for Sundays, frequently showing exemplary racecraft on his way to results that put his illustrious, four-time world champion team-mate Sebastian Vettel in the shade.

Unfortunately, while he flirted with the edge of the drivers' title battle, he never had the tools to force his way into the fight. All three of his wins depended on Mercedes losing a winning position: to car problems in Canada; to a poorly timed safety-car appearance in Hungary; and then the Rosberg/Hamilton collision at Spa. But what is telling is that it was always Ricciardo who profited.

The problem is that the change of engine formula effectively left the way clear for a Mercedes that maximised its potential to



'Ricciardo flirted with the edge of the drivers' title battle but didn't have the tools to fight'



Germany 5555



Rosberg; 2 Bottas; 3 Hamilton

A brake failure in Q1 leaves Hamilton 20th on the grid. He charges to third, with a few scrapes along the way, while Rosberg and Bottas have clear runs to first and second after Felipe Massa's first-corner inversion.

Hungary -



1 Ricciardo; 2 Alonso; 3 Hamilton

An early safety car turns the race on its head, costing Rosberg victory. Ricciardo passes Alonso to win late on, while Hamilton disregards a team order to let Rosberg by on his way to third.

Belgium 💵



1 Ricciardo; 2 Rosberg; 3 Bottas Rosberg's attempt to pass Hamilton for the lead at Les Combes hands Ricciardo a shot at his third win of the season. The relationship between the Mercedes drivers hits a new low.

Italy



1 Hamilton; 2 Rosberg; 3 Massa

Rosberg leads from pole position, but two under-pressure offs under braking at the first chicane hand Hamilton the lead. Behind them, Massa takes his first podium finish for Williams.



dominate. The Renault-powered Red Bull was a good car aerodynamically, but overall not quick enough to be a threat thanks to the power deficit. The Ferrari was one of the least convincing Prancing Horses bred for grand prix racing in a long time, with even the inspired Fernando Alonso managing just two podium finishes in China and Hungary. So this meant that the only realistic opposition would come from the other Mercedes-powered teams.

McLaren was never at the races, with its technical shortcomings laid painfully bare. While the team did improve in the closing stages of the season, it was very much a transitional season for the Woking squad. So with Force India never a serious threat for wins, it was actually Williams that was often the most serious threat

to Mercedes, particularly in the second half of the season. Unfortunately, those races when it was best of the rest never coincided with the ones where Mercedes hit problems, so Felipe Massa's pole position in Austria and a couple of second places were as good as it got. But with Valtteri Bottas enjoying a stunning breakout season, and the team going in the right direction technically, the future is bright.

The thorny question of the season is the success of the new hybrid power units. Contrary to conventional wisdom, F1 did need to move in this direction, otherwise there's a very good chance it would have lost Mercedes and Renault as engine builders. The concept of the engines was perfectly sensible as well, with adapting to a 100kg-per-race fuel limit that once sounded



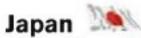
'F1's short-termism has backed the paddock into a corner that it doesn't want to be in'

Singapore ****



1 Hamilton; 2 Vettel; 3 Ricciardo

Rosberg suffers an electrical problem on the grid, meaning he can complete just one ERS-less stint before retiring. Hamilton repasses Vettel to win after a late pitstop.



1 Hamilton; 2 Rosberg; 3 Vettel

Bianchi's terrible accident overshadows what is a compelling race, with Hamilton overtaking Rosberg around the outside into Turn 1 to earn a crucial victory. Vettel takes third - his fourth podium of 2014.



1 Hamilton; 2 Rosberg; 3 Bottas Rosberg throws away a golden opportunity to pass Hamilton for the lead at the start, locking up his tyres and having to pit immediately. He recovers to finish second ahead of Bottas.

absurdly tight a challenge the manufacturers were more than equal to.

These new engines - more properly called power units - also had a big influence on the behaviour of the cars. Whereas the previous generation of V8 racers were machines that didn't demand much of a cultured right foot, these latest cars proved much more tail happy thanks to the extra torque of the turbo engine. On track, the cars looked much more spectacular and harder to control, with overall downforce at the rear reduced. This was exactly what fans had been calling for over the years, yet the message was overwhelmingly downbeat in the early stages of the season, partly because of the failure to convey accurately the engine sound over the television.

The racing was perhaps more cerebral, but the impression that the cars are being driven from the pitwall persists. This explains the decision to attempt to curb pits-to-car radio in the second half of the season, but also sums up how badly F1 as a whole presents itself. The 2014 cars were more difficult to drive than any arguably for the past decade or two. Less physical, certainly, but trickier in terms of the technical demands and the skill of the human behind the wheel.

The mistake in introducting the new engines was not a technical one, it was a financial one. The cost of these new engines played a key role in both Marussia and Caterham going into administration, and also imperilled other teams higher up the grid. The most galling thing about this situation is that F1 makes plenty

of money to fund the operation of 11 teams, it's just that it's not shared correctly between them. It's a simple question and one that should be easy to address - certainly far more easily than if the sport was costing more money overall than it was bringing in - but the ownership structure and the various commercial agreements already in place make the whole situation a mess.

That is the real story of F1 in 2014. A good season on track, even with one team dominating, undermined by off-track arguments and short-termism that has backed the whole paddock into a corner it doesn't want to be in.

It's time for things to change before the on-track action goes the same way as the off-track chaos. 88

THE SHADOW OF SUZUKA

At the start of the Japanese Grand Prix, Jules Bianchi's future could not have been brighter. After a shaky start to the season, he had continued to impress and was closing on a move to Sauber in 2015 as a potential stepping stone to a Ferrari seat. Then one of the most horrific accidents seen in Formula 1 in several decades changed everything.

At the time of writing, Bianchi's future hangs in the balance. He remains listed as critical, breathing unaided and no longer in a coma, but unconscious. His condition is both a cruel reminder of the dangers that remain in motorsport in general and F1 specifically, making a mockery of those who dismiss it as 'too safe'.

What happened that day cast a shadow not just over what had, up to that point, been a gripping race, but over the whole 2014 season. The softly spoken 25-year-old's star was firmly in the

ascendency and five months earlier he had scored his first points in F1 with ninth place for Marussia in Monaco. In that race, he actually finished eighth on the road, but still achieved a crucial result despite a five-second penalty and a differential problem in qualifying, that left him on the back row of the grid. It was a drive of the highest calibre.

Bianchi had also returned to the cockpit of a works Ferrari during the post-British GP test at Silverstone. With Kimi Raikkonen out of action as a consequence of his accident at the first start of the race a few days earlier, Bianchi distinguished himself with a fine day's work, helping to convince Ferrari that its long-term investment was close to paying off.

The path he was on remains a 'what if'. What matters now is that Jules, his family and friends remain in the thoughts of all who love F1, inside and outside the paddock.



United States



1 Hamilton; 2 Rosberg; 3 Ricciardo Rosberg leads the first stint from pole, only to be passed after the first round of stops when he calls for a delayed, rather than instant, ERS boost. Ricciardo stars on his way to third.

Brazil S

Rosberg; 2 Hamilton; 3 Massa Rosberg looks set to drop behind Hamilton, only for the Briton to spin after failing to re-adjust his brake balance. Rosberg holds off late pressure from his team-mate to take a vital victory.

Abu Dhabi



1 Hamilton; 2 Massa; 3 Bottas Hamilton takes the lead at the start, with

Rosberg initially second before suffering an ERS failure. Massa attacks Hamilton late on, but can't catch him on fresher rubber. Lewis seals the title (right).



THE TOP 10 F1 drivers of 2014

The two Mercedes drivers dominated the battle for the world championship, but the rest of the grand prix pack were by no means also-rans. EDD STRAW assesses the best on the grid



10th Daniil Kvyat

Considering Kvyat hadn't raced above F3/GP3 level, completed a race-simulation run or made a serious practice start before his debut in the Australian GP, he could have been forgiven for struggling. Yet, astonishingly, the 19-year-old qualified and finished in the top 10 on his debut weekend, marking himself out as a driver to watch.

The Russian's results – a smattering of ninth and 10th places – don't do him justice. Along the way, there were some

outstanding qualifying performances, notably in Austria and at home, and by rights he would have picked up significantly more points.

There were some inevitable lows. In Spain, Canada and Singapore he struggled, while in Russia he didn't react well to losing positions early on. But overall this was a superb debut season. While he was outscored by team-mate Jean-Eric Vergne, given his inexperience Kvyat's was the more impressive campaign.

9th Felipe Massa

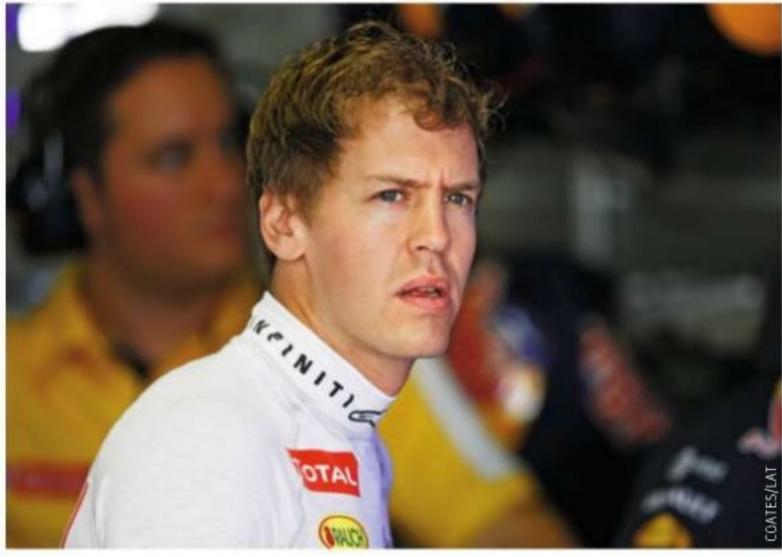
Being dropped by Ferrari has proved to be the rebirth of Massa, who revelled in his new surroundings and managed to more consistently deliver the pace that was only there in fits and starts during his latter years in red.

He was certainly quick, but that old ability to steer a path into problems in races did rear its head a little too often. There were plenty of occasions when Massa was the innocent party in race-ending crashes, notably in Australia and Canada, but there was the feeling he did have a capacity to make life difficult for himself in races.

But even so, there were some great moments. He took his first pole position since 2008 in Austria and came within a few seconds of victory in Abu Dhabi. And while it took him too long – until Monza in September – to take a podium finish, he racked up three by the end of the season.

After years of struggles, it was a great feelgood story to see one of the most likeable drivers in the paddock back on top of his game.





8th Sebastian **Vettel**

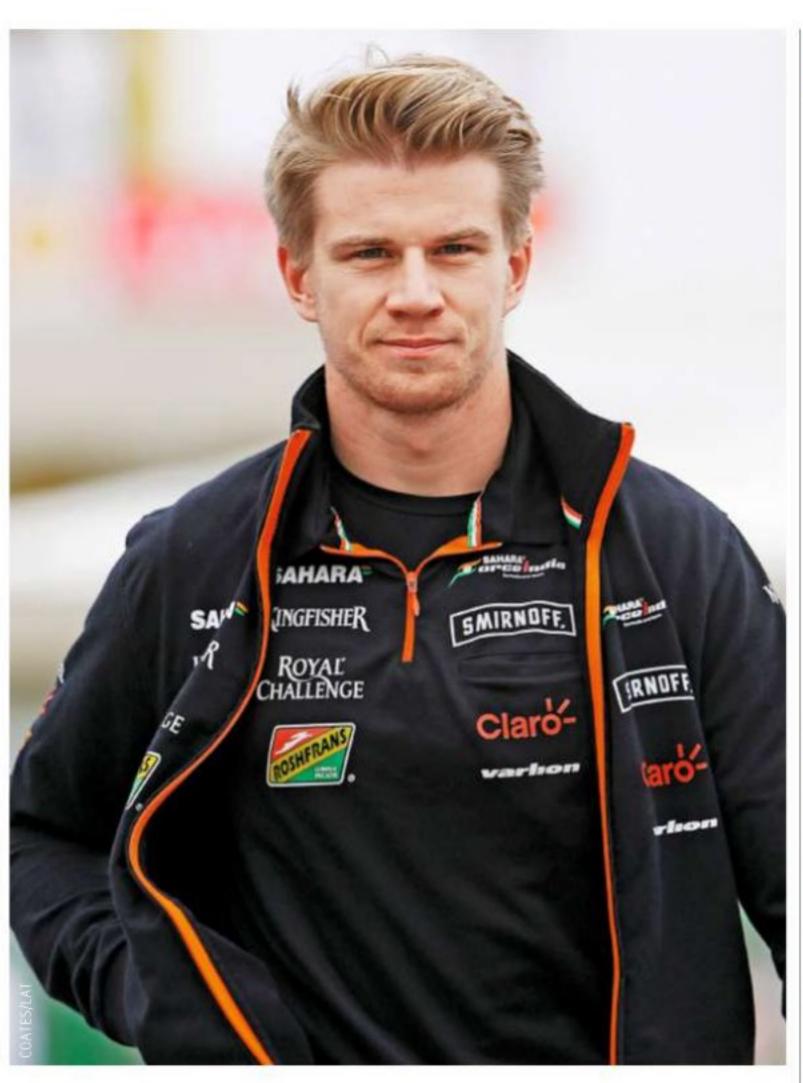
Yes, Vettel wasn't up to his usual standards in 2008. He struggled to get on top of the demands of a post-exhaust-blowing grand prix car and was comprehensively outperformed by team-mate Daniel Ricciardo. But 2014 was hardly an unmitigated disaster.

There were no wins, but in all three of the races won by Ricciardo he was initially ahead of the Australian. There's no guarantee he would have stayed there – in fact in at least two of them he probably wouldn't – but he could easily have come

out of the season with a face-saving victory had the cards fallen his way.

But the biggest shock was that a driver who had proved so adaptable in the past didn't manage to get completely on top of the required driving style. At the end of the season, he was still working against the rear end, something that hurt him badly on race pace thanks to using the tyres harder.

Perhaps what happened in 2014 justifies Vettel's decision to seek a new challenge at Ferrari.



7th Nico Hulkenberg

Hulkenberg started the season regularly mixing it with more fancied teams and distinguishing himself in battle against far more expensively assembled cars. But, inevitably, Force India couldn't carry that pace through into the second half of the year. That, combined with the difficulties it had in developing the car as well as should have been possible, even within the limitations, made life harder for Hulkenberg.

He made significant progress with his rear-tyre management, learning from team-mate Sergio Perez's excellence in

those areas, but even so it was usually the Mexican who was able to get the flashier results.

There were also a few question marks in the team in the second half of the season as to whether Hulkenberg was operating at the level you'd expect from such a high-calibre driver. But there were also a lot of problems that compromised his results.

While not quite as strong a season as expected from a driver who merits a place in a top team, this was still a good campaign.

6th Jenson Button

There were times in 2013 when Button didn't quite seem to have the fight to extract the best from a poor McLaren. But this year he was a very different driver. In the second half of the season in particular he excelled, very often getting the best possible result out of a car that, while improving, was never a serious podium threat other than in the unusual circumstances of the season opener.

While Button's old weaknesses were still there, in particular a discomfort with an unstable rear end, he seemed to be better able to deal with that than in previous seasons. Whether that was as a result of the growing pressure to secure himself an F1 future, or the different characteristics of the 2014 cars, is unclear. But while there

were still a few too many under-par qualifying performances, there were also plenty of good ones.

He also saw off a formidable challenge from Kevin Magnussen, with his advantage in the closing stages of the season allowing him to score double the points of the promising rookie.

Often it was Button's ability to achieve race results in that characteristically unobtrusive way of his that made him a very valuable commodity to McLaren. As usual, Button was also a wonderfully canny driver in wheel-to-wheel combat, combining savvy racecraft with precision throughout the season.

There was some unhappiness inside the team at Button's attitude in the final months of the season, but you can hardly blame him given the way he was treated.





5th Valtteri Bottas

The Finn was only able to show how good he was very occasionally in 2013. But once in a more competitive car, he showed his class immediately.

There were a few stray moments at the start of the season. In Australia he had the speed to finish second but was a little overexuberant while charging through the field and clouted the wall. Team-mate Massa's speed also meant that Bottas was trying a little too hard at times in the early races. But once he had

settled down and learned the lessons of overdriving in the season opener, he became a well-rounded performer.

Fast and with good racecraft, Bottas never cracked again. It was unfortunate that, while he was often best of the rest behind the Mercs, it was never in the races where the Silver Arrows hit trouble.

There are still a few slightly rough edges to clean up, but Bottas has everything he needs to be a world champion.



4th Nico Rosberg

There was much to admire about Rosberg's season. His qualifying performances were extraordinary considering he was up against a driver regarded as perhaps the fastest over a single lap. But too many times he was in a position to beat Hamilton in races and failed to follow through on the work he had done to create that situation.

Bahrain, Italy, Japan, Russia and the US were all races that Rosberg was in a position to win, but that he squandered. Often it was a question of his racecraft letting him down. In Bahrain a poor start resulted in him dropping behind Hamilton and he couldn't find a way past, while at Monza he twice went off under braking trying to stay ahead of the faster sister car.

In Japan he simply couldn't extract

the same speed out of the tail-happy
Mercedes in the wet as Hamilton and
on pure pace was as much as a second
a lap slower. This was a surprise given
that, in 2013, there had been several
occasions where Rosberg was the
stronger of the two in the wet.

In Russia he had a move for the lead as good as done, only to lock up spectacularly, while in Austin he started slowly in his second stint then mistakenly called for a delayed ERS boost, rather than an instant one, while under attack. Too many strong positions were squandered.

But, overall, Rosberg still deserves credit for taking the title down to the wire and being able to hit back every time Hamilton had taken a seemingly decisive advantage.

3rd Fernando Alonso

Alonso regularly lamented the fact that he seemed condemned to spend most of the season in the vicinity of fifth place. But although he managed only two podium finishes, it's difficult to argue with his performances.

He crushed team-mate Kimi
Raikkonen in both qualifying and race
pace, which was not a surprise, and it's
hard to imagine any other driver scoring
as many points in similar circumstances.

The only real negative was that he was increasingly a distraction behind the scenes at Ferrari, and there were a few races where he seemed not quite able to deliver peak form. This had echoes of his frustrations at Renault during 2008 and '09.

This only happened occasionally, however, and for the most part Alonso delivered exactly what you would expect from him: good qualifying performances and outstanding race drives. It wasn't his fault that even in a grand prix such as Hungary, where he drove immaculately and the race opened up for him, it still wasn't enough to win.

But overall he extracted performances from a poor Ferrari, flattering the machinery. The car was not easy to drive and required what's best described as a very proactive driving style to get it to behave. That proved well beyond Raikkonen, while Alonso used his skills behind the wheel to haul Ferrari to fourth in the constructors' championship.

With two Raikkonens in the car, there would only have been enough points for sixth place. That tells you just how important Alonso – for all his foibles – was to Ferrari.





2nd Lewis **Hamilton**

Judged over the second half of the season, Hamilton would likely top this list thanks to his stunning Sunday form. But while he was a deserving champion and prevailed in a tense title fight, there were a few too many scruffy moments in qualifying. The run of Saturday errors in Canada, Austria and Britain put him on the back foot mid-season.

But he did pull that back. The errors seemed rooted in trying to extract more than he could get out of the car in answer to Rosberg's remarkable qualifying form. It was a surprise to see Hamilton outqualified more often than not by his team-mate and, even without the misfortune of Q1 failures in Germany and Hungary, he would have lost out in the intra-team Saturday battle.

The two flashpoints with Rosberg neatly bookended Hamilton's difficult run. Qualifying in Monaco seemed to unsettle him and it wasn't until post-Spa that he regained that sense of equilibrium. When he did, he drove stunningly well in the races.

Only twice did the two Mercedes drivers swap positions on track in what might be called a normal racing move. Both times it was Hamilton who prevailed. First at Suzuka in a race overshadowed by Jules Bianchi's terrible accident, and then in the US when he ambushed Rosberg after the first round of pitstops. That proved beyond doubt that he was the stronger racer of the two, a fact backed up by his haul of 11 wins to his team-mate's five.

For more F1 season analysis, visit **MAUTOSPORT.COM**



1st Daniel Ricciardo

The Australian with the perma-grin proved his searing speed during his stint with Toro Rosso. But there were doubts over whether he could translate that into consistently strong race performances once he moved into the big league alongside Vettel. Those were answered, resoundingly, and very quickly.

While he didn't have the pressure of a world championship fight to deal with, Ricciardo went into the season knowing that he was in the right place at the wrong time. Pre-season was a shambles, yet in the revised Red Bull he qualified and finished second in Australia. While the fuel-flow-meter infringement led to his exclusion, it showed that Ricciardo was comfortable at the sharp end. He never looked back.

The biggest surprise was that Ricciardo's real strength was in the races. It's not that his qualifying form wasn't good – he beat Vettel 12-7 – but on Sundays he had a touch of the Alonso about him. The adjective usually appended to the Spaniard is 'relentless', and that's exactly what Ricciardo was. That consistent speed, combined with his outstanding tyre management, meant that the 25-year-old was always a factor in races. Combined with his strength in wheel-to-wheel battle, that made him a formidable adversary.

Wins in Canada and Hungary caught

the eye as they involved flashy late-race charges. But his best victory was at Spa. There, the collision between the Mercedes drivers meant Ricciardo knew he was in a position to win from early on. He then had to deliver under a very different kind of pressure. He didn't buckle, typical of a season during which errors were rare, even though starts were occasionally a weakness.

Ricciardo was also a joy to watch.

He naturally likes to carry the speed into the corner rather than relying on a more stop/start approach. You could liken him to Button in that regard, but better able to deal with an unstable rear end.

A class act. M

THE REST

If this was a list of the best drivers in F1, Romain Grosjean would be near the top. But while he dragged some astonishing performances out of the Lotus, there were also times when he seemed frustrated. This sometimes allowed team-mate Pastor Maldonado to get ahead more often than he perhaps should have as he grew more comfortable with the team.

At McLaren, there was a lot to admire about **Kevin Magnussen** but, after making good progress in the first two-thirds of the season, he struggled to deliver the results expected in the closing stages of the year. That said, his performance at Sochi was outstanding.

Ferrari returnee **Kimi Raikkonen** had a poor season during which there were only flashes of the underlying ability as he struggled with the lack of front-end feel.

After being axed by McLaren,

Sergio Perez did a good job
of rebuilding his reputation at
Force India. His podium in Bahrain
was superb, but his season
was a little uneven.

Jean-Eric Vergne drove some great races in 2014, but couldn't quite assert himself over his rookie team-mate. But there's real ability there, and he deserves to stay on in F1. At Sauber, both Adrian Sutil and Esteban Gutierrez wasted a year of their lives in a terrible car.

Poor Jules Bianchi was very close to making the overall top 10, partly thanks to his stunning ninth place in Monaco. Only a shaky start to the season, as he struggled to adapt to the car, goes against him. His horrifying situation has interrupted a hugely promising career. Team-mate Max Chilton had a frustrating year. While not as good a driver as Bianchi, he is better than he showed.

At Caterham, Kamui Kobayashi fought the good fight and showed his class in races such as China and Italy, but in his final appearances was on a hiding to nothing. Team-mate Marcus Ericsson, meanwhile, struggled badly for the first two-thirds of the season with too many mistakes, but did show his speed on his final two outings before the team dropped out. Andre Lotterer exceeded all expectations in his one-off outing for Caterham at Spa, while Will Stevens did a very respectable job in the Abu Dhabi finale.



Team bosses' top 10

Who did the Formula 1 team bosses rate as the best drivers of 2014? JONATHAN NOBLE asked

them to anonymously choose their favourites for our annual team principals' top 10 drivers

THE PANEL



Toto Wolff Mercedes



Christian Horner Red Bull



Claire Williams Williams



Marco Mattiacci Ferrari



Eric Boullier McLaren



Vijay Mallya Force India



Franz Tost Toro Rosso



Federico Gastaldi Lotus



Graeme Lowdon Marussia



Monisha Kaltenborn Sauber

Caterham not included due to multiple changes of management

FORMULA 1 IN 2014 WITNESSED A CHANGING of the guard as Sebastian Vettel's four-year run of championship success came to an end.

The dominance of Mercedes, plus Vettel's struggles, opened the door for a dramatic shake-up in the ranking in AUTOSPORT's exclusive team bosses' top 10 drivers too, with four new entries.

As usual, we asked each team boss to come up with a secret list of their top 10 performers of the 2014 season. The secrecy is vital because it allows those voting

to give their honest opinion on how drivers performed, rather than pandering to what they think their men in the cockpit might like to hear.

Points are awarded on the F1 scoring system basis — so 25-18-15-12-10-8-6-4-2-1 — and the results collated to give us a top 10 ranking.

After his title-winning campaign, it's no surprise to discover that it's Lewis Hamilton who has come out on top. But the way the ranking plays out in the nine places behind him contains plenty of surprises.



10th Daniil Kvyat



Daniil Kvyat proved instantly at home in Formula 1 as he wasted little time showing Toro Rosso that he had the speed and car control to deliver regularly.

Although reliability problems hurt his chances of more points, his pace made enough of an impact for Red Bull to decide without hesitation to promote him to the top team when Sebastian Vettel jumped ship to Ferrari.



9th Jenson Button

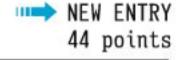
NO CHANGE 40 points

The Briton again endured the frustrations of an uncompetitive McLaren, but again proved what a canny driver he is to pick up a pretty decent chunk of points, even if he lacked the out-and-out speed of team-mate Kevin Magnussen.

It was tough for him to accept he was driving for his F1 career but, once he no longer let the pressure get to him, it lifted him to a new level.



8th Jules Bianchi

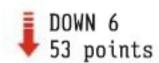


Jules Bianchi's horrific accident in the Japanese Grand Prix was the low point of a season in which the Frenchman had delivered a truly brilliant drive from the back of the grid to ninth place in the Monaco Grand Prix.

Bianchi did all that was expected of him at Marussia, and it was doubly terrible that, after Japan, the team was unable to carry on and reap the benefits of his efforts.



7th Sebastian **Vettel**



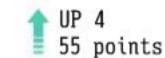
Vettel's dominance of F1 was always going to come to an end eventually, but even he couldn't have predicted the frustrations he would face in 2014 as poor reliability and a down-on-power Renault engine left him struggling.

Clearly demotivated after so long at the top, and outperformed by his team-mate, it will be with Ferrari that he attempts to get back to number one in F1.

For our writers' vote, visit **MAUTOSPORT.COM**



6th Felipe **Massa**



Massa proved in 2014 that there is life after Ferrari, at the same time silencing many of the critics who felt the best days of his career were long behind him.

The pole position (his first since 2008) for Williams in Austria, and runner-up spot in Abu Dhabi, showed that the Brazilian has rediscovered the joys of F1 and is capable of pushing highly rated team-mate Valtteri Bottas.



4th Valtteri Bottas

NEW ENTRY 119 points

It's hard to believe that 12 months ago Valtteri Bottas had only just scored his first points in Formula 1. Now he is a man on the verge of race victories, with six podiums on his CV.

His cool approach to racing, delivering every time he gets in the car, produced podium after podium for a rejuvenated Williams team and proved that the Finn is a big star of the future, as F1's team bosses have recognised in this vote.



2nd Fernando Alonso "→ NO CHANGE 155 points

155 points

The 2014 season proved to be the final straw for Fernando Alonso and Ferrari, as the frustrations of an uncompetitive car boiled over and resulted in a split - after five years together - that many had foreseen coming.

Even so, Alonso always knuckled down and performed brilliantly, comprehensively outclassing team-mate Kimi Raikkonen and clearly impressing the team bosses.



5th Nico Rosberg

NO CHANGE 115 points

He was the man who pushed Lewis Hamilton the hardest, but in the end he just fell short after a frustrating season finale in the Abu Dhabi Grand Prix.

Brilliant on Saturdays - as he found a sweet spot with the W05 that eluded his team-mate - he just could not hook it up enough on race days. Nevertheless, he drove better than he has in his career, and should improve more in 2015.



3rd Daniel **Ricciardo**

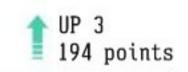
™ NEW ENTRY 135 points

Any doubts Red Bull had about the potential of Daniel Ricciardo were wiped away instantly when he finished on the podium in Australia (although he would be stripped of the result in the FIA courts).

It proved the springboard for a brilliant campaign that included three wins and left team-mate Sebastian Vettel chasing fresh motivation with a move to Ferrari.



1st Lewis Hamilton



Even title rival Nico Rosberg acknowledged that Hamilton was the best driver on the grid this season.

His 11 wins were proof of his speed, even though reliability problems hampered him from building up decent momentum in the title race to wrap up the crown earlier than the season finale.

There were mistakes, and room for qualifying improvement, but Hamilton's overall form delivered a healthy margin out front.

PREVIOUS SEASONS

2013

- Sebastian Vettel
- Fernando Alonso
- Kimi Raikkonen
- Lewis Hamilton
- Nico Rosberg
- Romain Grosjean
- Nico Hulkenberg
- Mark Webber
- Jenson Button
- 10 Felipe Massa

2012

- Fernando Alonso
- Sebastian Vettel

Kimi Raikkonen

- Lewis Hamilton
- Jenson Button
- Mark Webber
- Nico Hulkenberg
- Nico Rosberg
- Sergio Perez
- 10 Felipe Massa

2011

- 1 Sebastian Vettel
- Jenson Button
- Fernando Alonso
- Lewis Hamilton
- Nico Rosberg
- Mark Webber
- Paul di Resta
- Adrian Sutil
- Heikki Kovalainen
- 10 Michael Schumacher

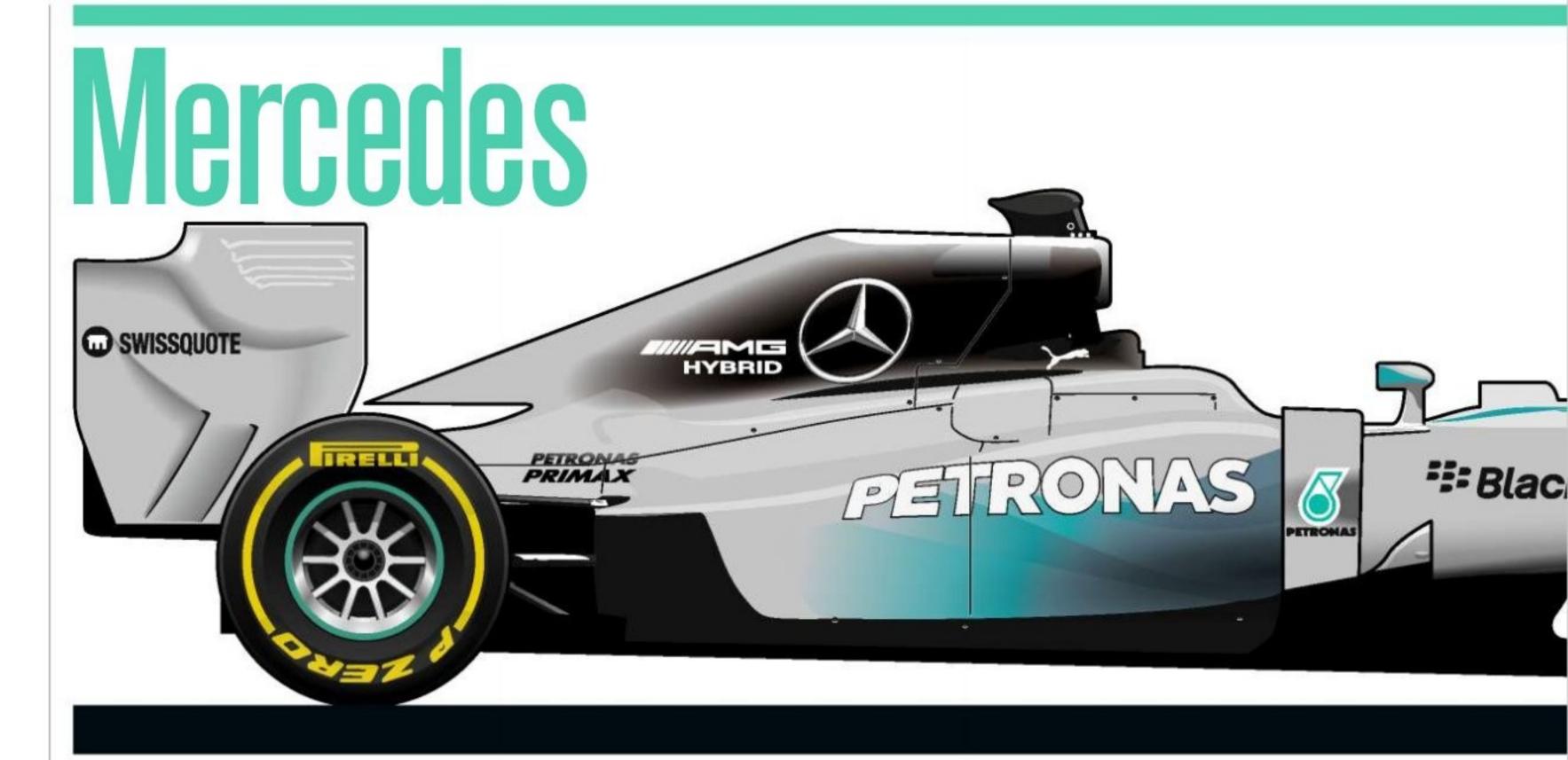
2010

- 1 Fernando Alonso
- Sebastian Vettel
- Lewis Hamilton
- Mark Webber
- Robert Kubica
- Jenson Button
- Nico Rosberg Nico Hulkenberg
- Felipe Massa
- 10 Rubens Barrichello

2009

Sebastian Vettel

- Jenson Button
- Lewis Hamilton
- Fernando Alonso
- Rubens Barrichello
- Kimi Raikkonen
- Mark Webber
- Felipe Massa
- Robert Kubica
- 10 Adrian Sutil



Preparation, and a superbly integrated relationship between chassis and powertrain departments, proved the key to a dominant season

hat can you say about
Mercedes other than
to doff your cap and
hail a team that, on
both the chassis and
engine side, has done
a near-perfect job
over the past season?
A record 16 victories, 18 pole
positions and both the drivers'
and constructors' championships
represents one of the best years
any team has had in F1 history.

You Marcedon had the resources

Yes, Mercedes had the resources required to achieve this. But other teams also had plenty of cash to throw at the problem of adapting to the new chassis and power-unit regulations and achieved far less. Well integrated, with a car that produced more downforce than it is given credit for and the strongest

power-unit package on the grid, Mercedes had few weak points.

Reliability wasn't perfect, although there were only five race retirements, with a few 'walking-wounded' performances such as Nico Rosberg's drives in Canada and Abu Dhabi. The ERS failures suffered by both cars in Canada were traced to the overheating of a peripheral system, which was fixed. Aside from a few ill-timed problems for Lewis Hamilton in qualifying, there were not many other major problems.

As far as weaknesses are concerned, a reliability problem that led to just five retirements in 38 attempts is hardly a potentially fatal weakness. Mercedes did a good job of introducing countermeasures when things went wrong, and come

the final third of the season Hamilton and Rosberg were racking up one-two finishes for fun.

Much of the credit for the team's success has to go to Mercedes AMG High Performance Powertrains in Brixworth. Early development work on the new engine began at the start of the decade, so when the time came to run in anger for the first time Mercedes was well ahead of the game. Pre-season, its teething problems were minuscule compared with the rest, which offered the compound interest of allowing the team to get on with sorting out the car while others struggled.

Again, this success was the consequence of huge amounts of preparation. By the end of the season, Mercedes had gone through over 30 different iterations of



HAMILTON

Starts 19
Wins 11
Poles 7
Fastest laps 7
Points 384





Championship position 2013 position: 6th

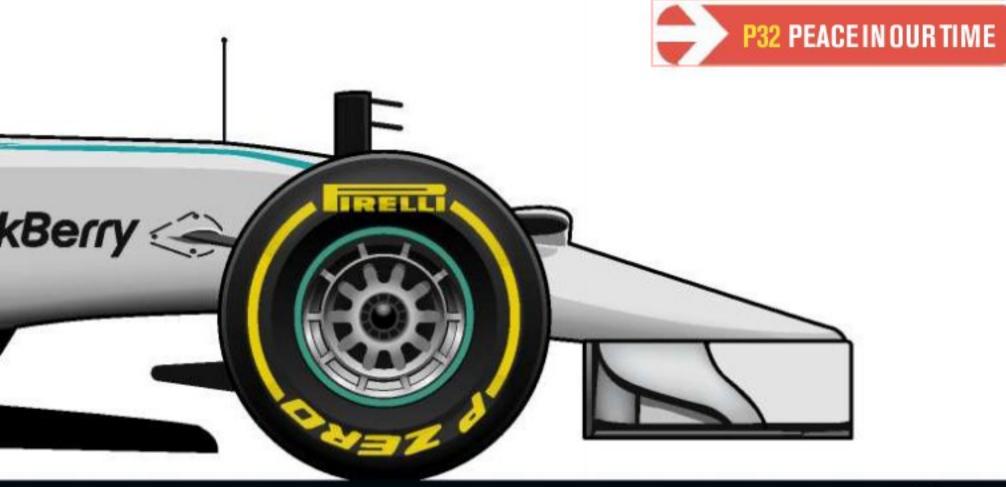


ROSBERG

Starts 19
Wins 5
Poles 11
Fastest laps 5
Points 317



"By the end of the season, Mercedes had gone through over 30 different iterations of cooling set-up"



1st Championship position

> 16 Wins

31 **Podiums**

> 18 Poles

12 Fastest laps

Mercedes WO5 Hybrid

cooling set-up, the vast majority of those being versions that were designed and studied long before the season had even started. Then there was thorough pre-testing work on its state-of-the-art dynamic rig set-ups. This kind of thoroughness is a reminder of what it takes to be successful in F1.

It isn't only on the engine side that 2014 represents the culmination of years of work. After taking over the Brawn team at the end of 2009, with the promise of a low-cost turnkey title-contending outfit to allow the Silver Arrows to return as a full works team, it underachieved. But increasing financial commitment from Mercedes, combined with changes overseen by former team principal Ross Brawn, made a big difference.

What is too often overlooked is that the Mercedes was a fine car aerodynamically. While, early in the season, the Red Bull looked like it was a step ahead, as the year progressed the Mercedes steadily improved. Even in the final races of the season, both titles long since guaranteed, it was still gaining.

The expected narrowing of the competitive spread didn't happen and Mercedes not only stayed ahead, but kept a handy margin at the front. It's worth bearing in mind that while both Ferrari and Renault made significant engine-package improvements, it wasn't until the Austrian GP in June that the works Mercedes team had the 'phase 3' power-unit combo that gave it the power levels hoped for at the start of the season. This year wasn't just about being ahead of the curve, it was about moving along it rapidly.



One area of weakness in 2013 was tyre management. Very often in the first half of the year, the Mercedes was the fastest car but fell away dramatically. In 2014, even with the potent torque delivery of the new engines, it had no such problems.

"A lot of effort went into that through last year," says team chief Paddy Lowe. "You saw the car improve quite a bit. It was a big focus for this year's car that we built on further. Generally, we were doing one more stop than everyone else a couple of years ago so it was an important part of the jigsaw."

All of this added up to a car that was the fastest, with only a slight reliability problem, driven well by two of the strongest drivers on the grid and with no curveballs caused by tyre degradation. The only thing that the team can be criticised for is not winning more, and for allowing the collision between Hamilton and Rosberg to cost a victory at Spa.

But even then, the management did a fine job to prevent that relationship becoming destructive. It was that kind of season, the sort that doesn't come around often for any team, no matter how good. M

TECHNICAL APPRAISAL

SHORTER NOSE

GARY ANDERSON: After launching its car with a more conventional length of nose, Mercedes raced a shorter version from the Chinese Grand Prix onwards. It was always the intention to use this nose concept, but the challenge of passing the crash test meant that it was not introduced until the fourth race of the season.

The nose is shorter and slightly higher at the leading edge. The idea is to ensure that the nose does not interfere with the airflow over the central section of the front wing. This is to allow the front wing to work more consistently, as well as setting up better airflow to the rest of the car.

We saw several different approaches to nose design during 2014 and the Mercedes method seems to have worked well.

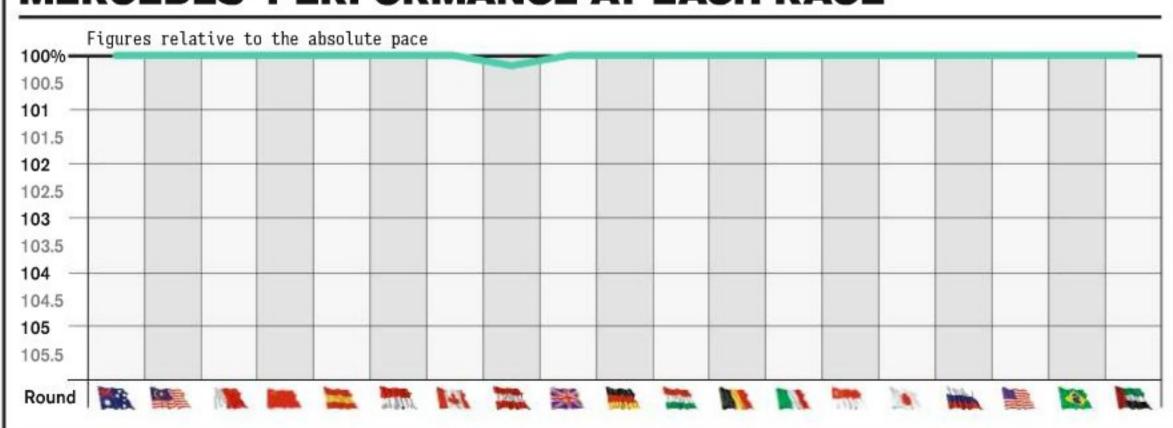
For 2015 it's all-change in this area, and the new regulations require that the nose concept is more in line with how Mercedes started 2014.



Mercedes made nose shorter and higher



MERCEDES' PERFORMANCE AT EACH RACE





HOW CIVILIANA WAS AVERTED

The battle between Lewis Hamilton and Nico Rosberg threatened to go nuclear in 2014.

JONATHAN NOBLE found out how the team kept the situation under control

he season ended in exactly the way
their bosses would have wanted:
with a handshake between Lewis
Hamilton and Nico Rosberg
shortly after the Abu Dhabi Grand
Prix. But reaching this point was
never guaranteed in a campaign
during which Mercedes faced
the risk of civil war breaking out.

The dominance of the Wo5 meant the intensity of the rivalry between Hamilton and Rosberg was always going to be elevated, and the potential for trouble further exacerbated by the team's decision to let its men race each other hard. It was the right path for the sport and created some sensational races. Yet the team acknowledged from day one that there was the chance it could also produce friction between its two drivers.

Flashpoints in Bahrain and Spain came and went with the team keeping a lid on matters, but things finally exploded publicly in Monaco when Hamilton felt he had been cheated of pole position. From then on the gloves were off, and Mercedes knew it was probably a matter of when, not if, the conflict would lead to a collision on track.

That doomsday moment came on lap two of the Belgian Grand Prix, when they clashed as Rosberg tried to go around the outside of Hamilton at Les Combes. Rosberg's damaged front wing and Hamilton's puncture left the door open for a Daniel Ricciardo win. It proved to be the decisive moment of the campaign, but not just in terms of the fight between Rosberg and Hamilton having reached its zenith.

The real significance of Spa was that it was the moment when team chiefs Toto Wolff and Paddy Lowe seized back control of the situation and brought Hamilton and Rosberg back in line. From then on, a path was set that led to that handshake in Abu Dhabi.

"It needed Spa," says Wolff, reflecting on the season. "Little kerfuffles were needed to explore the limits with each other and with the team, but I think it was pretty clear that it needed to come to a big incident to know that this is the end, that there will be not one millimetre more.

"This is what happened at Spa, and after that it was much better. We never returned to any problems after that."





DEALING WITH SPA

The way Mercedes dealt with the aftermath of Spa was kept under wraps at the time, but details have since emerged from various sources. Wolff and Lowe were certainly not afraid to lay down the law to the drivers.

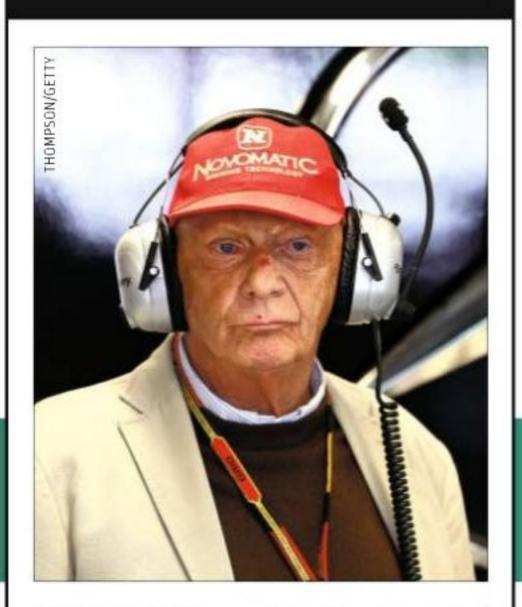
In the Mercedes offices at Spa, Wolff was furious. He had already spoken out to the media about how Rosberg's and Hamilton's collision was unacceptable. But he saved his real anger for the two men at the centre of the situation. In a season when Mercedes had avoided the path of least resistance (team orders), letting its drivers race freely, they had betrayed that trust with their clash at Les Combes.

Wolff wasted little time in letting his feelings known. In an unprecedented move, it was made clear to Hamilton and Rosberg that the situation was so bad that they were no longer in control of the situation — this was now a team matter. Both drivers were told to go home and banned from communicating with each other and the team. The message was clear: you don't call us, we call you. It was F1's equivalent of the naughty step.

For top-line drivers to have control taken away from them was incredible, but it showed how seriously Mercedes took the situation.

NIKI LAUDA ON...

Mercedes F1's non-executive chairman talks about the team's drivers





HAMILTON

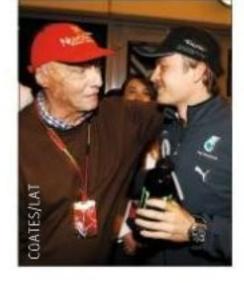
He is outstanding. He won 11 races and he won the championship.
I am especially proud because two and a half years ago I asked him to leave McLaren and come to Mercedes, and his arguments were when are we going to be



competitive? I said I am going to guarantee you a world championship. And the second year driving here, here it is. So I am happy because I didn't break my promises.

ROSBERG

Lewis and Nico from the beginning of the season pushed each other, in the same direction. The most important thing is that both drivers developed the car with their driving style. Therefore the team went forward because



everything we did was absolutely the same for both of them and therefore we have gone so quick.

Nico will fight back and Nico has the potential to go upwards. There is still something to come out of his speed and performance and technical inputs he gives. So next year's going to be fun again between the two. And I hope nobody else will interfere.

THEIR RELATIONSHIP

Igot really emotional when I saw before the podium [in Abu Dhabi] that Nico went up and congratulated Lewis. This is really an outstanding performance by Nico, especially because I know what discussions we had after Spa and because they were not always in that kind of relationship. It was the opposite.

Spa was the hottest moment. And then we got it all under control again, all together. It was not us telling them, it was them realising what they should do. And from then on it all worked and the outcome was unbelievable.

Hamilton and Rosberg returned to their Monaco apartments to wait for the phone to ring.

Back at Brackley, the race team was called together on Monday morning to discuss what had happened. But after two hours of frank exchanges, with Rosberg's and Hamilton's camps defending their men, a new unity emerged. The focus switched to the future rather than raking over the rights and wrongs of the past. It left the way open for the drivers to be summoned to Brackley later that week, to be told a repeat of the crash would not be tolerated. The situation was nipped in the bud.

Wolff refuses to confirm the details of what happened after Spa, but does admit that the dynamic in the team changed hugely for the better.

"We came out of it as a super-strong team," he says. "We said no driver is ever going to interfere with this team. We are one team. And it made us so united because maybe the powers shifted a little bit. Not in a power-game way, because a game like that is lethal and you cannot play games in a team. But, when we got them [the drivers] back at the factory they realised.

"We told them that you cannot do that again because we had bits on the car that were supposed to come at Monza, and bits that were supposed to come at Singapore. People had worked overnight, people didn't see their families and they had thrown it away on the second lap.





"We were not saying you are 100 per cent at fault, or one of you is, but it was enough that it was 51 per cent. So we said, 'Don't do it again. If you do it again, we will decide if we want to continue with this line-up.' That message being delivered, semi-officially, strengthened the position."

The manner in which Mercedes dealt with the Spa clash certainly had the right effect. It wouldn't have worked to have brushed the tensions under the carpet, as Red Bull sometimes did with Mark Webber and Sebastian Vettel, or to have read the riot act as someone like Flavio Briatore would have done.

Instead, a firm but considered response was all that was needed, for it drew a line under tensions that had been simmering away all season as both Rosberg and Hamilton explored the limits of what the team would accept.

"We had every single weekend some things that were under the radar screen — and some of them public," explains Wolff.

"We had Bahrain; we sorted it out. We had Barcelona: one driver happy, the other not, sorted it out. We had Monaco: one driver, this time the other way around, very unhappy; the other one saying, 'What's the problem?'

"And then came additional incidents. Nico breaking down at Silverstone. Lewis having the brake failure and hitting the barrier and starting from last in Germany. Lewis burning in Hungary and making his way through the field. Then the very public discussion about whether he should have given the place to Nico or not, who was on a different strategy.



"It just all added up and led to Spa. And Spa was a clearing of the thunderstorms; it was a cleansing storm."

TROUBLE NOT INEVITABLE

While Mercedes knew that allowing both drivers to race it out was always going to risk trouble, Wolff dismisses talk that it was inevitable.

One theory that arose during the year was that in an intra-team battle like this - where one driver (Hamilton) is widely perceived as having the edge on speed – a clash is unavoidable. If the other driver feels that with everything being equal he cannot win, then the only way to triumph is to destabilise his rival, stir up trouble, unsettle the situation. Wolff is adamant that was not the case at Mercedes.

"No," he says when it's put to him. "Because what you are saying here is that Lewis has the

edge on talent and that's why Nico has to be underhand. No, that is not happening, not at all. I think both drivers play the whole scope of the instrument. It's not the cliche of the talented and the ruthless versus the creative and the hard working.

"I think they are different personalities, but they are both talented – you do not end up in F1 winning races and being a championship contender if you are not talented. One might be a bit more instinct driven, the other might be a little bit more data driven, or a sum of his experiences, but they are both extremely competitive, both extremely diligent in the way they do their job.

"It is the way they digest information and the way they translate information onto the track, it is just different."

It would also be wrong to say that there is

just one way of dealing with the situation, because the relationship between Hamilton and Rosberg is ever-changing. What worked this year may well not work in 2015.

"The relationship is not static between the two," says Wolff. "What I can imagine, because I didn't know both of them before I joined Mercedes, is that it was an amicable but fierce competition in junior categories and in karting. But because they were never in the same team it was never a problem. Nico went into Williams and Lewis went into McLaren and McLaren was the more competitive team, he won the championship, and it was always quite balanced.

"Then, in the end, same team with a very competitive car and both being able to win the championship; I think it changed at the beginning of the season already because they realised that this is the year."

Through it all, though, Wolff thinks that Mercedes did as well as it could in managing its drivers. It would have been all too easy especially after Monaco and Spa – for things to have got really nasty.

And that could have opened the door for rivals to benefit, and left Mercedes with egg on its face.

"I'm very proud of the team with how we have handled the situation," says Wolff.

"It had the ingredients for a nuclear bomb, but if you look at the two today, they are as respectful as they can be considering they have

been fighting for the world championship." The Abu Dhabi handshake proved that.



RENAULT SIEMENS SIEMENS Computing IN FINITION IN FINITION IN FINITION PARTY COMPUTING SIEMENS IN FINITION PARTY COMPUTING PARTY PARTY COMPUTING PARTY PAR

Three wins and second in the championship demonstrated how well Red Bull recovered from its pre-season-testing reliability nightmares

ed Bull came crashing back down to earth in 2014. It's a measure of the squad's four seasons of glorious dominance from 2010-2013 that a yield of three victories and second in the championship is seen as such a poor year.

But even against this backdrop, the Milton Keynes team showed its innate class by getting so much out of the season. Regularly, Red Bull extracted the maximum potential from the weekends, and the recovery from a pre-season test programme that can be described as catastrophic without risk of hyperbole was remarkable.

During the 12 days of testing, Red Bull managed just 1063 miles. When the car wasn't breaking down on track, it was usually to be found behind a closed garage door from which plenty of grinding and sawing noises could be heard. At the end of testing, it seemed inconceivable that Red Bull would be able to finish the season-opening Australian Grand Prix, let alone qualify and finish second (prior to disqualification for a fuel-flowrate rule breach) in the hands of new recruit Daniel Ricciardo.

"We had various mechanical failures which were causing the car to set itself on fire," explains Red Bull chief designer Rob Marshall. "It's a misconception that the car was setting itself on fire because it wasn't cooling properly; it was setting itself on fire because it was burning.

"We knew the first night we

would be fighting to fix it and it turned out that the lead times meant we'd get them just in time for Australia."

Red Bull established itself as the nearest challenger to Mercedes in the early stages of the season. That did change as the season progressed and Williams began to extract the full potential from its car, but given the limitations of the Renault engine package there's not a great deal more the team could have done. Even with a five per cent gain in efficiency over the season, equating to around half a second per lap, and the capacity to harvest more energy than the other two engine manufacturers - Mercedes and Ferrari - the power disadvantage was too great to overcome.

This had the knock-on effect that Red Bull's traditional philosophy of running more downforce than most and compromising top speed on the basis that it would be fast enough to get up front and stay there didn't work. At Spa, for example, where in previous years it had generally sat at the bottom of the speed traps, a very skinny wing package meant that Sebastian Vettel and Ricciardo were hanging on for dear life in the twistier middle sector.

As the Renault package improved, so too did the Red Bull. Early on in the season, there were some troubles in the braking/turn-in phase that made life particularly difficult for Vettel. But by the second half of the year, the RB10



Championship position 2013 position: 14th



RICCIARDO

Starts 19
Wins 3
Best qual 2nd
Fastest laps 1
Points 238





Championship position 2013 position: 1st



SEBASTIAN VETTEL

Starts 19
Best finish 2nd
Best qual 2nd
Fastest laps 2
Points 167





"Red Bull's greatest achievement was that it was always the team to seize victories that fell off the Mercedes plate"



2nd Championship position

Wins

12

Podiums

Poles

Fastest laps

Red Bull-Renault RB10

became extremely strong on the brakes. That was essential given that overtaking on the straights wasn't always guaranteed.

Red Bull's greatest achievement was that it was always the team to seize victories that fell off the Mercedes plate. In Canada, Hungary and Belgium, the inspired Ricciardo was always the one to capitalise. In total, Red Bull was the best non-Mercedes finisher nine times, with that trio of victories backed up by being best of the rest six times.

It was ironic that two of the team's victories came at power circuits at Montreal and Spa. But it should also be noted that, thanks to the strength of the ERS package and the low-downforce approach, Red Bulls started to hang around the top end of the speed traps in the second half of the year. Ricciardo even achieved the best straightline speed seen in a race all year at Monza when he was clocked at 225mph on the start/finish straight.

There was a decline in the closing stages of the season as Renault's improvement began to be more and more limited by the frozen technology once software integration had been improved. That meant that in the final five races of the season, after Singapore, Williams had comfortably relegated it into a battle for third-best team with McLaren and Ferrari.

Against the backdrop of political lobbying for the lifting of the engine freeze, Red Bull was also dealing with some significant changes on the technical side. Adrian Newey remains at Red Bull, but moving into 2015 he will no longer have a day-to-day role at the top of the



team. The full effect of that move will be felt next year. The team has also lost Peter Prodromou, who joined McLaren and was responsible for a new front wing trialled by the Woking team at the end of the year, clearly inspired (perfectly legitimately) by his old team's concepts.

But for those seeking proof of the team collapsing from powerhouse

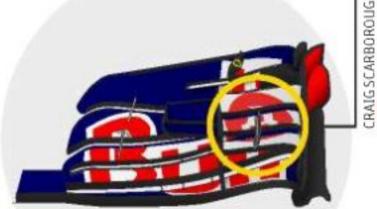
back into the midfield, there's no evidence that's happening as yet. Red Bull remained, operationally, a razor-sharp team that consistently undertook good pitstops, produced a car that was in the same ballpark as Mercedes aerodynamically and made the Silver Arrows wait a little longer than they might have done to secure their first constructors' championship. 8

TECHNICAL APPRAISAL

FRONT-WING MODS

GARY ANDERSON: With new rules for 2014 narrowing the front wing by 150mm, teams had to make changes to their approach to the endplates to turn some of the airflow around the outside of the front wheels. This front-wing specification, introduced by Red Bull at Suzuka, features a vertical turning vane on the forward upper wing with a slot gap in it. This is to create a turning moment to turn the air more effectively.

The complexity of the Red Bull front-wing endplate also shows the philosophy required to get the best out of the car aerodynamically. While you can get higher downforce levels out of longer cord-wing sections they will be more prone to airflow separation. By having the multiple elements and slot gaps, you make that separation less likely and ensure that, if it does happen, you lose a smaller percentage of your downforce.



Multiple elements help reduce airflow separation



RED BULL'S PERFORMANCE AT EACH RACE Figures relative to the absolute pace 100% -100.5 101 101.5 102 102.5 103 103.5 104 104.5 105 105.5 Round

RICCIARDO'S DREAM SEASON

Daniel Ricciardo beat expectations in 2014 – especially his team-mate's. By BEN ANDERSON

efore he joined Red Bull, Formula 1 knew Daniel Ricciardo as a happygo-lucky honey-badger fan with a turn of speed. Now, like the furry mammal he has painted on the back of his crash helmet, the Australian has shown that the teeth in that ubiquitous smile are sharp by winning three races and trouncing his four-time world champion team-mate.

Ben Anderson: Coming into this season, how did you deal with the pressure of joining a world champion team and a multiple world champion team-mate in Sebastian Vettel?

Daniel Ricciardo: I wanted to do well and show the team I could race against Seb, but I think Red Bull expected me to feel a lot more pressure so they tried to take a lot off. My mindset was, 'The pressure is on Seb to continue delivering.' No one expected me to come out straight away and start beating him, so that was something I could play with, which made things easier. I had a lot of belief that the year would go well. But it definitely went better than expected. The three wins to zero [versus Vettel] is the big one.

BA: Did you come with the approach of trying to learn from Vettel, or did you come in and go, 'Right, I'm going to do my own thing'?

DR: I wouldn't say I studied him, but I was trying to absorb everything I could. But once I got down to it and was comfortable with everything around me, the priority was making sure I was doing everything right and making sure that my weekends were going to plan. I always believed that if I got everything right and put down the perfect lap, then I would be able to challenge him.

BA: Is there something about the car that suited you better than him? What do you think made the difference between you?

DR: It's something I've tried to figure out.
Getting the tyres to last longer and still having good pace has been a strong point of mine this year. I don't know if I have found an explanation for that. I think, generally, I'm quite sensitive: if the tyre does start to slide a bit too much then I think I can adapt and back off where I need to.
But at the same time, I feel I have done that well in previous years, but it hasn't had the same effect as it has this year. That's one [reason], but the car itself I definitely feel at home with. They are difficult to drive, and I think everyone has found that. I think I just found it less difficult...

BA: Did your first win change your mentality?

DR: Yeah definitely. It was a bit like Melbourne with the first podium (before he was disqualified). It was like, 'I can really do this', and then the first win (in Canada) was like, 'OK, I can really do this'! I hit the lead with only a couple of laps to go and I could feel the heart rate starting to go up, and that whole question came up in my mind: 'Can I still drive sensibly in the last two laps — do I have what it takes?' Obviously I did have what it takes, and that

made me feel a lot more comfortable about the other opportunities that came up.

BA: We saw some great qualifying sessions in your Toro Rosso days, but this year we've seen you fighting with the top names and pulling some incredible overtaking moves. Where did that come from?

DR: It's definitely something I knew I had in my armoury, but it wasn't getting pulled out enough. I think it comes down to a couple of things: I feel confident I can place the car and know I'm able to stop and make the apexes. And secondly I'm more confident as a whole. More time in the sport means my self-belief grows, and I believe I can pull off these moves; I believe I can race the top guys in the world. When I first started karting I was hopeless at overtaking. But, by the end, once I had confidence with the kart, I was one of the more aggressive and decisive drivers. It's the same sort of trend here.

BA: It's important that they trust you as well. You haven't had many incidents and you've had praise from the likes of Fernando Alonso...

DR: Yeah, that was cool. What I wanted to achieve this year — results aside — was to earn respect from the top guys. I think I have established myself in that group, not only from the results, but also from the racing. There are a few of us up-and-coming drivers — [Valtteri] Bottas as well — we have done well. I guess if you ask the team principals who Danny Ricciardo is, they know who I am now... ■

VETTEL'S NIGHTMARE

After four seasons of record-breaking success, Sebastian Vettel had a rendezvous with ordinariness in 2014, failing to win a race for the first time since his debut part-season with BMW-Sauber and Toro Rosso in 2007.

The quadruple world champion found it difficult to adapt to a car with greatly reduced levels of downforce compared with his last title winner, the RB9, and the complicated new braking-by-wire system made it more difficult to set the RB10 up for corner entry in the way he prefers. Vettel also had to adjust mentally to the fact that he no longer possessed a car capable of realistically fighting for the championship.



Progress was slow, but he made it nonetheless.

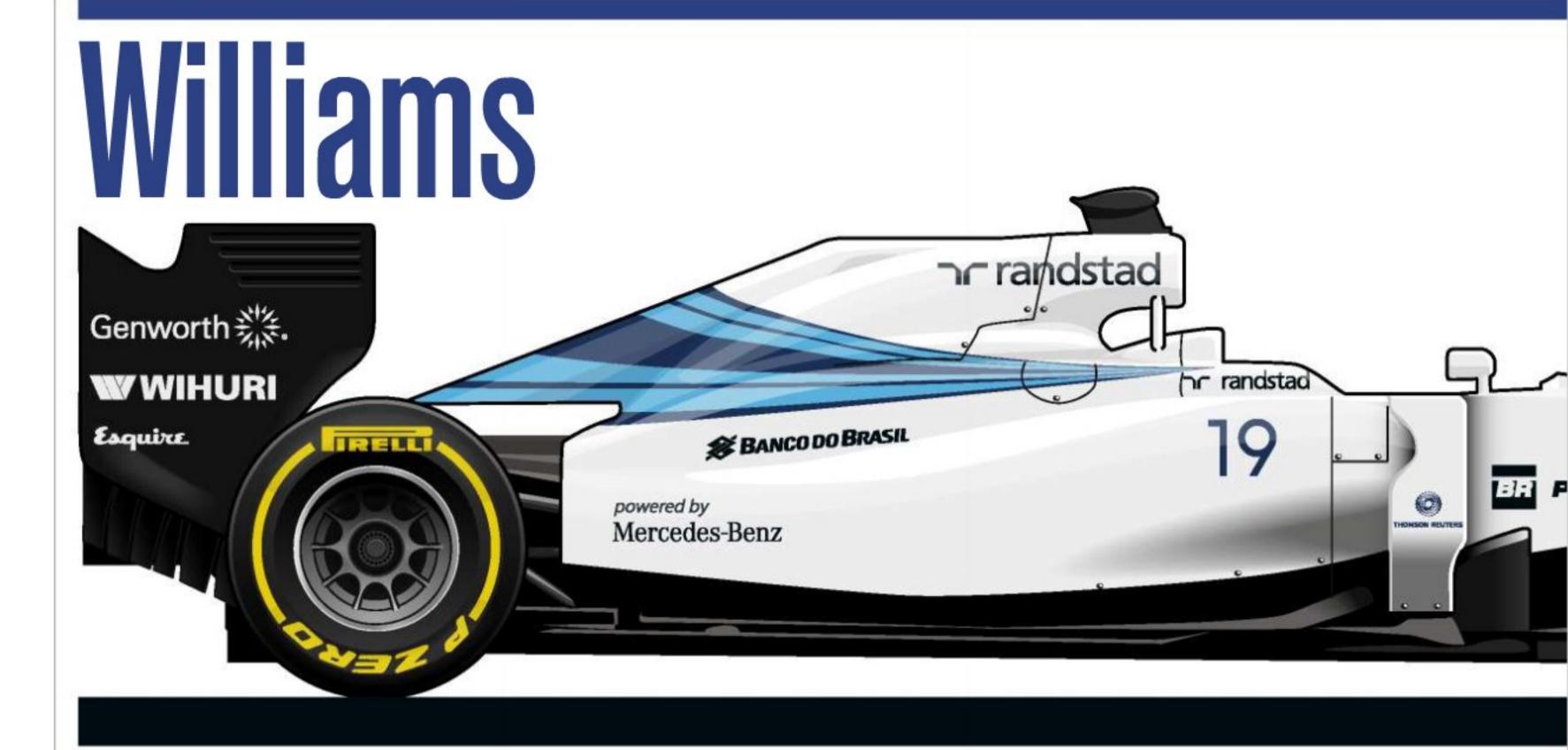
And although new team-mate Daniel Ricciardo has enjoyed greater success this year, a different strategy call in Canada, tidier driving through

Pouhon in the early stages of the Belgian GP, and a better-timed safety car in Hungary could easily have sent the Australian's well-earned first grand prix victories in Vettel's direction instead.

"I think I had races where if things had gone a little bit different this year I could have won," says Vettel. "I think we got better and better. I've been very fortunate in the last few years. I had technical issues [this season] just like everybody else, but sometimes things come together and sometimes not, and it seems this year things were not coming together. That's how it is sometimes."

It was a limp way to end a phenomenally successful era with Red Bull, but a fresh start now waits for Vettel at Ferrari.





A reformed technical organisation and the arrival of Mercedes power helped new-look Williams enjoy its most competitive season in years

illiams scored twice as many points in the season-opening Australian Grand Prix than it did in the whole of the 2013 season. But while that strong start was anticipated after superb performances throughout preseason testing, there was a suspicion that Williams, for so long in the thick of the midfield or worse, would fade.

Not a bit of it. Williams could

have finished second in the season opener had Felipe Massa not been wiped out at the start and Valtteri Bottas driven into a wall, but come the last race of the season both drivers were on the podium. Williams's development rate was

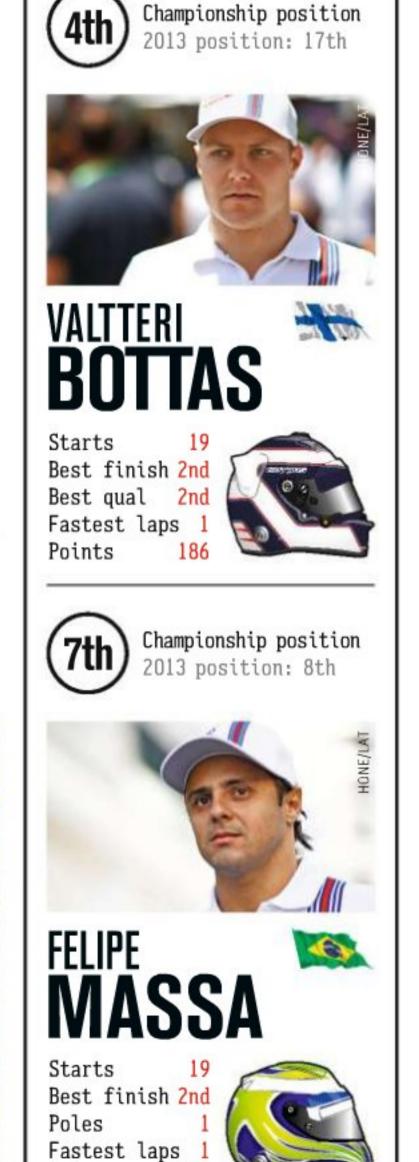
as good as anyone's over the course of the year, suggesting that under the technical leadership of Pat Symonds the team is genuinely moving forwards rather than simply being on one of the periodic ups that have been interspersed with the more common downs over the past decade.

The team had a new look to it with title sponsor Martini, and this new-broom approach was felt at the top of the company. Under team principal Frank Williams, daughter Claire has settled into her deputy role superbly and, along with CEO Mike O'Driscoll, made some key moves that have put the team back in better health on track.

The key moves were recruiting the wily Symonds as chief technical officer. He eschewed the obvious approach of making personnel changes, instead focusing on the processes within the team. He maintained it had the facilities and resources to be in this position, and the performance in 2014 justified this belief.

Another key technical change was bringing in Rob Smedley as head of vehicle performance, effectively heading up the race team. Smedley's straight-talking approach was central to the team evolving from quick but flaky early on to podium regular as the season progressed.

"With the facilities that this team has, the resources and how well organised it now is, we are meeting expectations," said Smedley at the season-ending Abu Dhabi GP. "We developed the car as quick as anybody this year, that's fair to say.

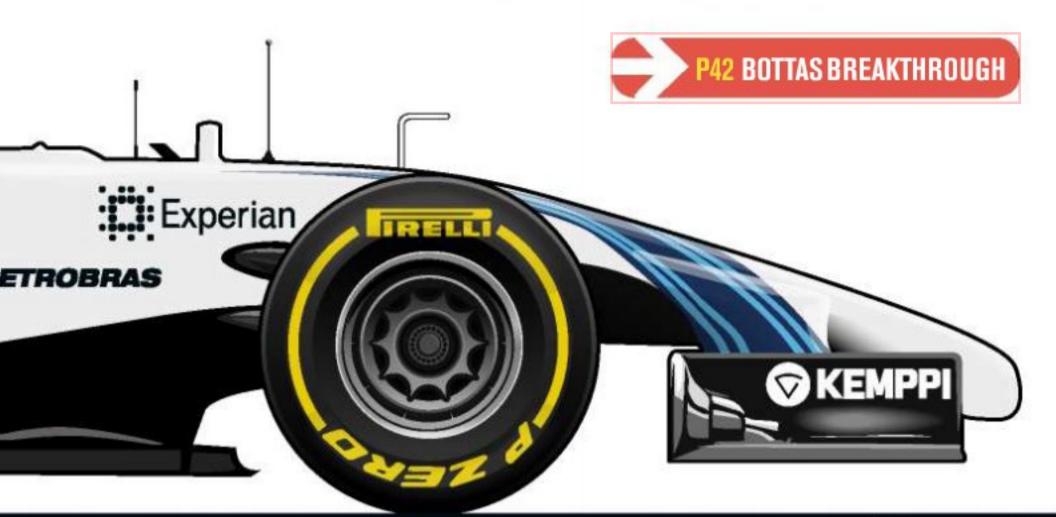


Points

134



"A Mercedes engine wasn't a guarantee of success, so Williams deserves credit for doing a better job than McLaren"



3rd Championship position

Wins

9

Podiums

Poles

Fastest laps

Williams-Mercedes FW36

"Are we developing it quickly enough? Not at the moment because we have the second fastest car. But I'm encouraged by it even though it's not wholly unexpected."

Another reason for the team's stride forward was the signing of a seven-year engine-supply deal with Mercedes. This gave it the best power unit in F1, which was a significant boost. But simply building a car with a Mercedes engine wasn't an automatic guarantee of success, so Williams deserves credit for doing a better job than McLaren.

The Williams FW36 was a car that didn't have the downforce of its leading rivals, Mercedes and Red Bull, but the combination of power and a low-drag configuration meant that it was consistently a rocketship on the straights. Regularly, the names Bottas and Massa would loiter at the top of the speed-trap figures.

But that doesn't mean it was a poor car in the corners. Yes, in the twistier sectors it was less impressive, but still quick enough to be in the mix for pole position several times.

The only occasion when Williams did land top spot was in Austria, when Massa took his first pole since 2008, with Bottas completing the front row. Bottas also had a damned good go at snatching pole at Sochi, laying it on the line in the tight third sector and only coming unstuck in the final seconds of the lap. In Austria, Williams also ran first and second in the first stint, but realistically the car wasn't quite fast enough to hold the lead even though Bottas, with a correctly



timed final pitstop and a perfect turnaround, might have been able to hang on to second.

The only thing missing from the team's season was a victory. Seven times it was best of the rest behind Mercedes, but unfortunately those were not the three races in which Mercedes faltered. Canada was the most galling of these. Problems for Bottas and a fraught race for Massa meant that it was Daniel Ricciardo who won. Had that race happened in October rather than June, chances are Williams would have been good enough to win given the

strides subsequently made in operational sharpness.

The only real criticism that can be made of the car is that it lacked overall downforce, particularly at the rear end. Overall, though, while the loss of the rear beam wing was a problem, the removal of exhaustblown downforce (thanks to the 2014 regulation changes) was useful for Williams.

Last year, the team had struggled to master Coanda exhausts and actually removed its interpretation of the concept from the car late on. Several rival teams had Williams marked down as a dark horse for 2014 when Bottas had a stellar run to eighth at Austin late last season with a conventional car, so that was a clear weakness eliminated.

As to whether Williams can continue to rise, it's hard to say. But there's certainly no reason why it can't continue to be a podium contender. This season should not be a flash in the pan. 36

TECHNICAL APPRAISAL

NEW SIDEPOD

GARY ANDERSON: Williams did a good job of packaging the Mercedes engine, certainly better than either McLaren or Force India did. Inevitably, it fell short of what Mercedes achieved, but the works team had the advantage of a close relationship with the engine builders rather than simply being presented with something to fit in.

At the Japanese GP, a sidepod upgrade was introduced that compressed the trailing edge of the sidepods so they were lower. Note the small blister added to ensure it complied with the FIA rules on engine/gearbox-mounting position. This package improved the airflow to the rear wing to boost its efficiency.

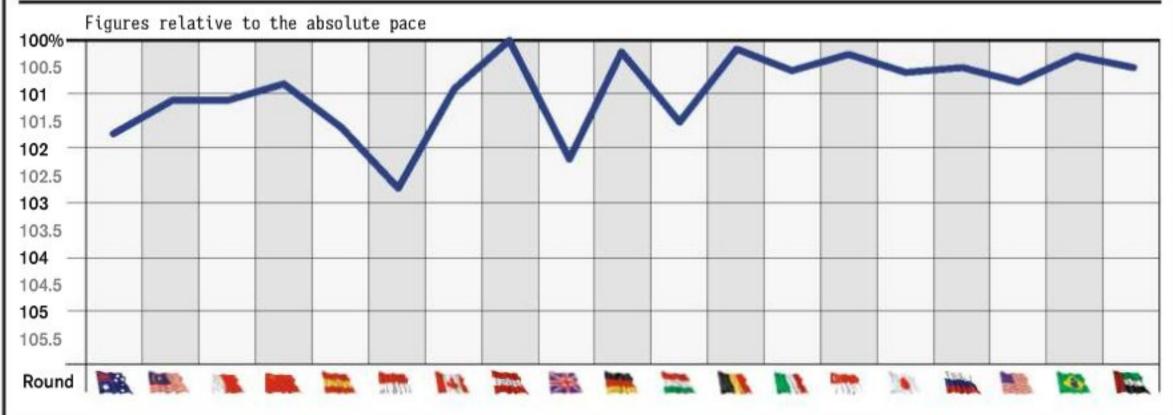
Overall, I would say that Williams was the most impressive team of the season because of the extent of its turnaround. All credit to Pat Symonds and the technical team for jumping from ninth in 2013 to fighting for regular podiums in 2014.



Sidepod 'blister' covered mandatory gearbox mount



WILLIAMS'S PERFORMANCE AT EACH RACE Figures relative to the absolute pace







inland doesn't produce many grand prix drivers, but when it does they tend to be pretty handy. Only eight have ever raced at world championship level, but three -Keke Rosberg, Mika Hakkinen (twice) and Kimi Raikkonen - have become world champion. If his career is managed well, there's a good chance that Valtteri Bottas will become the fourth.

Bottas's sophomore Formula 1 campaign with Williams has been a revelation. He finished on the podium six times and, although he didn't win a race, he very often finished best of the rest behind the dominant Mercedes. Along with Daniel Ricciardo, Bottas was one of the stars of the 2014 season.

Williams has nurtured his career since the end of his first year in Formula 3 in 2009, and those who work closely with this thoughtful, humble and highly focused driver believe he is the real deal. For them, the question is not if, but when he becomes world champion.

That's the opinion of Williams performance chief Rob Smedley, who's worked with a world champion or two during his time at Ferrari. When he joined Williams in April, Smedley immediately took a shine to F1's latest 'flying Finn'.

"Straight away I liked the guy," Smedley tells AUTOSPORT. "I really like his work ethic; I really like his will to win. After this year you've seen his speed - it's unquestioned. How good he is, is not really under question. But what I really like about him is how unspoilt he is.

"It's very easy in this business to have a lot of people blow smoke up your arse and tell you how good you are, and you start believing your own press. But Valtteri is very grounded; all he's interested in is progressing and improving.

"He's a guy who doesn't need telling twice. He's a quick learner and a really, really quick driver."

There were glimpses of this potential aboard last year's FW35 - a difficult car that lacked downforce, but which Bottas managed to haul into Q3 in Montreal and Austin. This year Williams has given him machinery in which he can display his searing speed regularly, but it has also been tempered with calm judgment. Mistakes are made, but not repeated. Time is nearly always found through each phase of qualifying. The trajectory of Bottas's development is almost exclusively in the forward direction.

"He has a really, really good feel for the car and he knows exactly what he wants from it," adds Smedley. "He's still at an age where he's trying to understand how to achieve that, but that's why he has an engineering team around him.



"He knows exactly what the car's doing. He's able to be quite clever about it as well: knowing that perhaps the feeling of the car is not quite perfect for one moment, but in a race situation it would work much better. He's very clever at projecting forward.

"He's also great because he's always open about 'I made a little mistake here' or 'I made a little mistake there, and I'm really sorry and I'll try harder next time', and I'm like, 'Valts, give yourself a break! It's a team effort, you're part of the team, you don't have to take all of the responsibility on your shoulders'.

"But that's a great attribute - somebody who takes responsibility at such a young age. Somebody who can't take responsibility for anything they do in any walk of life is never going to be ultimately successful, and I think somebody so young, in the public eye, who is ready to take responsibility for their mistakes is going to have a great career."

Bottas has compared favourably alongside veteran Felipe Massa, scoring more points and achieving a better qualifying record, against a man Fernando Alonso describes as "the fastest teammate I've ever had". Ask Smedley to compare Bottas with double world champion Alonso - a man Smedley rates as the "best driver of his generation, if not ever" - and the response is effusive.

"Fernando is the absolute complete driver at the moment, there's nothing that he hasn't come across before, there's nobody he's scared of, there's no situation that worries him, he believes he is the best in the world and that's the difference between him and Valtteri at the moment," Smedley explains. "Valtteri will eventually get to the point where he believes he's the best in the world. If he can do that with his feet on the ground, in a humble way, he'll be the complete package.

"I don't see any real weak points in his armoury and I think that if he keeps developing at the rate he is doing, he's going to win not just one, but multiple world championships." 8

JONATHAN EDDOLLS **VALTTERI BOTTAS'S RACE ENGINEER**

What's Valtteri like as a person?

We've kind of progressed through Williams and our roles together. He lived in the UK for part of that so we used to meet up quite a bit; we worked together and socialised together and did sports and shooting together. He's very genuine, just an all-round nice bloke. There's no arrogance. People that meet him wouldn't know he's an F1 driver; he's just very normal.

What's he like to work with and how has he developed?

He's very clever. In the car he's a driver who's got quite a lot of [spare] mental capacity, let's say. When he's racing you can hear in his voice that he's not shouting or screaming. That makes him so much easier to work with because you know that any information you give to him he's going to react to.

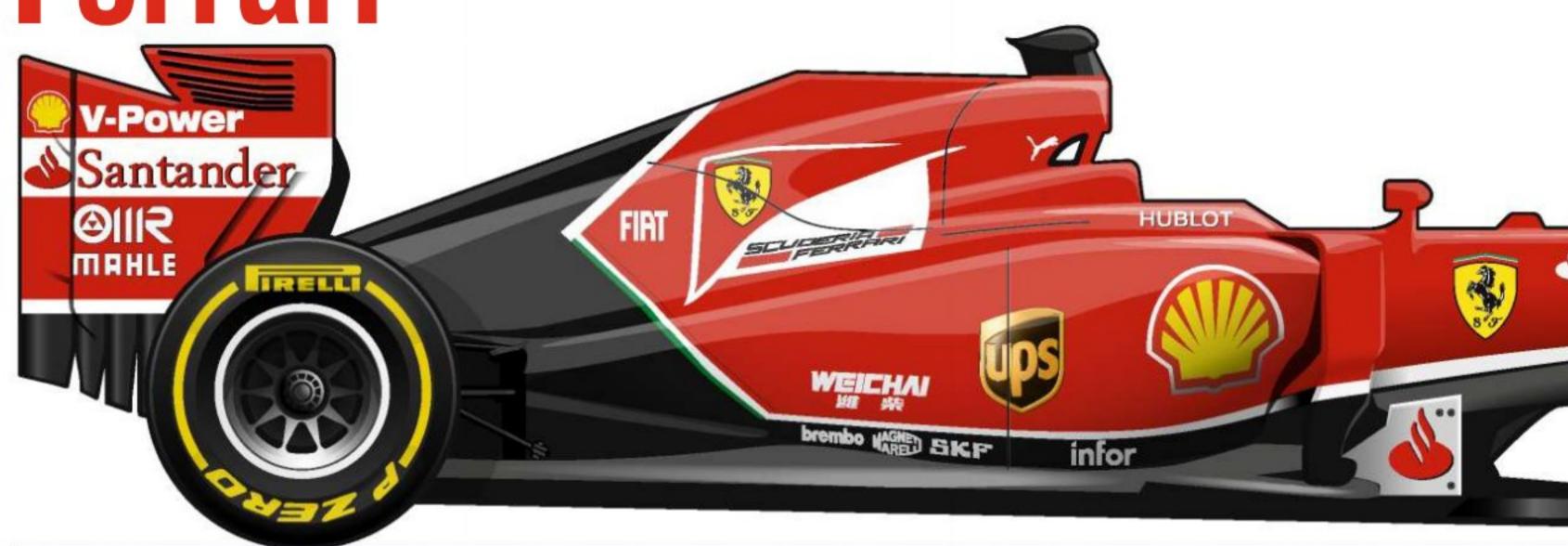
Last year we could see the qualities in his driving. Unfortunately the car wasn't to a level for the world to see how good he was. Now we've got a half-decent car, everyone's seeing his ability shining through.



Does he have any weaknesses? Rob Smedley says only lack of experience...

To be honest I can't think of any either. He's amazing at saving the tyres in the races, he's amazing at putting together a lap in qualifying, he's good at the starts and first lap. He's just a good all-rounder.

terrar



Weakness on the track led to ructions off it as the Scuderia lost one of its key assets – Fernando Alonso – and management heads rolled

ow do you take the positives from a season like this? Ferrari produced the weakest engine package in the field, a car that was probably better than the results suggested aerodynamically but still lagging behind the best on the grid, lost arguably the best driver in the sport in Fernando Alonso, and ends 2014 with its third team principal of the year in place. A paltry two podiums was not even close to par for the illustrious team, and as always it was struggles on track that precipitated the upheaval off it.

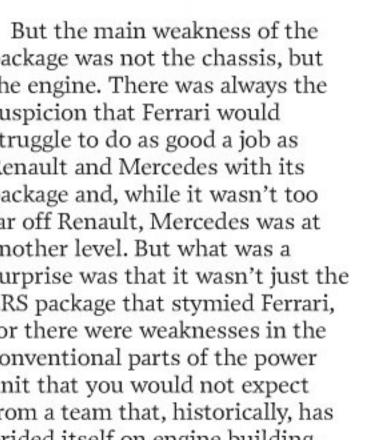
This was always likely to be a transitional year. James Allison joined as technical director in September 2013, too late to have as significant an influence over the

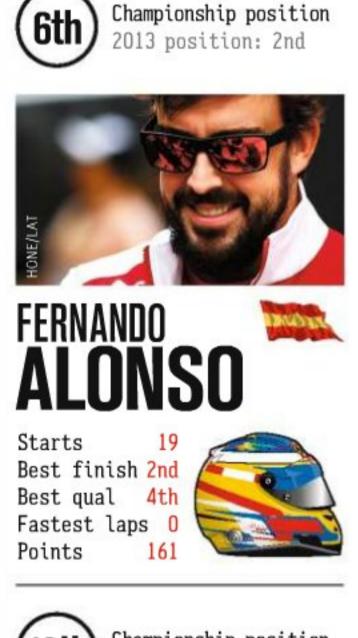


F14 T as he would have liked. What is encouraging for the Scuderia is that he has been able to restructure the team. And there were some reasons to be optimistic on the chassis side, with the car seemingly a small step forward aerodynamically compared with recent years. If that trend continues, it will correct a weakness that has held Ferrari back for the past half-dozen years.

But the main weakness of the package was not the chassis, but the engine. There was always the suspicion that Ferrari would struggle to do as good a job as Renault and Mercedes with its package and, while it wasn't too far off Renault, Mercedes was at another level. But what was a surprise was that it wasn't just the ERS package that stymied Ferrari, for there were weaknesses in the conventional parts of the power unit that you would not expect from a team that, historically, has prided itself on engine building.

This is why there was so much agitation about lifting the engine freeze. There are clear ideas about what hardware changes are needed to correct the main vices of the power unit, but these could not be







Championship position 2013 position: 5th



KIMI RAIKKO

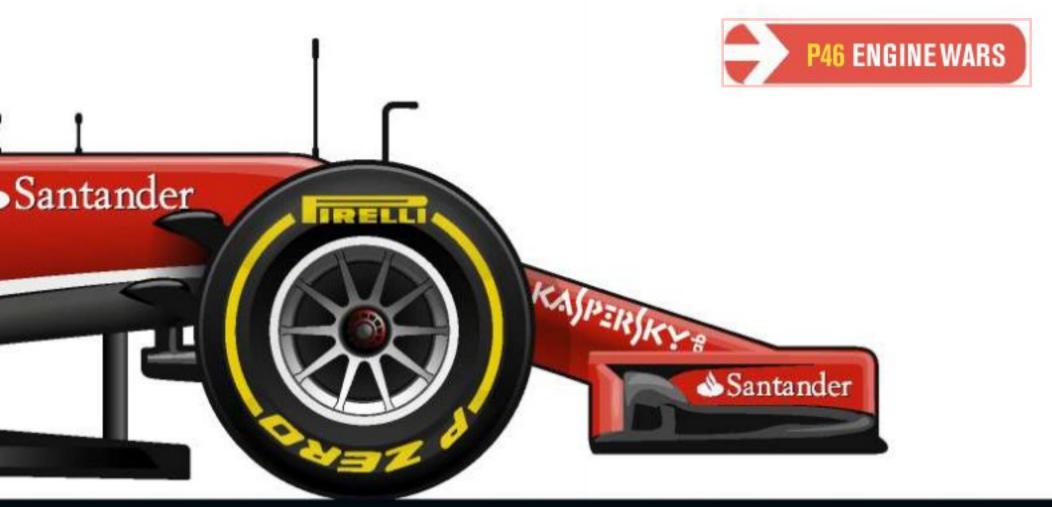
Starts Best finish 4th Best qual 6th Fastest laps Points







"Ferrari needs to make advances in many departments if it is to start challenging for world championships again"



4th Championship position

Wins

Podiums

Poles

Fastest laps

Ferrari F14 T

put in place until the end of the season. In effect, Ferrari had backed itself into a corner. Engine chief Luca Marmorini paid the price, and there were grumblings about power-unit packaging being compromised in search of aerodynamic gains.

But as engineering chief Pat Fry points out, Ferrari needs to make advances in many departments - not just engine if it is to start challenging for world championships again.

"The problems are across all areas," he says. "Our aero compared to Red Bull, you'd say we had a long way to move forward. If you compared our engine to Mercedes, you'd say we had a long way to go."

While Alonso plugged away, usually achieving about as much as was possible with the machinery, Kimi Raikkonen did not deliver the results expected of a world champion recruited at significant expense. Progress was made in giving the Finn the front-end feel and response he demanded, but there were few occasions when he was able to operate at Alonso's level.

His recruitment for this season was symptomatic of the thinking that has held Ferrari back. For while Raikkonen's ability is unquestionable, he is not the driver he was a decade ago. There were flashes; at Monaco the podium was in sight before he clashed with Max Chilton under the safety car, while in Singapore he looked set for his best qualifying performance of the season before problems compromised his final Q3 run.

But Raikkonen was recruited for

more than flashes, and there were options on the market who would have done a better job in the 2014 car. Put a Romain Grosjean or a Nico Hulkenberg in the second Ferrari and there would have been far more points than the 55 Raikkonen achieved. If Ferrari can give him a car to his liking, the results will improve next year the question is by how much?

While Raikkonen's results weren't as hoped, the real problems surrounded the driver of the lead Ferrari. Alonso's relationship with the team had started to deteriorate during 2013, to the point where there were some in senior management who wondered if the Scuderia wouldn't be better off without him. As the 2014 season progressed, it became clear that Alonso wanted out. And while he did not manage to book a ticket to the destination he desired -Mercedes - the distracting saga eventually ended in him leaving

anyway and Sebastian Vettel joining for 2015. This could compromise results, but the relationship had hit the end of the road so their parting is probably for the better.

Ferrari's strongest results came early in the season, with Alonso finishing in the top four in four out of the first six races. In the remaining 13 races, only three times did a Ferrari finish so high; and even in Hungary, where Alonso drove brilliantly and the race opened up for him beautifully, it was not possible to finish better than second.

This was a season of politics, change and embarrassment for Ferrari. Fortunately for the Scuderia, there is light at the end of the tunnel. If Allison is able to do things the way he wants to, and Vettel starts delivering the kinds of performances he did pre-2014, the future is bright. It might just take a few years for Ferrari to get back to where it belongs. M

TECHNICAL APPRAISAL

NOSE JOB

GARY ANDERSON: Of all the different approaches to the nose design we saw in 2014, Ferrari's made the least sense. Pre-season, technical director James Allison said that the nose concept was not that sensitive an area in terms of which way you go, which I could not believe at the time and still don't.

The Ferrari nose was a very simple approach to the rules. The nose itself was as low as possible, with the outer profile blended into the chassis. The negative of this is that the speed of the airflow on top of the nose will increase as it is pulled around the rounded sides of the nose by the low pressure below the chassis. This creates lift on the top of the nose, which is the last thing you want.

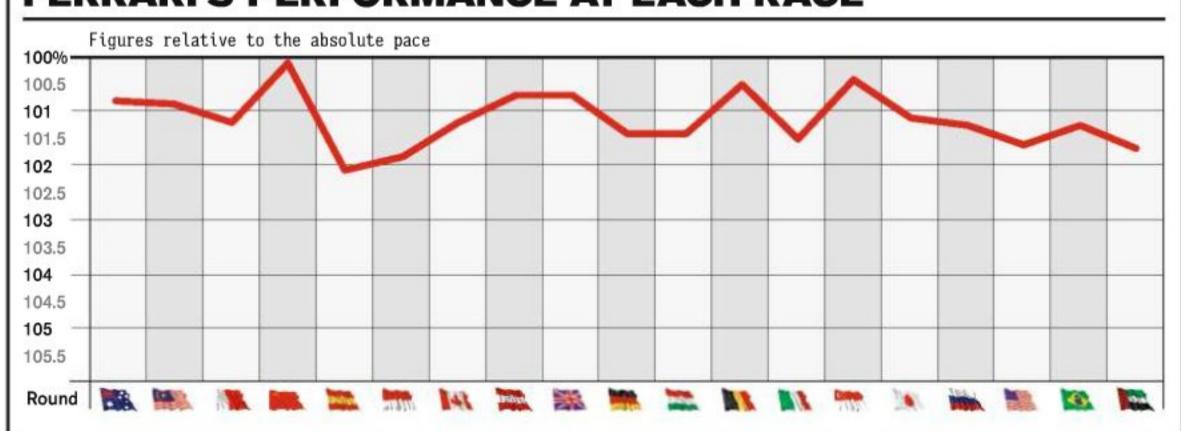
While the Ferrari solution was tidier than the anteater style noses, the performance of the car during the season did little to persuade me that this was the right approach.

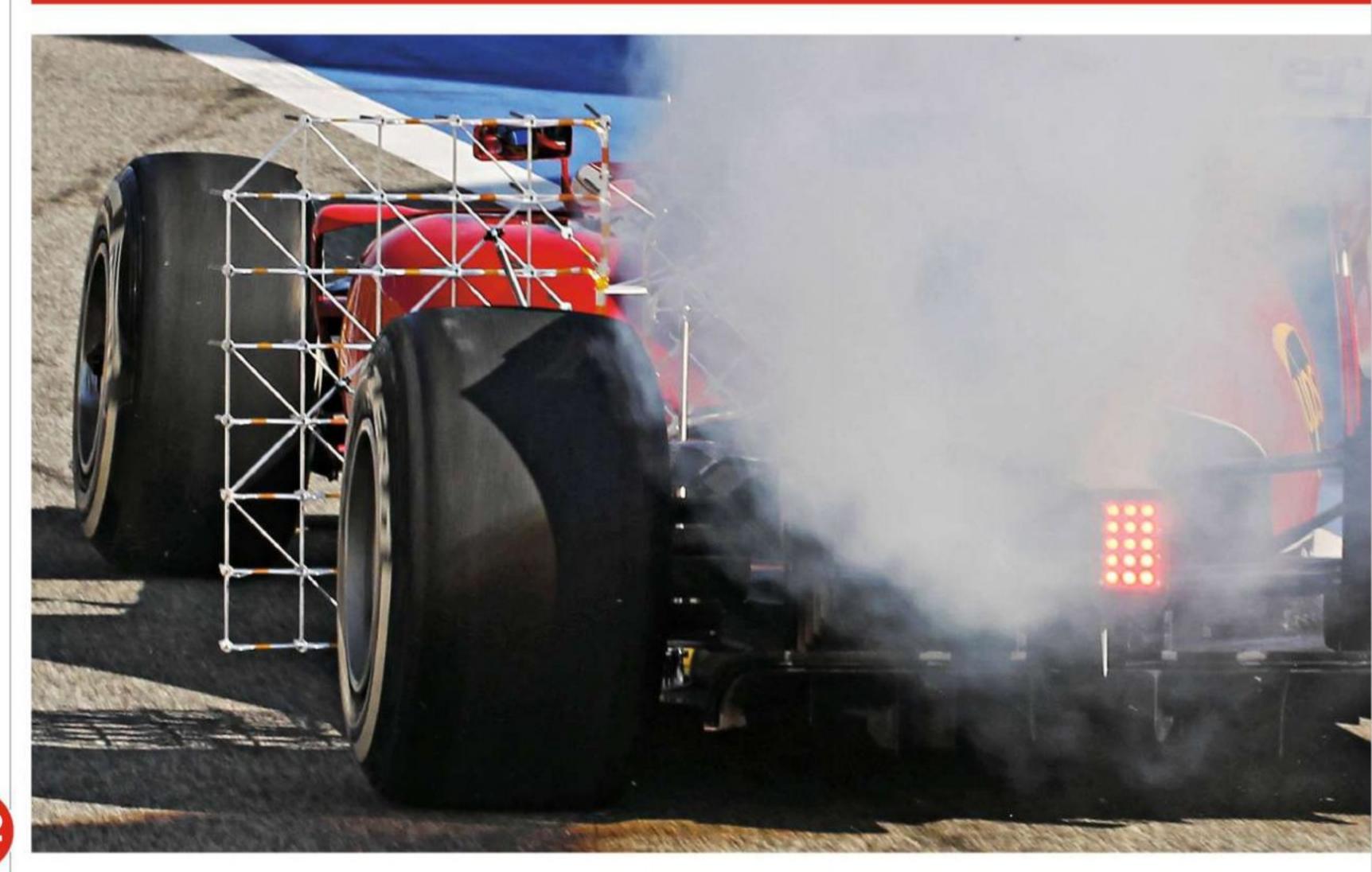


Nose was simple approach to rules



FERRARI'S PERFORMANCE AT EACH RACE





POWER STRUGGLE

Ferrari was off the pace in responding to the challenges of the new hybrid-powered era, and both its own team and its customers faced a bleak year struggling for speed and points. By EDD STRAW

ot once was a Ferrari-powered
Formula 1 car the fastest in the main
speed trap during a grand prix over
the 2014 season. Not only that,
but only twice in 17 races was
the quickest Ferrari figure not
behind the best speeds of both
Mercedes and Renault.

There's a tremendous irony in the fact that Ferrari, historically a vocal advocate of the need for engine building to be crucial in F1 rather than aerodynamics, should suffer most from the introduction of the 1.6-litre turbocharged V6 power units this year. But those at Maranello didn't have the hybrid technology of the ERS era in mind when hoping for a change. Even so, its power unit was bitterly disappointing. In terms of peak power, it was in the region of 40bhp down on the Mercedes, and that deficit told.

The results paint a clear picture. The works team managed a grand total of two podium finishes, both of those results owing more to Fernando Alonso's skills behind the wheel than the strength of the Ferrari package. Its customer teams, Sauber and Marussia, scored just two points between them, with the former enduring its worst season in 22 years in F1. While it would be unfair to blame the engine department exclusively for Ferrari's underachievement, it was the major limiting factor.

Ferrari simply underestimated the scale of the task of creating this new engine package.

"As well as saying we didn't integrate enough, we should have started earlier. We need to try harder"

It missed out on the opportunity Mercedes capitalised on so effectively of creating its own sweetly integrated power unit and car. There was grumbling in the engine department (which lost its head, ex-Toyota man Luca Marmorini, during the season) that the power-unit package had been compromised by aerodynamic demands. But that's too simple an explanation, for there is always a tradeoff; an aerodynamicist will always want less engine to get in the way, an engine builder will always want to avoid compromises for performance gains elsewhere.

Instead, the seeds for Ferrari's engine struggles were planted years ago. You reap what you sow in grand prix racing, and Mercedes was well ahead of the curve from the start.

"As well as saying we didn't integrate well enough, we should have started earlier," says Ferrari engineering director Pat Fry. "It's a massive project to integrate and when you start is crucial. With Mercedes, when the engine freeze came in it was their own engineers who designed KERS. And they were doing single-cylinder research in 2010. It's all down









to good work and planning on their part. We need to try harder."

When talking about the 2014 engines, talking about power outputs only tells part of the story. The Ferrari was underpowered and overweight compared to the Mercedes, but its biggest weakness was the hybrid package. You only have to look at the difference between the car's relative pace in qualifying and the race. Often, Ferrari was able to threaten cars on Saturday that it could not live with come the race.

In qualifying trim, there wasn't a dramatic difference between the Ferrari and the Renault. But once in race conditions, the effectiveness of the Renault's MGU-H package meant that it could harvest, and therefore deploy, more recovered energy. On a qualifying lap, with a proper warm-up, Ferrari was in the same ballpark. In race conditions it wasn't.

Just as Mercedes gained significantly from the fact that, when KERS was introduced for the

2009 season, it developed its own system in house, Ferrari fell behind because it was more reliant on outside suppliers. Substantial revisions are in the works for its ERS system in 2015, which should offer significant efficiency gains. With the use of the MGU-H, which can effectively be used to give a power boost outside the restrictions that apply to the MGU-K, getting the motor mounted on the turbine of the turbo working effectively is critical. This is an area where Ferrari struggled to match both Mercedes and Renault this year.

The engine-homologation regulations were Ferrari's biggest problem. Having started later, the engine hit the track undercooked and there were plenty of improvements that needed to be made. But during the season it was impossible to implement changes beyond those made for reasons of reliability, cost or safety. Ferrari did make its fair share of these, a similar number to Renault, while Mercedes had to make fewer.

That's not to say that improvements weren't found during the season. The hardware was frozen, but software wasn't and there was huge potential there. Renault claimed a 5 per cent efficiency gain over the season, equating to around half a second per lap. Ferrari perhaps didn't make as much progress, but it did improve significantly. Notably, the savage torque delivery was eased as the season progressed, even though it was not always the most driveable of engines.

Realistically, it's difficult to see Ferrari catching Mercedes with its power unit over the winter. The engine-freeze regulations allow limited changes from 2014 to next year, but this can apply only to 48 per cent of the engine. Given that Mercedes is also expected to make progress, perhaps enough to improve laptime by a second per lap around a typical circuit, Ferrari needs to find that and then some to make a dent in the real deficit. If the gap can be halved in 2015, it will have done an excellent job. 38

ENGINE COMPARISON

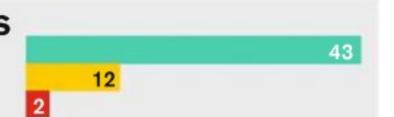




POLES 19 Mercedes Renault 0 Ferrari



Mercedes Ferrari



SPEED TRAP Based on an average of the fastest car powered by each engine in the main speed trap during the 19 races

190.6mph 187.5mph 185.0mph

Renault Ferrari

Mercedes

Hilton Mobili Mercedes-Benz Mercedes-Benz

McLaren's 20th and final season with Mercedes power started well but faded, before the MP4-29 showed improvement in the final few races

hings started so well
for McLaren, with a
double podium finish
in the season-opening
Australian Grand
Prix and the lead
of the constructors'
championship. But it was
clear that this was an illusion, the
result of unusual circumstances
in the first race. The team quickly
dropped to its rightful level, which
in the first half of the season was
firmly in the mid-pack.

The surprise was that McLaren, which had the strongest engine package in the field in its final year as a Mercedes customer, could not extract as much from it as its rivals. Primarily, this was down to being the only one of the four Mercedespowered teams not to run the

Petronas fuel. It was reckoned that this led to a power deficit of as much as 40bhp at times, and ultimately the resources of supplier Mobili were better directed into perfecting its fuel for the forthcoming Honda engine. This meant that the McLaren was rarely a serious threat at the top of the speed traps.

But any engine disadvantage was only a minor contributor to its problems. Following the disaster of 2013, when the concept of its successful 2012 car was abandoned for a new direction, leading to a poor year, there remained legitimate question marks about the decision-making process in the team. While the McLaren MP4-29 appeared to correct many of the weaknesses of its predecessor, the car was not as

competitive as anticipated. This played a part in significant changes to the way the technical team operated, particularly when it came to analysing data drawn from the windtunnel and CFD.

But, encouragingly, after a difficult start to the season, things did improve, and there was a McLaren in the top five in four of the last five races of the season. This was courtesy of a resurgent Jenson Button, who dug deep and delivered some excellent performances amid doubts about his future with the Woking team.

"It's been a year of rebuilding the engineering team," explains technical director Tim Goss. "The early part of the season was about change in the engineering department and then getting the





Championship position 2013 position: n/a



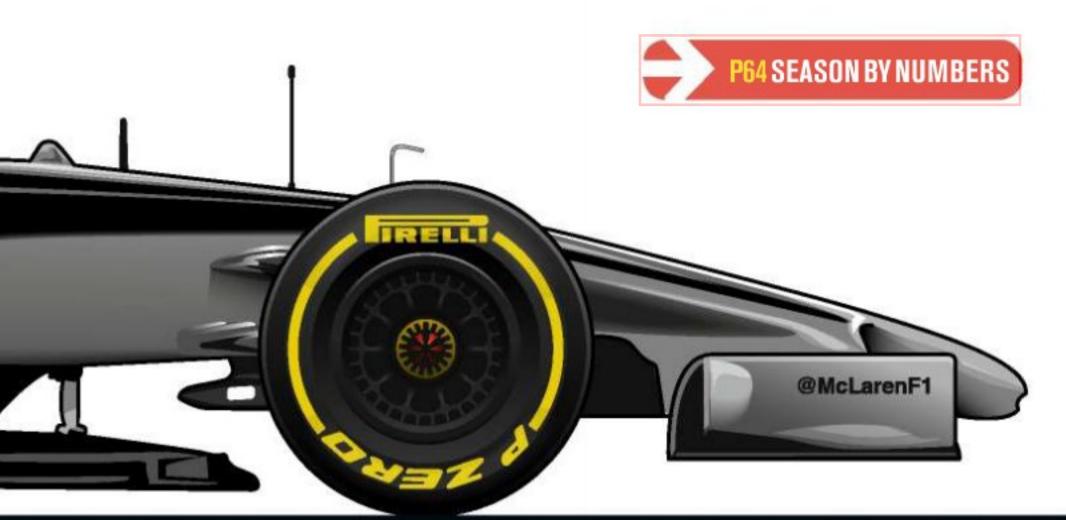
MAGNUSSEN

Starts 19
Best finish 2nd
Best qual 4th
Fastest laps 0
Points 55





"The 2014 season was one to forget for McLaren, little more than a waypoint in the transition from Mercedes to Honda"



5th Championship position

Wins

Podiums

Poles

Fastest laps

McLaren-Mercedes MP4-29



right leadership, direction and focus. Then the main battleground under these regs is the front end of the car, and so much of that is detail. It was a season for keeping your nerve, a cool head and staying focused on the task. We've put measurable performance on the car and kept pace with Mercedes development. We learned a lot about how we improve the front end and are confident we have an understanding of where we need to go now."

The front wing was certainly a source of constant interest. During the Russian Grand Prix weekend, the team was baffled by the slump in performance from Friday practice to Saturday. While this pattern was often seen during the year, possibly as a consequence of how efficient the team was at finding a suitable set-up using pre-weekend simulator testing, in Sochi it was extreme.

After struggling on Saturday morning, the decision was made to put back on the experimental front wing tried on Friday, but removed from the car because the numbers it was generating didn't match those achieved in the factory. Once returned to the car for qualifying,

the car improved and Button and Kevin Magnussen performed well.

At the Abu Dhabi finale, McLaren also trialled a front wing heavily influenced by the concepts favoured by Red Bull in recent years. This showed the influence of new aero head Peter Prodromou, and bodes well for 2015. But still, there were suspicions over its overall downforce numbers, rather than focusing on the consistency and stability that the elaborate design provided.

Inevitably, the season was overshadowed by the imminent return of Honda. There were grumblings in the team about not getting the best kit from Mercedes (the specs of the engines were all the same, however) and there were certainly concerns about letting the team see too many of its secrets with the imminent switch of engines. That made the dynamic a little uneasy during the year, but did not appear to have a

major impact on performance.

What did become an increasing preoccupation in the closing stages of the season was the battle for a 2015 seat between Button and Magnussen. In the first two thirds of the season Magnussen made good progress, but in the closing stages of the year Button started to convincingly outperform the Dane in terms of results. This leaves McLaren, at the time of writing, with the dilemma either of dropping a proven world champion still operating at a high level, or a promising rookie who did a good job in his first season.

Either way, 2014 was a season to forget for McLaren, little more than a waypoint in the transition from Mercedes to Honda. With Fernando Alonso on the way and high expectations for the power unit, despite the lack of running on its public debut in the post Abu Dhabi GP test, McLaren is potentially on a path back to the sharp end.

TECHNICAL APPRAISAL

REAR BLOCKERS

GARY ANDERSON: At the first pre-season test at Jerez, most of the focus was on the engines. But McLaren also caught the eye with the 'blockers' mounted on the rear suspension. These were used throughout the season, although later in the year the top row of the blockers was removed.

The blockers were designed to block the airflow emerging from the Coke-bottle area of the car when it reached the diffuser. A low-pressure area is created behind the blockers, increasing the velocity of the airflow underneath the car, allowing it to generate more downforce.

We haven't seen this kind of design before because this function was previously fulfilled by the rear beam wing, banned for 2014.

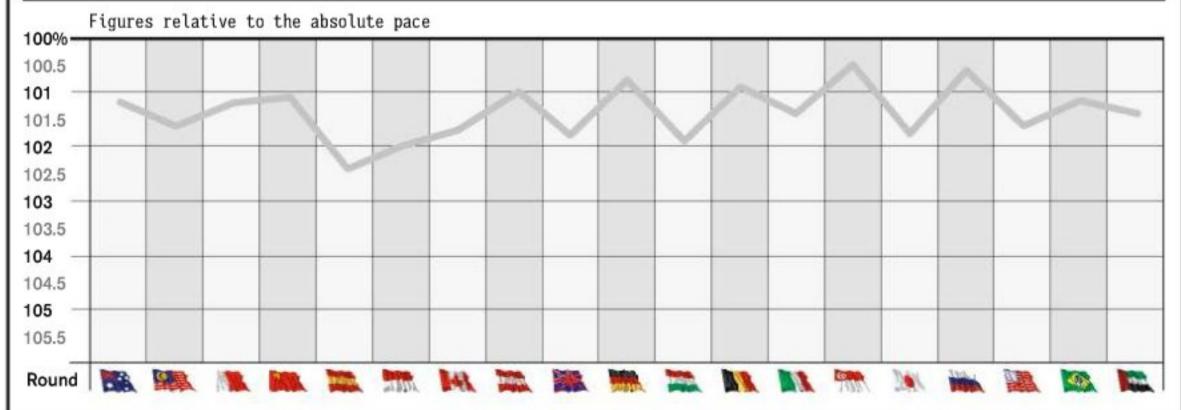
The design was also tuneable, making it possible to add or remove the blockers depending on the track. It was a neat idea that with the lower blocker only worked reasonably well.



Lower suspension blocker worked OK on the McLaren



McLAREN'S PERFORMANCE AT EACH RACE



"The car's narrow operating window made it more and more difficult to remain competitive"



Championship position

Wins

Podium

Poles

Fastest lap



Force India-Mercedes VJM07

The Silverstone-based team struck early with a simple and effective car, but soon struggled to keep others behind, falling to sixth in the table

verything went right for Force India during the first half of the season. The team's strategy was simple: go conservative with the car, make sure it runs cleanly in pre-season and use early races to pick up plenty of points while teams with greater resources struggled. After eight races, it had banked almost 100 points and held fourth in the constructors' championship.

There was always the expectation that the Silverstone squad would not be able to maintain that form. But the drop-off in the second half of the season was worse than anticipated. This was down to a fundamental problem with the design of the car that would have required a new chassis to eliminate entirely. The

bottom line was that it proved difficult to convert the excess cooling capacity that had been engineered into the car at launch into aerodynamic performance. This particularly hurt the rear end of the car, where there was a need to regain downforce from the loss of exhaust blowing and the ban on beam wings.

The car's narrow operating window and ride-height sensitivity made it more and more difficult to remain competitive in the top 10. But, crucially, progress was made late



on to validate the 2015 path.

Had the mid-season upgrade programme produced the results expected, things could have been very different. Part of the problem for a team more dependent on windtunnel work was the need to focus more on CFD.

It wasn't until the Russian GP, with four races to run, that Force India slipped behind McLaren. It didn't have enough to fight back, leaving it down in sixth.

But this still represented Force India's best season in F1, with 155 points and a return to the podium in Bahrain. In Nico Hulkenberg and Sergio Perez, it had a line-up that combined the speed of Hulkenberg with the superb tyre management of Perez, and each seemed to help the other improve. 8





NICO HULKENBERG

Starts Best finish 5th Best qual 4th Fastest laps Points



Championship position 2013 position: 11th



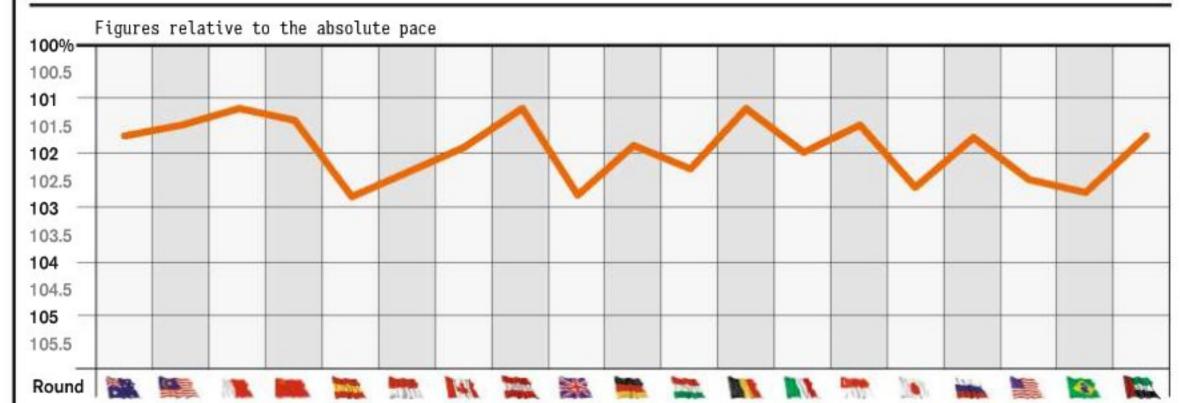
SERGIO

Starts Best finish 3rd Best qual 5th Fastest laps Points



o

FORCE INDIA'S PERFORMANCE AT EACH RACE Figures relative to the absolute pace



oro Rosso

"It was a better season than the results suggest, but one that could've been so much better"





Wins

Podiums

Poles

Fastest laps

Toro Rosso-Renault STR9

CEPSA

Poor early-season reliability hampered the team. A mid-season shakeup helped the finishing rate, but the car's pace was too hit-and-miss

he Toro Rosso regularly qualified in the top 10, yet the ex-Minardi team ended up 125 points away from the top six in the constructors' battle. The car was respectably quick, the second-best of those with Renault power, so why were results restricted to a dozen finishes in the bottom half of the top 10?

There were two main factors. Firstly, the dreadful reliability early on that cost the team significant



points, notably in the Monaco GP when Jean-Eric Vergne and Daniil Kvyat could have finished fifth and sixth. There, an ignition problem blew a hole in the exhaust of both cars. Two races later, in Austria, what technical director James Key admitted was "a stupid mistake on trackrod design" again cost a potential top-six finish for Kvyat.

In the first eight races of the season, Toro Rosso's finishing rate was a poor 50 per cent, leading to technical director James Key calling a crisis meeting to start measures to dramatically improve reliability. To the team's credit, there were only two DNFs in the final 11 races. But big points-scoring opportunities early on had been wasted.

The second factor was that the Toro Rosso's qualifying pace often

did not translate into the race. In the Russian GP, where Kvyat qualified a stunning fifth, the struggles to manage fuel and hybrid energy effectively meant that both he and Vergne dropped out of points contention. By comparison, Force India, often slower on qualifying pace, was a far better proposition on Sundays. Tyre management was also hit and miss.

"We had some races where we struggled with the tyre degradation and we didn't know why," says Kvyat. "And some with issues with fuel or not enough energy management. The chassis was always quite strong, but Renault was missing something from the power unit."

A better season than the results suggest, but one that could have been so much better.





JEAN-ERIC

Starts Best finish 6th Best qual 6th Fastest laps Points





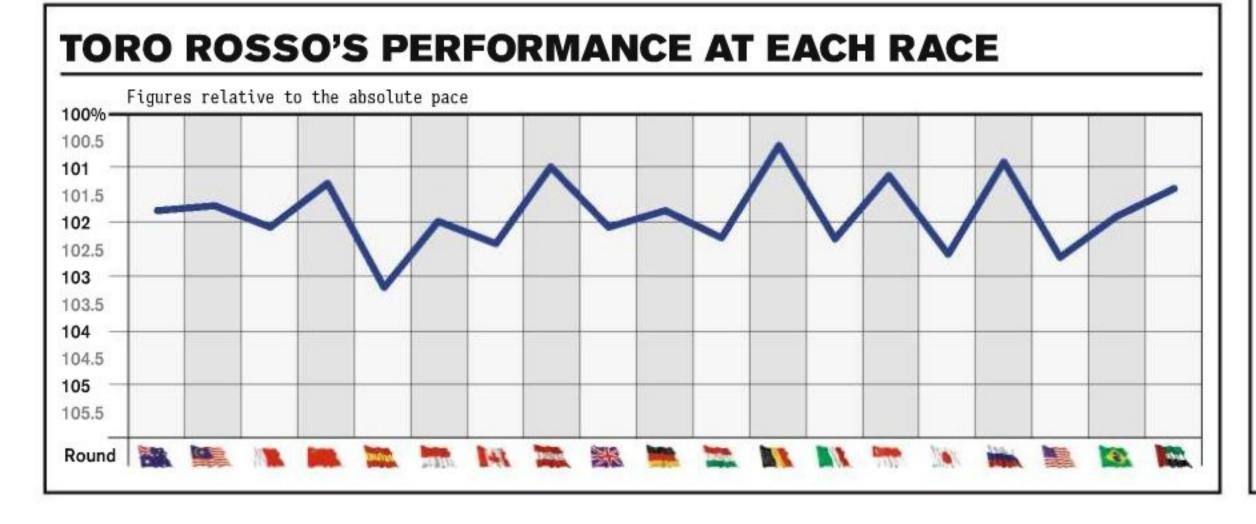
Championship position 2013 position: n/a



DANIIL

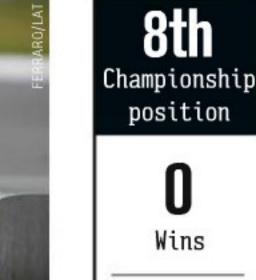
Starts Best finish 9th Best qual 5th Fastest laps Points





"The twin-tusk E22 was an erratic performer, reluctant to behave the same way from lap to lap"





Wins

position

Podiums

Poles

Fastest laps



Lotus-Renault E22

It was a dreadful season for 'Team Enstone' in comparison with its 2012/ 2013 efforts. Next year, and a Mercedes tie-up, can't come soon enough

ver the two preceding seasons, Lotus averaged almost 16 points per race. In 2014, its haul was less than two thirds of that figure over the whole season. That's a measure of just how desultory the team's slump was.

On track, the twin-tusk Lotus E22 was an erratic performer that was reluctant to behave in the same way from lap to lap. Lotus spent most of the season battling to escape Q1 and only occasionally made the top-10 shootout. Too often, even finishing was a battle.

But in the fifth race of the season at Barcelona, Grosjean qualified fifth on merit and converted it into points even though his power unit was misbehaving. This was off the back

of a major aerodynamic upgrade. But, as technical director Nick Chester admitted, "post-Barcelona we didn't keep the development going". The Lotus became increasingly uncompetitive and aerodynamic weaknesses made it very difficult to drive. But when in the right window it performed reasonably, as its late-season form proved.

"It's ultra-sensitive to the wind and to conditions," admitted Grosjean late in the season. "One minute can change a lot of things



in the way the car reacts. It was a problem all season long."

The Renault power unit was clearly a major weakness although, given that Lotus was the third fastest of the French-propelled teams, well behind Toroo Rosso, that only tells part of the story. The E22's troubles were also a symptom of Lotus's malaise. 'Team Enstone', as it's more appropriate to dub it given its numerous identity changes over the years, has proved itself to be a robust institution, but it was inevitable that its performance would suffer in 2014.

Focus switched early on to work on the Mercedes-powered 2015 car. How Lotus performs next season will prove whether this year was a temporary and unavoidable blip, or a more permanent slump. It will certainly be an improvement. 8





ROMAIN GROSJEAN

Starts Best finish 8th Best qual 5th Fastest laps Points



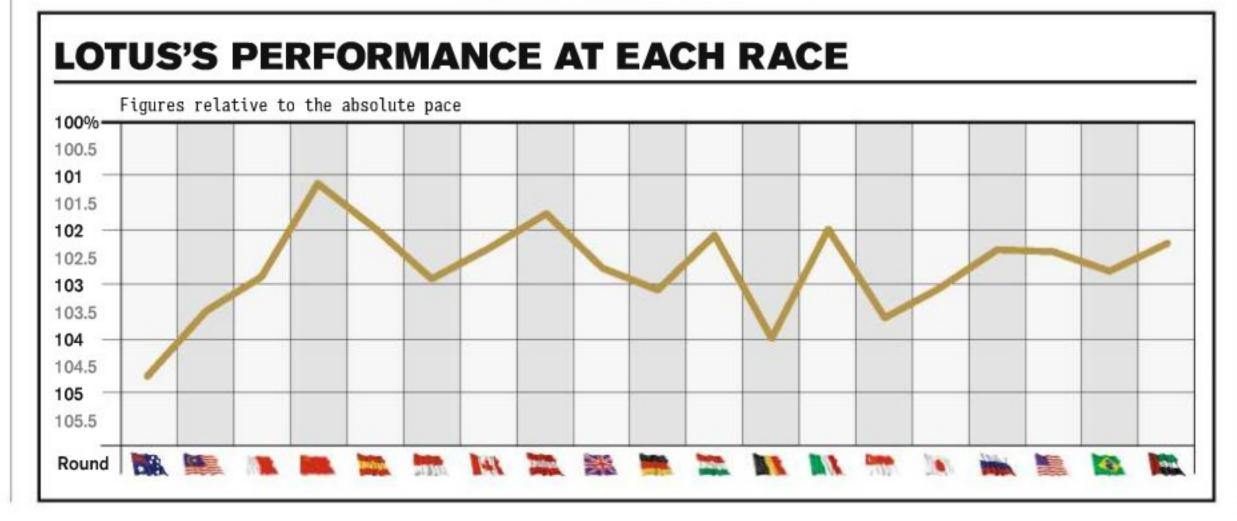
Championship position 2013 position: 18th



PASTOR MALDONA

Starts Best finish 9th Best qual 11th Fastest laps Points





Marussia

"The team did a commendable job, but then suffered the double blow of Suzuka and closure"



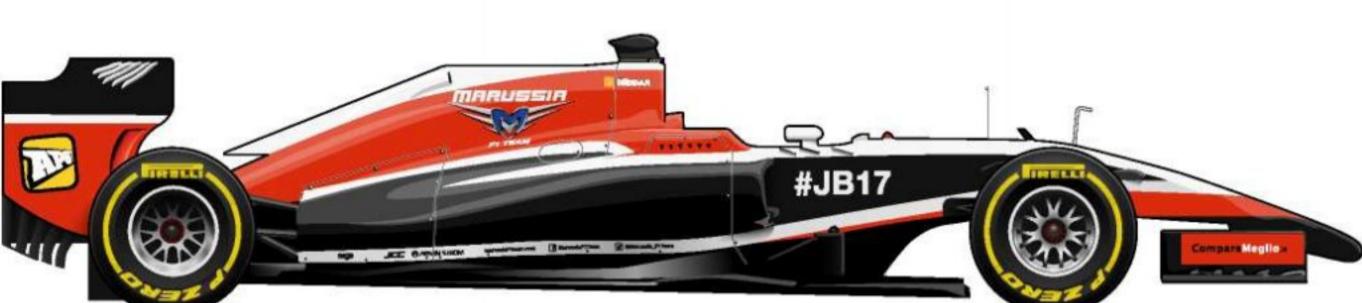
Championship position

Wins

Podiums

Poles

Fastest laps



Marussia-Ferrari MR03

The British team produced an effective car with star driver Jules Bianchi getting the most of it. His Suzuka crash and the team's demise was cruel

riumph turned to tragedy for Marussia. The team did a commendable job to adapt to the new regulations and claim a potentially very lucrative ninth place in the championship, but then suffered the double blow of Jules Bianchi's horrific Suzuka crash and then the closure of the team. This small, but effective, crop of true racers didn't deserve to end the season out of a job.

This year was a huge challenge for a team of a couple of hundred people. The switch to Ferrari engines and gearboxes inevitably created some pre-season challenges, and it wasn't until late in testing that the car managed to do some serious running. But it was handily

quick, carrying over its pace from 2013 at a time when others were dropping back, which overall moved Marussia closer to the front.

An upgrade that was significant in effect, but not cost, was introduced for May's Spanish GP. Fettled in the subsequent test, it gave Marussia a much wider set-up window, which allowed it to be a genuine Q2 contender in Monaco.

Unfortunately, a differential problem in qualifying held Bianchi back, but he bounced back from that, and a five-second penalty, to take an inspired ninth place.

But Marussia was unable to build on that progress. The ban on FRIC was a big setback as the team had produced a very effective system, which former technical consultant Pat Symonds, now at Williams,

reckoned was ahead of what he found when he moved to his new team. It took a while to refine the car for the post-FRIC era, by which time the back of the midfield was far away.

Lack of cash meant that further upgrades could not be put into production, and the team began to struggle to keep the improving Caterhams behind. Then came Suzuka and Bianchi's terrible accident, a blow that left its mark on the team.

An attempt to get back onto the grid in Abu Dhabi after missing the United States and Brazilian GPs fell tantalisingly short, and there are still efforts to revive the squad. If these don't come off it will be little reward for the remarkable progress this hardy team of racers has made. 80





JULES BIANCHI

Starts Best finish 9th Best qual 12th Fastest laps Points



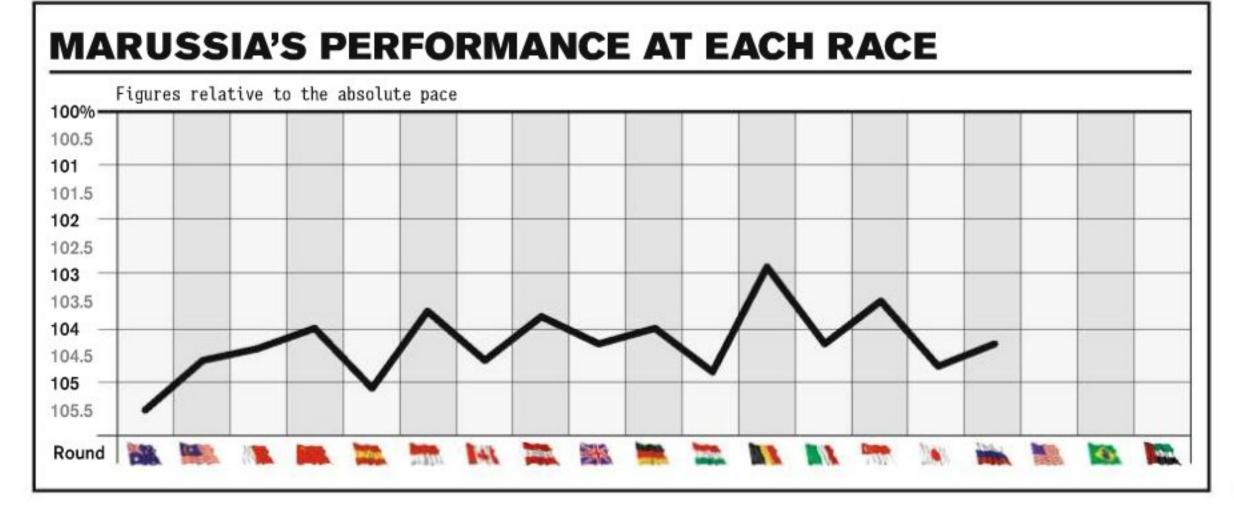


Championship position 2013 position: 23rd



Starts Best finish 13th Best qual 13t Fastest laps Points





Sauher

"The C33 missed team objectives from the start and was then unable to improve quickly enough"



10th
Championship
position

U Wins

U

Podiums

O Poles

0

Fastest laps



Sauber-Ferrari C33

The Swiss squad endured its first pointless season in over two decades in F1, beating only Caterham in the championship's wooden-spoon race

auber's reputation as a dependable midfield stalwart took a beating in 2014 as it drew a blank over the 19 races. So what went wrong? The most obvious weakness was the Ferrari engine, not only its performance deficit, but also how late Sauber was able to finalise its deal to use Maranello propulsion and gearboxes. When the engine arrived it was overweight, forcing the diversion of resources into a programme for lightening the car. This did not bear fruit until May's Spanish GP, and even late in the season Adrian Sutil was unable to benefit from carrying ballast low in the car, as his and the C33's combined weight was right on the regulatory minimum.

Given that pre-season testing was beset by problems, with the brake-by-wire system proving particularly tricky, Sauber was on the back foot from the start. The first test at Jerez was always expected to be difficult, but the troubleshooting process with both car and engines stretched on longer than expected and the team never really recovered.

It would be unfair to blame only the Ferrari power unit. After all, while Ferrari itself had a challenging season, it at least scored consistent points. While internally there was the feeling that the Sauber harnessed to a Mercedes engine would have been a consistent points proposition, there were also aero weaknesses.

The car's set-up window was narrow, a problem at least ameliorated by the aerodynamic upgrade tried in



Singapore in September and raced from Japan onwards. But it was too little, too late. Given that the C₃₃ missed the team's objectives from the start and then was unable to improve quickly enough, points always remained out of reach.

When Sauber did flirt with the points, in races such as Hungary and Singapore, car problems often intervened. As for Monaco, both cars would have been in the points but for Sutil and Esteban Gutierrez hitting the barriers.



ADRIAN

Starts 19
Best finish 11th
Best qual 10th
Fastest laps 0
Points 0



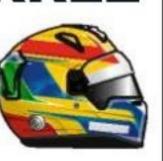


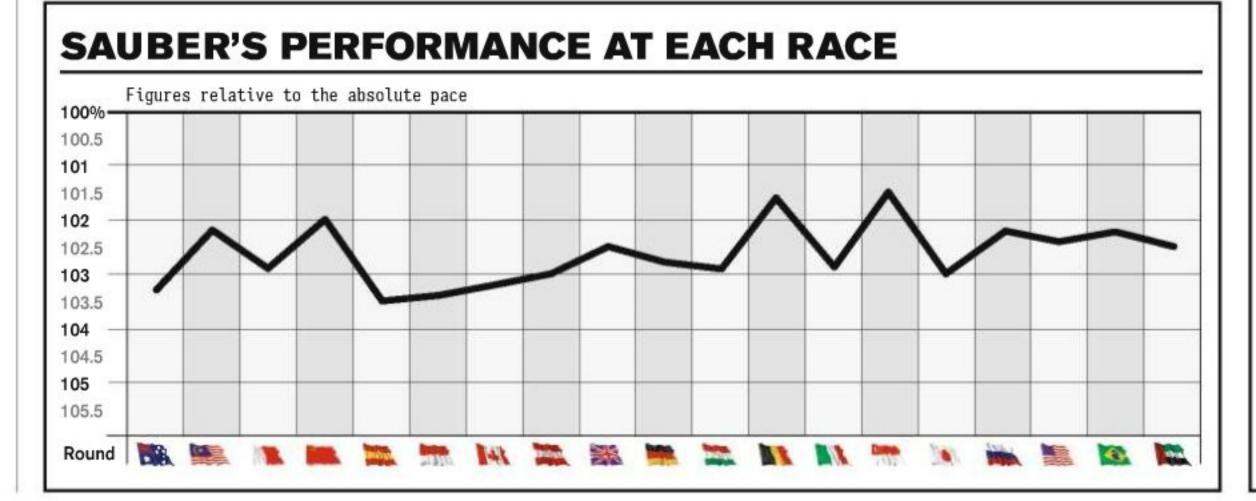
Championship position 2013 position: 16th



ESTEBAN GUTIERREZ

Starts 19
Best finish 12th
Best qual 11th
Fastest laps 0
Points 0





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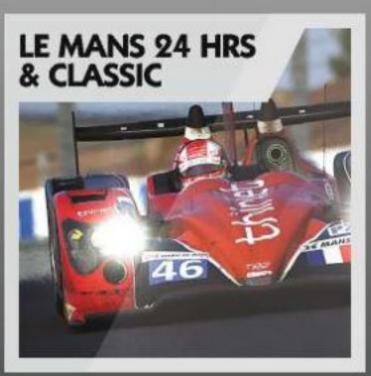
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Caterham

"At one stage there was a danger the season might not last beyond the British Grand Prix in July"



11th Championship position

> **O** Wins

n

Podiums

0

Poles

0

Fastest laps



Caterham-Renault CT05

Was the team doomed once Tony Fernandes issued his "last-chance" pre-season threat? It was certainly a prophetic, if demotivating, call

he writing was on the wall for Caterham from the moment team owner Tony Fernandes declared this year to be its "final chance" back in January. Saying "if we're at the back, I don't think I'm going to carry on" when you know that there's every chance that's exactly where you will be starting the season is hardly a vote of confidence. The situation was clear: either a buyer was found or the team would not see the second half of the season.



That put Caterham into a holding pattern technically. Aside from a modest aerodynamic upgrade for May's Spanish Grand Prix, updates were put on hold so there was little opportunity to build on a respectable enough start in preseason testing during which the Caterham was, while slow, at least more reliable than some of its rivals.

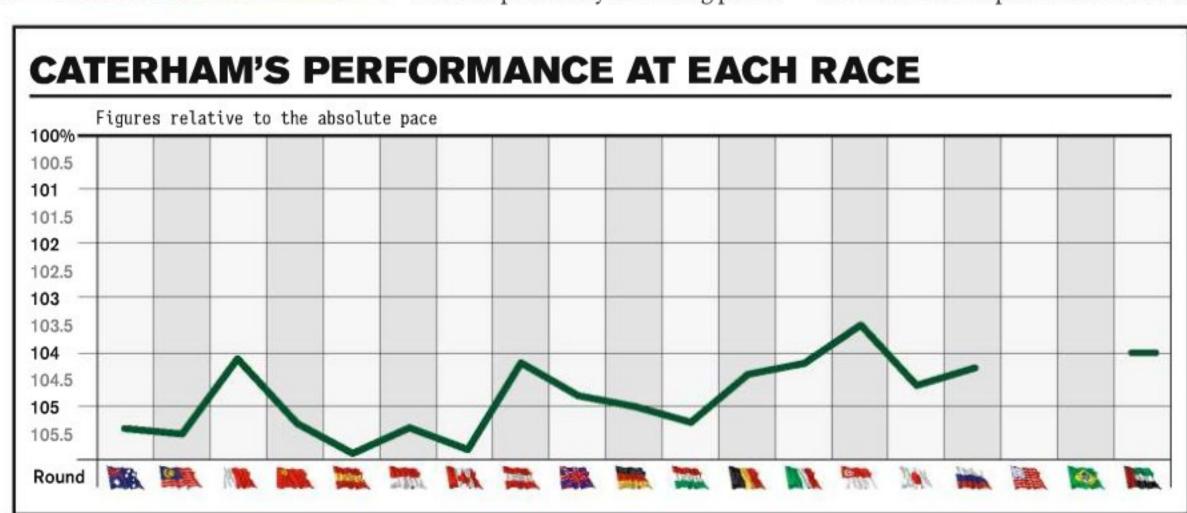
At one stage, there was a danger that the season might not last beyond the British Grand Prix in July. But a new owner was found and, for a while, things got back on track. At Spa and Suzuka, aerodynamic upgrades were introduced that had a tangible effect on performance, which allowed Caterham to edge back ahead of old rival Marussia. The trouble was, by this point any realistic possibility of scoring points

had long since gone, and Caterham was last in the championship.

Had those upgrades gone on the car earlier in the season, as planned, it could have sent Caterham on a very different path. But as it was the team was heading for another crisis when it went into administration against an unseemly backdrop of public disagreements between owners old and new. Eventually, this resulted in the team missing two races before returning to the grid for the Abu Dhabi finale under the auspices of the administrators.

The results were, predictably, dire.

Marcus Ericsson's 11th in Monaco
was the year's best. The sad thing
was that there were quality people
on the staff who, with the right
management, could have turned
the team into a capable midfielder.







15th

Best finish 13th

Best qual

Points

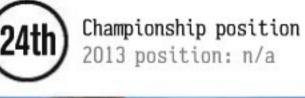
Fastest laps





Starts 1
Best finish 17th
Best qual 20th
Fastest laps 0
Points 0







Starts 1
Best finish n/a
Best qual 21st
Fastest laps 0
Points 0





Dieter Rencken F1's political animal

On the track, F1 was spectacular in 2014, but the paddock was wracked with politics. Our columnist gives his own take on a year when financial troubles hit grand prix racing hard

he 2014 political season ended precisely as it started: with much squabbling over costs and engine regulations at Formula 1 Commission level. Both issues remain absolutely unresolved despite F1's three player groups (governing body FIA, commercial rights holder FOM and the team collective) vowing to engineer solutions.

The scene was set during pre-season testing when F1 tsar Bernie Ecclestone vehemently criticised the (lack of) sound of 2014's engines and their (initial) unreliability, despite not having heard the complex hybrid technology run on track.

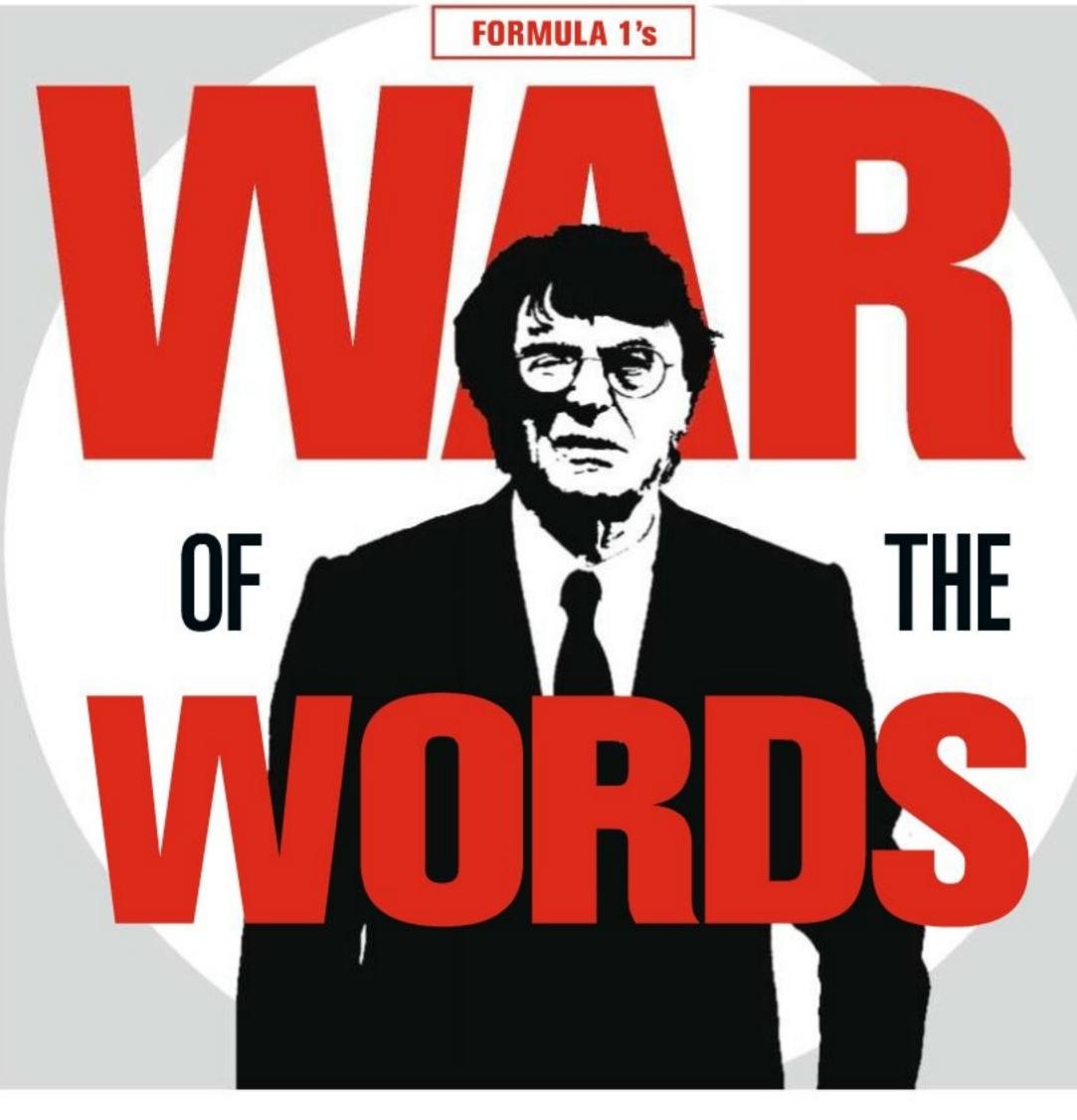
This denunciation of the sport and its new formula became a distasteful feature of the season, with broadcasters, team principals/employees, drivers and even race promoters rounding on F1's (generally) ugly cars, (convoluted) governance, (inequitable) commercial structures, and (excessively complex) regulations. Prophets of doom went as far as predicting zero finish rates at the season opener.

05 1

Santander

Given this onslaught, it was indeed surprising that TV ratings and race attendances fell but 20 per cent year on year.

Thankfully on-track action was absolutely scintillating. There was no sight more humiliating than that of then-Ferrari president Luca di Montezemolo slinking from Bahrain after arguably the season's best race — in which his red cars completed the nether regions of the top 10 — having



earlier arrived in a blaze of publicity during which the flamboyant Italian condemned F1 2014-style as "taxi-cab racing".

A week later, team boss Stefano Domenicali was gone, having resigned honourably, and replaced by Marco Mattiacci, Ferrari North America's super-salesman. Immediately the season ended he was relieved of his private hell, with incoming Ferrari president Sergio Marchionne appointing Philip Morris executive (and thus the Scuderia's main benefactor for 20 years) Maurizio Arrivabene as head of racing.

Sergio who? Bahrain marked di Montezemolo's penultimate appearance in the F1 paddock, the next (Monza) being his swansong. Rumours had long persisted that his days were numbered, that Fiat Chrysler Automobiles boss Marchionne intended listing Ferrari after promising to increase annual

> sales by 40 per cent to 10,000 units — a strategy di Montezemolo robustly opposed. Shocking 2014 on-track performance provided the bullet.

Such shenanigans precipitated turmoil in 2015's driver market, with Fernando Alonso forsaking Ferrari in favour of a Japanese sunrise and Sebastian Vettel slotting into Maranello. Daniel Ricciardo, the only man other than Mercedes twins Lewis Hamilton and Nico Rosberg to win a race, was elevated to Red Bull Racing leader, but three victories did not dilute the team's criticism of Renault and the engine formula.

Stefano Domenicali's resignation just one symptom of Ferrari's troubles



Team boss Christian Horner raged against
Mercedes' (deserved) performance advantage
from first race to last, at one stage suggesting a
(farcical) return to last decade's V8s, but he failed
to gain the unanimous approval required for
change. Expect more of the same next year,
be it silver hegemony or rant.

In many ways the noise about silent engines was a smokescreen, for the real story of 2014 was money, or rather a distinct lack of the commodity at the middle-to-blunt reaches of the grid, and eye-watering excesses of the stuff when it came to settling bribery charges in Munich.

This year marked the first year of F1's inequitable payouts, which see the top three share riches out of all proportion with the rest — for example, double championship winner Mercedes is due an estimated £35 million less for the year than fourth-placed Ferrari — and this factor, coupled with a continuing global crisis and doubling in power-unit costs due to their complexity,



put massive squeezes on half the grid.

Recognising this, FIA president Jean Todt committed to some form of cost control/cap by season's end, but the power of the Strategy Group — albeit touted as a forum without executive authority - saw the governing body overruled by the Big Six teams voting in conjunction with commercial rights holder FOM. The EU Commission beckons; deservedly so in many minds.

By the 17th race Caterham and Marussia were in administration; two races later the wrangling reached fever pitch, overshadowing the season finale. "How can it be that a sport generating £1.2 billion annually cannot sustain 11 teams?" was the burning question in Abu Dhabi, rather than "Lewis or Nico?"

The endangered teams campaigned for an additional \$100m split three ways, and if proof is needed that the 113-year commercial rights deal struck between FIA/FOM - a decade before Todt took office - is the root of paddock evil, consider that the sum equals that proffered by Ecclestone to a Munich court in settlement of serious bribery charges not unrelated to the sale of the sport's rights to investment fund CVC Capital Partners.

The case saw Ecclestone shuttling to/from



'The noise about silent engines was a smokescreen, for the real story of 2014 was money, or rather a distinct lack of it at the middle-to-blunt reaches of the grid'



Germany for five months before settlement was reached, but the sport suffered under a cloud immediately charges were announced. During this period F1 operated in an unwelcome leadership vacuum, one that persists five months after charges were dropped, culminating in an extraordinary admission from Ecclestone in Austin.

Having accepted that, "There is too much money probably being distributed badly - probably my fault," the 84-year-old added: "Frankly, I know what's wrong, but don't know how to fix it." Certainly, this, like the questions of engines and the Strategy Group, will be a recurring theme. Add to that the question of succession at the top.

As the year draws to a close, the question of two teams in administration remains unresolved, although at the final Commission session of the year they pleaded for permission to run modified cars in next year's championship, failing which they would most certainly fold.

No decision was handed down, and auction dates have been set for Marussia. Indeed, the only resolutions passed during the two-hour meeting of 25 high-powered folk were reversals of the double-points regulations and standing start after safety-car phases - rules that should not have been on the books in the first place. Such muddling sums up 2014's political season. 36

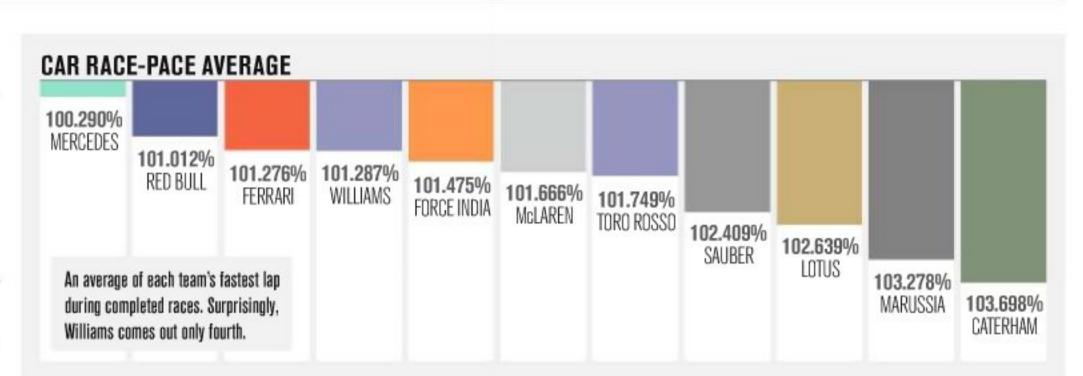
DECEMBER 11 2014 AUTOSPORT.COM 61

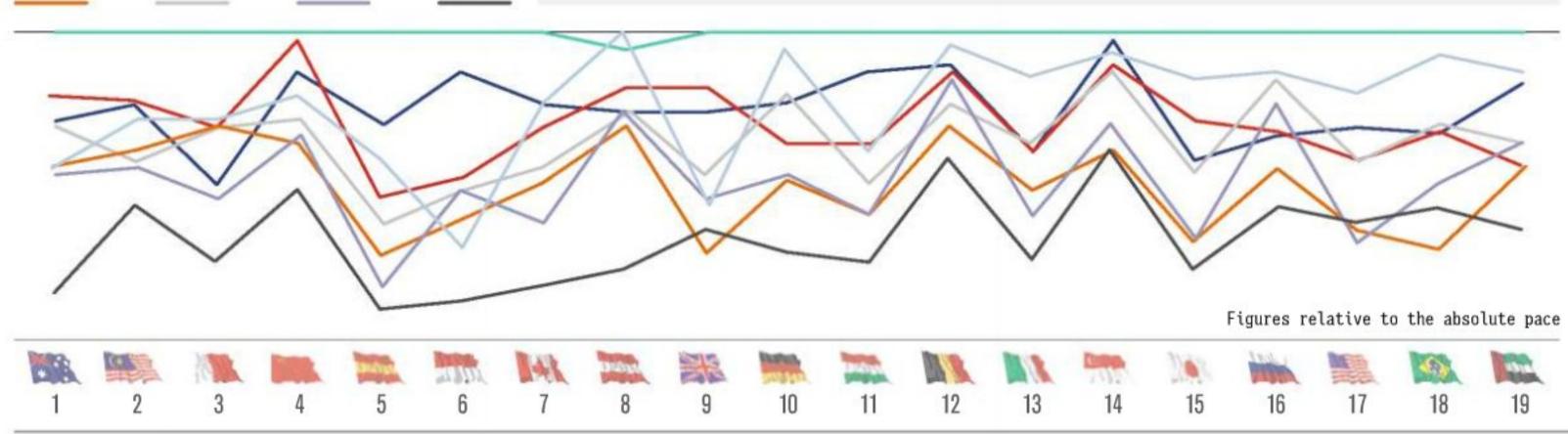
PERFORMANCE ANALYSIS

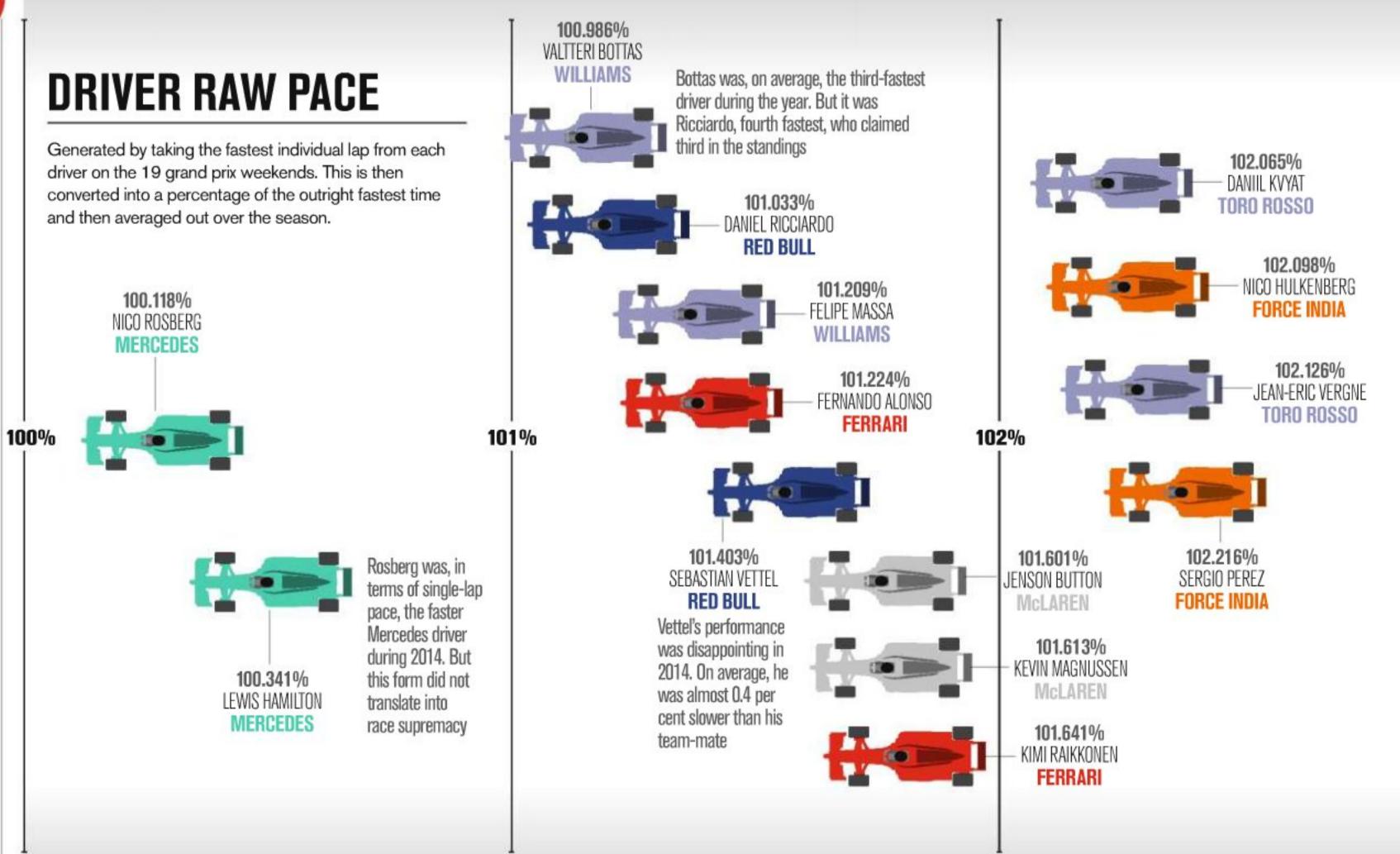
Laptime comparison

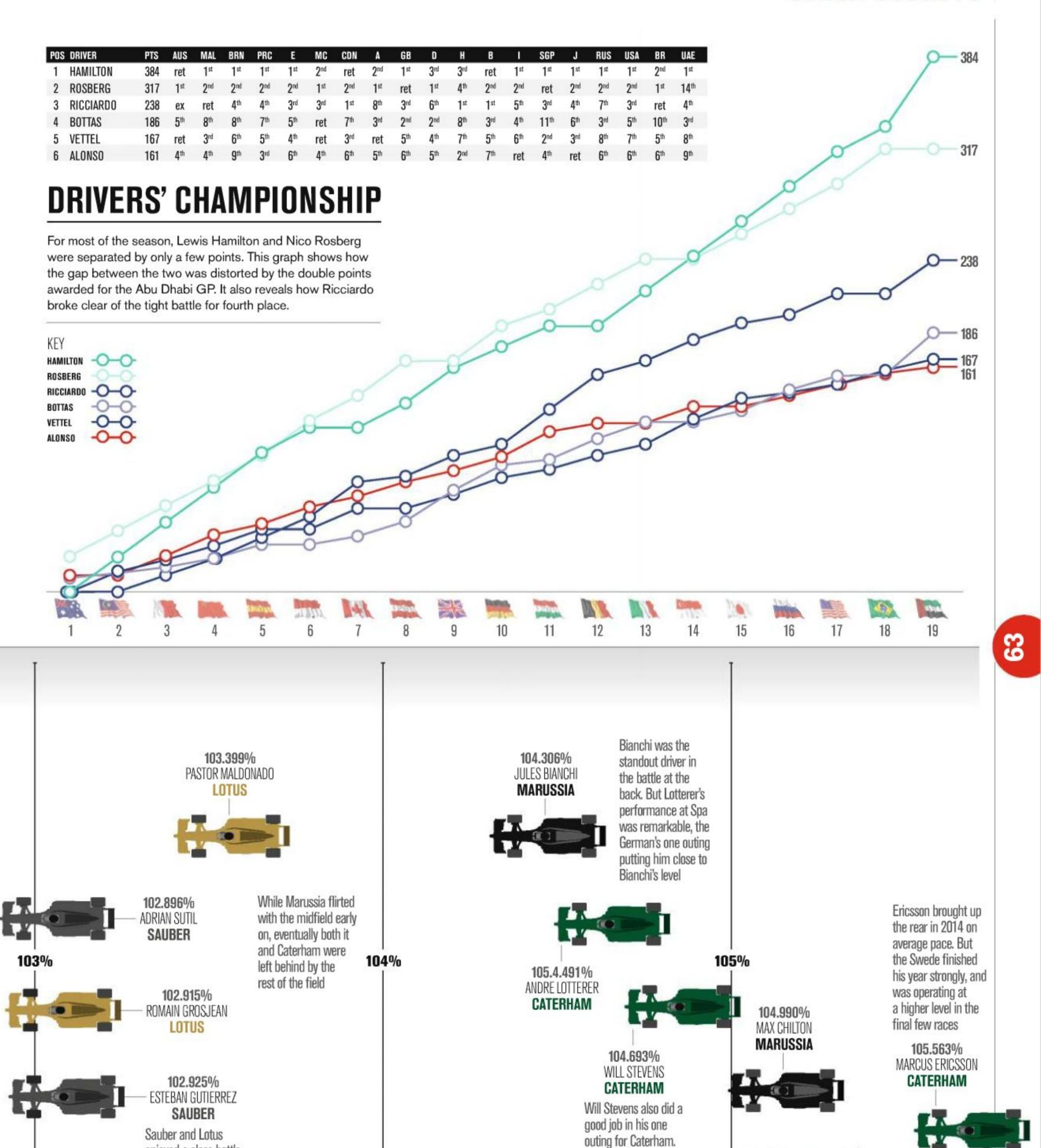
The chart below plots the relative pace of the top eight cars during the 2014 season. Mercedes was almost always fastest – Austria being the only exception – but the battle that raged behind was a close one, with Williams eventually emerging as best of the rest.

KEY
MERCEDES RED BULL FERRARI WILLIAMS
FORCE INDIA McLAREN TORO ROSSO SAUBER









Because Caterham

him ahead of the

regular drivers

was closer to the pace

in Abu Dhabi, this puts

enjoyed a close battle.

On average, Sutil was

the quickest of the

quartet, but over the

season the gap between

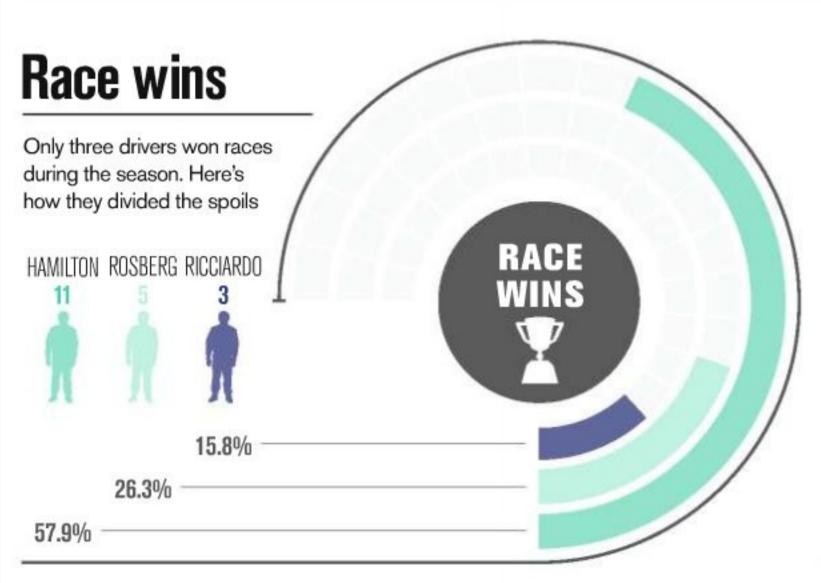
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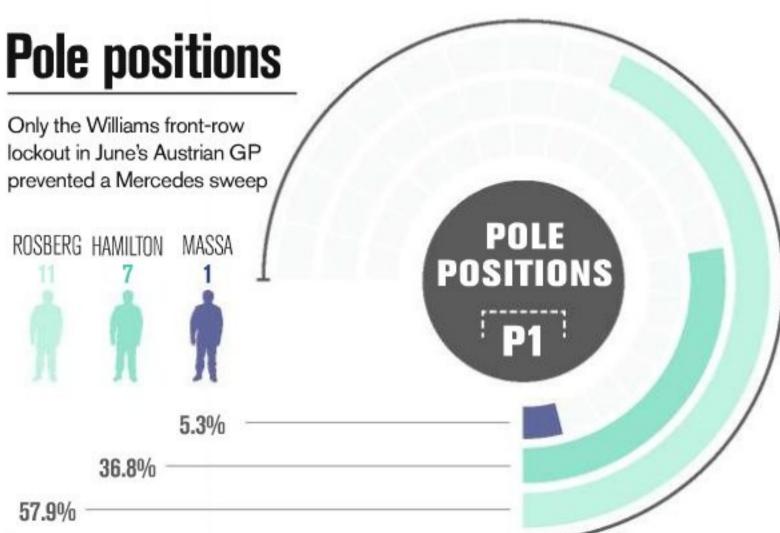
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KAMUI KOBAYASHI

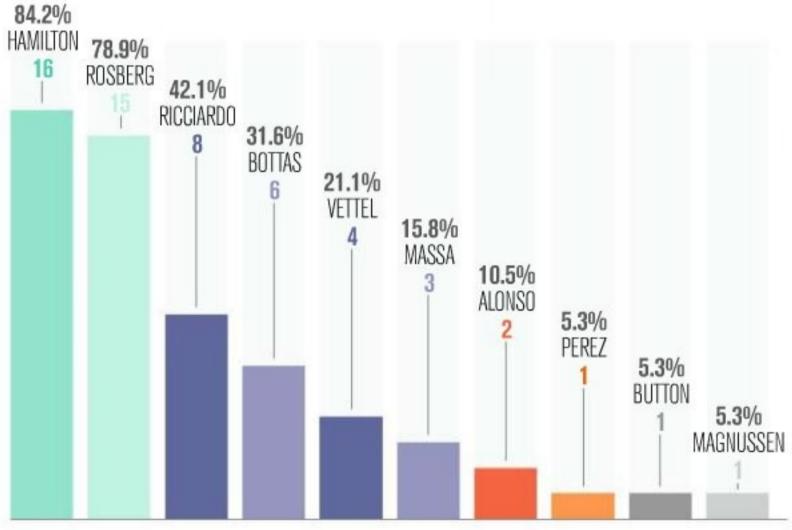
CATERHAM





Podiums

Who occupied one of the three places on the podium most often during the season



Qualifying head-to-head

No driver outqualified his team-mate more often than Fernando Alonso during the year

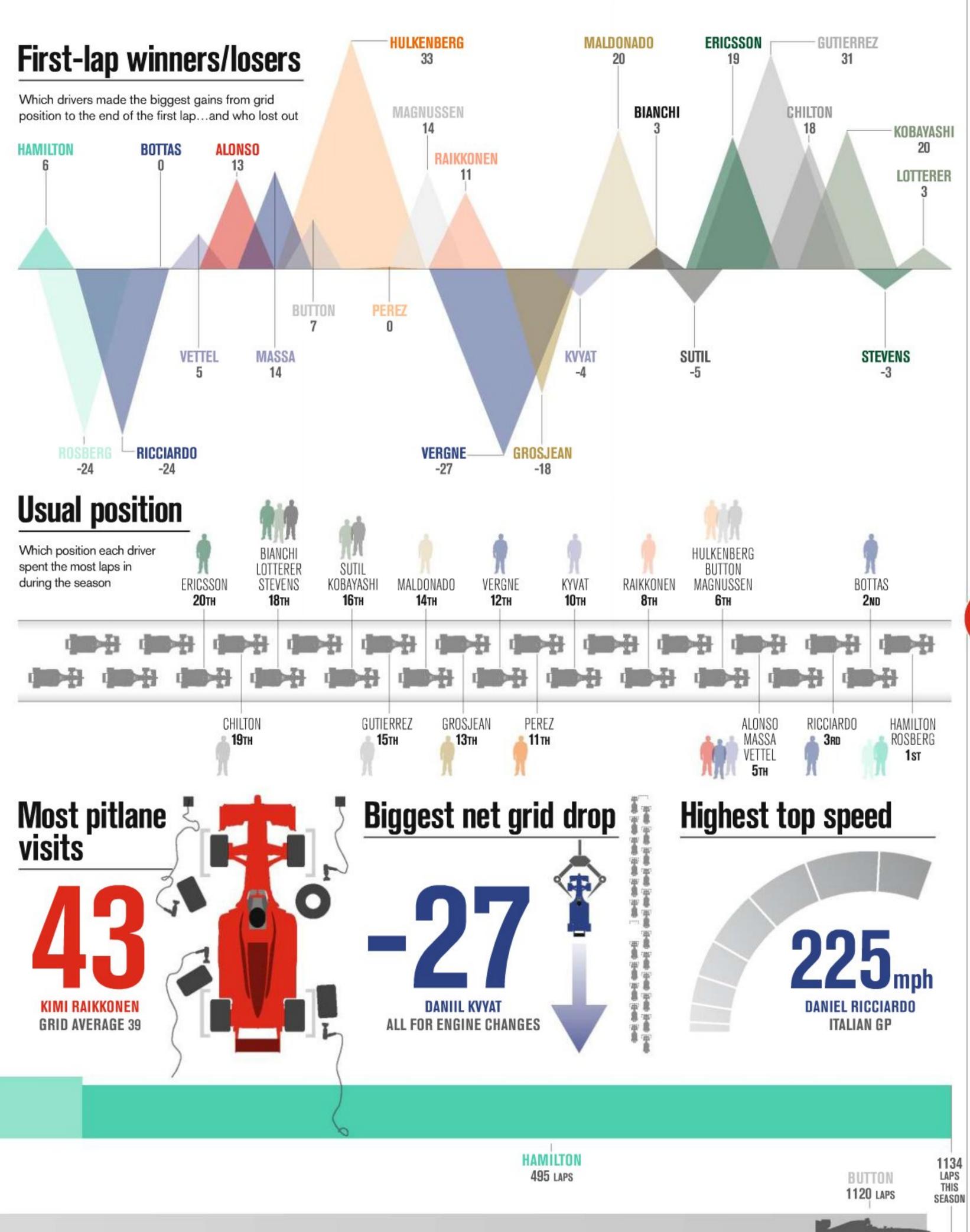


Laps led



Most race laps completed

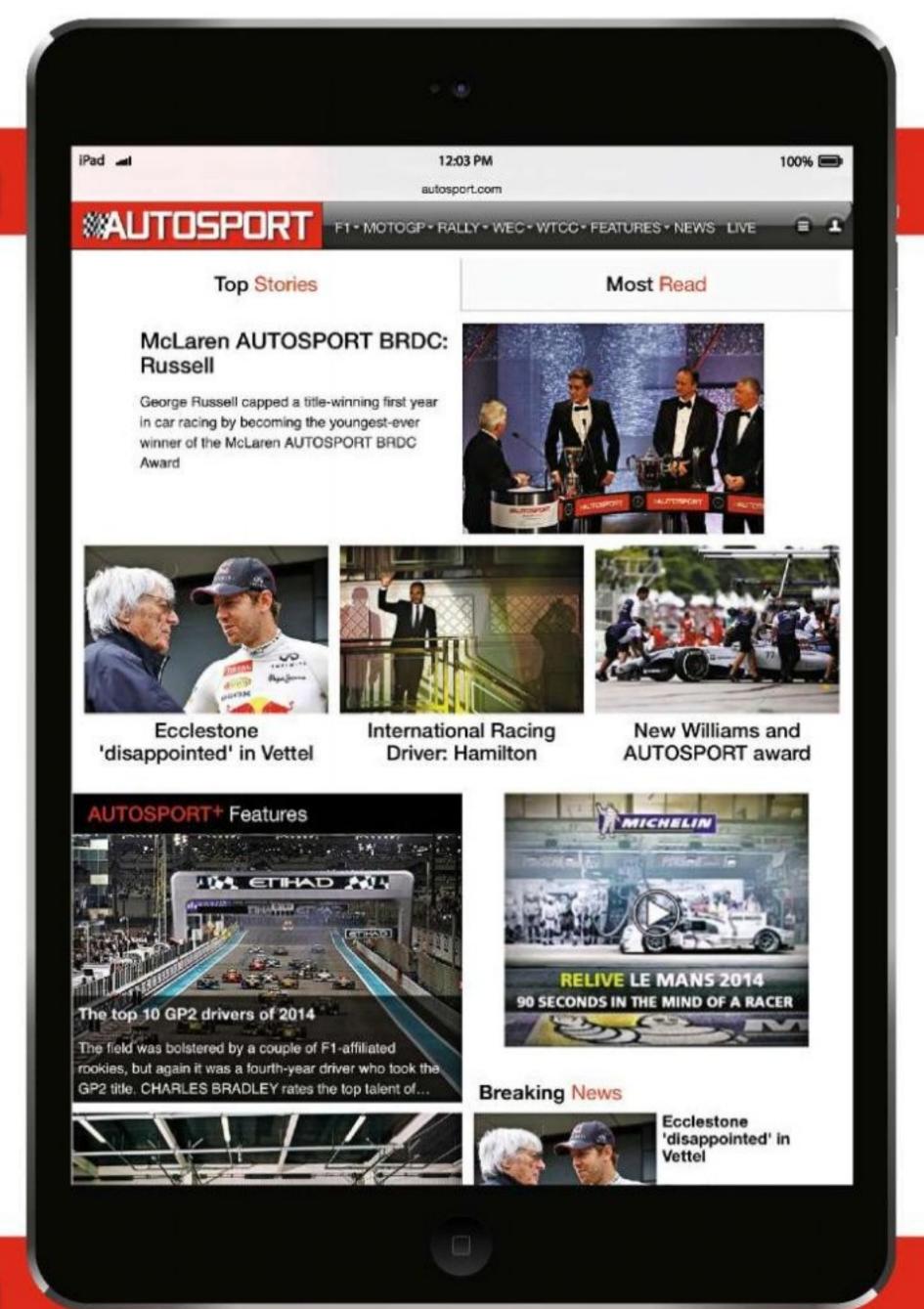
ROSBERG 483 LAPS



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MOST READ STORIES OF 2014



WAUTOSPORT.COM

Alonso finalises switch to McLaren

The story on the eve of the Japanese Grand Prix weekend revealing that Fernando Alonso and Ferrari were going to part ways was one of our biggest, but nothing in 2014 got near the moment that our group F1 editor Jonathan Noble confirmed that the Spaniard had completed his deal with McLaren. Attention quickly shifted to which of its current drivers the team would keep, as debate raged over the merits of Jenson Button and Kevin Magnussen.

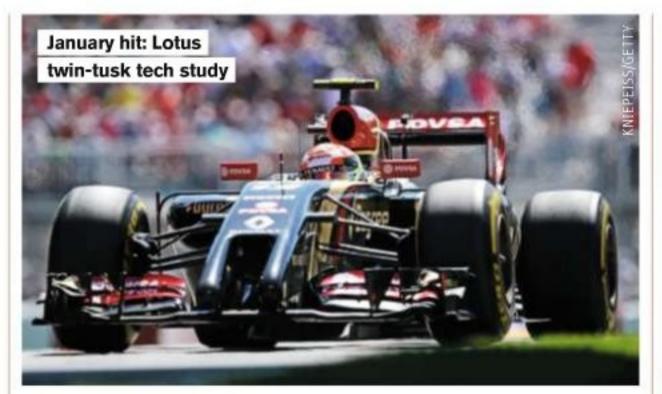


2 Analysis of McLaren's suspension 'blocks'

McLaren's rear suspension set-up caused a stir in preseason testing. Following the car's first appearance in public our technical expert Gary Anderson was quick to explain how they worked, and how they got around F1's complex (and often restrictive) regulations.

3 Extent of Bianchi's injuries revealed

Reliable information was sometimes hard to find in the wake of Jules Bianchi's horrific accident at the Japanese Grand Prix, so when his family first revealed details of his injuries and his condition on the Tuesday after the race, it proved to be the biggest story surrounding the unfortunate situation. It was closely followed by our in-depth report on the FIA's full explanation of the accident, which brought several new pieces of information to light.



The launch of the Lotus
E22 made a splash in January
as the team had created a unique
interpretation of F1's 2014
front-end regulations. While
other teams went for the unsightly
nose tip or a lower, flatter design,
Lotus took the radical twin-tusk
approach. The first images of the
car were narrowly surpassed in
popularity on AUTOSPORT.com
by Craig Scarborough's technical
analysis of the design.

Honda reveals first image of 2015 F1 engine

As the 2014 season wore on, anticipation grew for the prospect of Honda becoming the fourth engine manufacturer on the grid next year when it returns with McLaren. In the week leading up to its home grand prix at Suzuka, the Japanese firm released the first picture of its new power unit. Six weeks later McLaren ran the engine in its 2014 car for

the first time, but the first images of the engine proved slightly more popular.

6 Williams to bring Martini back to F1

Williams' fantastic season on-track kicked off with some positive news off-track, as a new sponsorship deal brought the iconic Martini stripes back to F1 for the first time since the '70s.

7 F1 set to ban FRIC suspension systems

Formula 1 loves a mid-season technical row, and this year it was the front-to-rear interconnected suspension system (FRIC) that caused a storm, and was eventually banned by the governing body in the summer. It was believed at the time that the removal of FRIC from the cars would affect Mercedes' advantage over its opposition, but the change did little to derail the Silver Arrows' dominance in the second half of the year.









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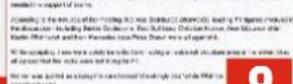












water providing water to go about





F1 deemed closed cockpits ugly

Jules Bianchi's accident in the Japanese GP put the focus back on F1 cockpit safety, and it emerged that back in 2013 the teams rejected moves to introduce closed cockpits because they were "shockingly ugly". By that stage the FIA had decided that a front roll-hoop was the only workable solution, and the teams were not willing to progress with that so the plans were shelved.

McLaren reveals 2014 car

While a couple of teams had already shown computergenerated images of their 2014 cars, McLaren was the first team to properly reveal its new machine in the flesh. The striking head-on images of the car showed just how extreme some teams' approaches to the 2014 nose regulations would be.



Wolff warns Rosberg of consequences

The clash between Nico Rosberg and Lewis Hamilton at Spa led to one of the busiest days of the F1 season on AUTOSPORT.com. The top story from that day just makes it into our top 10, as Mercedes motorsport boss Toto Wolff warned that Rosberg was going to need more than "a slap on the wrist" as punishment for colliding with his team-mate.

WAUTOSPORT+

Top features on AUTOSPORT PLUS in 2014



Gary Anderson predicts F1's pecking order

After two of the three pre-season tests, our tech expert crunched the numbers to reveal just how far ahead Mercedes was.



Mhen Adrian Newey got it wrong

As Red Bull suffered a disastrous pre-season, Edd Straw picked out five Adrian Newey cars that weren't up to his usual standards.



Why Ron Dennis reclaimed 'unfit' McLaren

Early in the year, Jonathan Noble heard from Ron Dennis. Now back in charge of McLaren, Dennis explained his plans to turn the team around.



Ten things we learned from the Jerez F1 test

After one of the most eventful pre-season tests in recent memory, AUTOSPORT's team dissected the dawn of F1 2014.



5 Tech analysis: Ferrari F14 T

Of all the top teams, Ferrari's new car was the one that generated the most interest when Craig Scarborough analysed its design.



Ask Gary Anderson: Should Alonso go to McLaren?

Our new 'Ask Gary Anderson' series proved popular all year, with this driver-market-led piece leading the way.



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BOOK NOW! 0844 581 1372 WWW.AUTOSPORTINTERNATIONAL.COM V8 SUPERCARS HOMEBUSH (AUS), DECEMBER 6-7 RD 14/14

Whincup brings it home – but not dry

THE WEATHER PLAYED A BIG ROLE IN V8 Supercars' 2014 finale at Sydney Olympic Park, with two of the three races cut short by torrential rain.

Jamie Whincup won the opening race and was in front when the second was stopped when the track was hit by flash flooding. After a stoppage the race was 'restarted', which meant the cars trailed around behind the safety car until it was mercifully terminated.

On Sunday almost exactly the same thing happened. The race started dry and, when it did rain, Shane van Gisbergen was in a class of his own, seizing and building a lead. The track dried, but when the rain returned it did so properly, forcing all the drivers in for wets before the race was stopped. With the track getting wetter in the fading light, officials declared the race.

Van Gisbergen's win vaulted the Tekno Holden man to second in the championship. Mark Winterbottom's cause was not helped by a crash in the first race, and Craig Lowndes's plans of giving Triple Eight a series one-two were dashed by a 100mph qualifying crash, which put him at the back of the grid for the first two races and a couple of painful (possibly broken) ribs.

Marcos Ambrose's return to V8 Supercars was predictably tough, the former NASCAR driver running at the rear of the grid and driving sensibly in the conditions. A best



result of 16th may not get headlines but he returned a car intact and gained a lot of miles.

Paul Dumbrell ended his recordsetting year in the second-tier Dunlop V8 series with a win and a crash, allowing Cam Waters to win and seal second overall.

• Phil Branagan

RESULTS

Race 1 1 Jamie Whincup (Holden Commodore

VF), 37 laps in 1h01m50.6379s; 2 Tim Slade (Holden), +3.1095s; 3 David Reynolds (Ford Falcon FG); 4 Scott McLaughlin (Volvo S60 Polestar); 5 Rick Kelly (Nissan Altima); 6 Shane van Gisbergen (Holden). Race 2 1 Whincup, 23 laps in 1h05m51.1979s; 2 van Gisbergen, +0.7818s; 3 McLaughlin; 4 Jason Bright

(Holden); 5 Mark Winterbottom (Ford); 6 James Courtney (Holden). **Race 3 1 van Gisbergen**, 44 laps in 1h14m50.0418s; 2 Garth Tander (Holden), +1.8157s; 3 Courtney; 4 Whincup; 5 Chaz Mostert (Ford); 6 Slade. **Points 1 Whincup, 3364**; 2 van Gisbergen, 2781; 3 Winterbottom, 2763; 4 Craig Lowndes, 2656; 5 McLaughlin, 2509; 6 Courtney, 2489.

ASIAN LEMANS SEPANG (MAL), DECEMBER 7 RD 4/4

Mighty OAK is unbeaten

OAK RACING COMPLETED A 100 PER cent record in this year's Asian Le

Mans Series with its Morgan-Judd.
American-Chinese racer David
Cheng started the car and instantly
pulled out an advantage on the
Eurasia Motorsport ORECA-Nissan
of Pu Jun Jin.

Newcomer Yuan Bo then drove the middle stint before Dutch-born Chinese Ho-Pin Tung completed the race, which finished in torrential rain, for OAK.

The Eurasia car, which Pu shared with James Winslow and John Hartshorne, was the only other LMP2 car in the race.

Irishman Matt Griffin led the lineup in the Clearwater Racing Ferrari that took GT class honours from the AAI BMW Z4s, with Briton Ollie Millroy on the driving



strength of the car that finished second and class poleman Marco Seefried leading the other.

RESULTS

1 Ho-Pin Tung/David Cheng/Yuan Bo
(Morgan-Judd LMP2), 77 laps in
2h44m40.459s; 2 James Winslow/Pu Jun Jin/
John Hartshorne (ORECA-Nissan O3R), -2 laps;
3 Matt Griffin/Mok Weng Sun/Richard Wee
(Ferrari 458 Italia GT3); 4 Tatsuya Tanigawa/
Ollie Millroy/Jun San Chen (BMW Z4 GT3);
5 Marco Seefried/Morris Chen/Ryohei
Sakaguchi (BMW); 6 Jonathan Venter/Samson
Chan/Kevin Tse (Ligier-Honda JS53). Points
1 Tung/Cheng, 103; 2 Pu/Hartshorne, 55;
3 Winslow, 36. GT 1 Tanigawa/Chen, 95;
2 Seefried/Chen, 71; 3 Sakaguchi, 59.

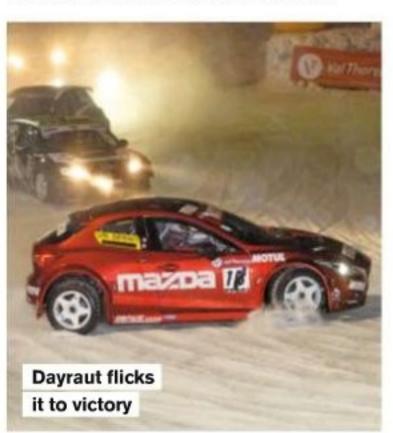
ANDROS TROPHY VALTHORENS (F), DECEMBER 6-7 RD 1/7

Dayraut has an ice weekend

JEAN-PHILIPPE DAYRAUT EQUALLED

Yvan Muller's record of 48 Super Final wins on Saturday, but had to play second fiddle to Franck Lagorce the following day.

Driving a works Mazda run by Sainteloc Racing, Dayraut led home the Dacia Lodgy of Lagorce in the first Super Final after topping the timed qualifying runs — for which points are more heavily weighted than the races. The other Mazda of World



Rallycross ace Toomas Heikkinen finished third.

An off for Dayraut in qualifying on Sunday meant repairs were needed to the Mazda. That gave Lagorce an edge, which he held to the end. Third was the Toyota of Olivier Panis, run by top Belgian GT squad WRT.

Sebastien Loeb turned out for Citroen but finished the weekend as the eighth-highest scorer, comfortably outpointed by fellow DS3 pilote Benjamin Riviere.

Among the electric racers, DTM Audi driver Adrien Tambay beat Lagorce to win both finals.

RESULTS

Final 1 1 Jean-Philippe Dayraut (Mazda 3).

6 laps in 5m05.737s; 2 Franck Lagorce (Dacia Lodgy), +4.623s; 3 Toomas Heikkinen (Mazda); 4 Benjamin Riviere (Citroen DS3); 5 Jean-Baptiste Dubourg (Renault Clio 3); 6 Olivier Panis (Toyota Auris). Final 2 1 Lagorce, 6 laps in 4m58.460s; 2 Dayraut, +0.663s; 3 Panis; 4 J-B Dubourg; 5 Heikkinen; 6 Andrea Dubourg (Renault). Points 1 Dayraut, 117; 2 Lagorce, 113; 3 Panis, 100; 4 Riviere, 98; 5 J-B Dubourg, 97; 6 Heikkinen, 96.



International Racing Driver of the Year

Lewis Hamilton





International Racing Driver Roll of Honour

1982 Keke Rosberg

1983 Nelson Piquet

1984 Niki Lauda

1985 Alain Prost

1986 Nigel Mansell

1987 Nigel Mansell

1988 Ayrton Senna

1989 Jean Alesi

1990 Ayrton Senna

1991 Ayrton Senna

1992 Nigel Mansell

1993 Nigel Mansell

1994 Damon Hill

1995 Michael Schumacher

1996 Damon Hill

1997 Jacques Villeneuve

1998 Mika Hakkinen

1999 Mika Hakkinen

2000 Michael Schumacher

2001 Michael Schumacher

2002 Michael Schumacher

2003 Juan Pablo Montoya

2004 Jenson Button 2005 Kimi Raikkonen

2006 Fernando Alonso 2007 Lewis Hamilton

2008 Lewis Hamilton

2009 Jenson Button

2010 Sebastian Vettel

2011 Sebastian Vettel

2012 Sebastian Vettel

2013 Sebastian Vettel

2014 Lewis Hamilton

LEWIS HAMILTON'S MAIN TITLE RIVAL, Mercedes-team-mate Nico Rosberg, admitted after the season that the Briton had been the best driver on the grid in 2014 - and AUTOSPORT's readers clearly agreed.

Despite Daniel Ricciardo's heroics, and some gutsy driving from Fernando Alonso, it was Hamilton who was picked for AUTOSPORT's International Racing Driver award. But while the trophy might not have been a huge surprise, what did catch Hamilton out was the identity of the presenter: his musician friend Tinie Tempah.

Tempah spoke about how inspirational Hamilton had been this year, while the man himself admitted that his second crown meant so much more to him than the first.

"It's the most special and the most important one for me," he said. "The first one was good.

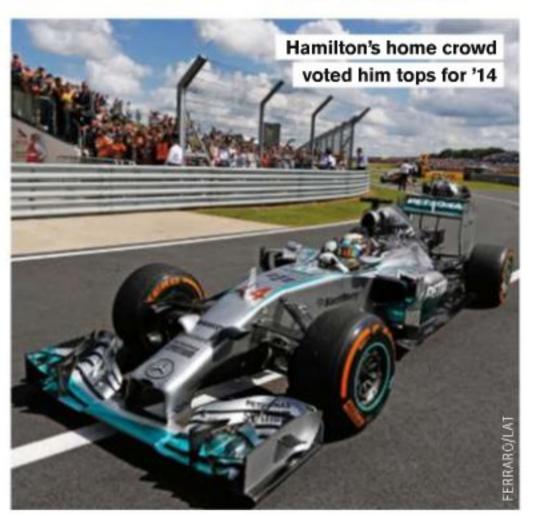
But it got to a point where one championship is good but more is better!

"So, getting this second one, especially after everything I've been through, feels so much better than the first and I'm enjoying it so much more."

Hamilton said the rollercoaster of emotions this season – where the highs of victories contrasted with some frustrating incidents - meant that success in the end was sweeter.

"There was the car setting on fire, the spins, all sorts! So, it wasn't an easy year at all. But what I feel mostly happy about was that I did everything the right way.

"So that's why it was perhaps even tougher going into the last race. I knew the difference of the results and all the things that had happened through the year. So I had to make sure I got it."

















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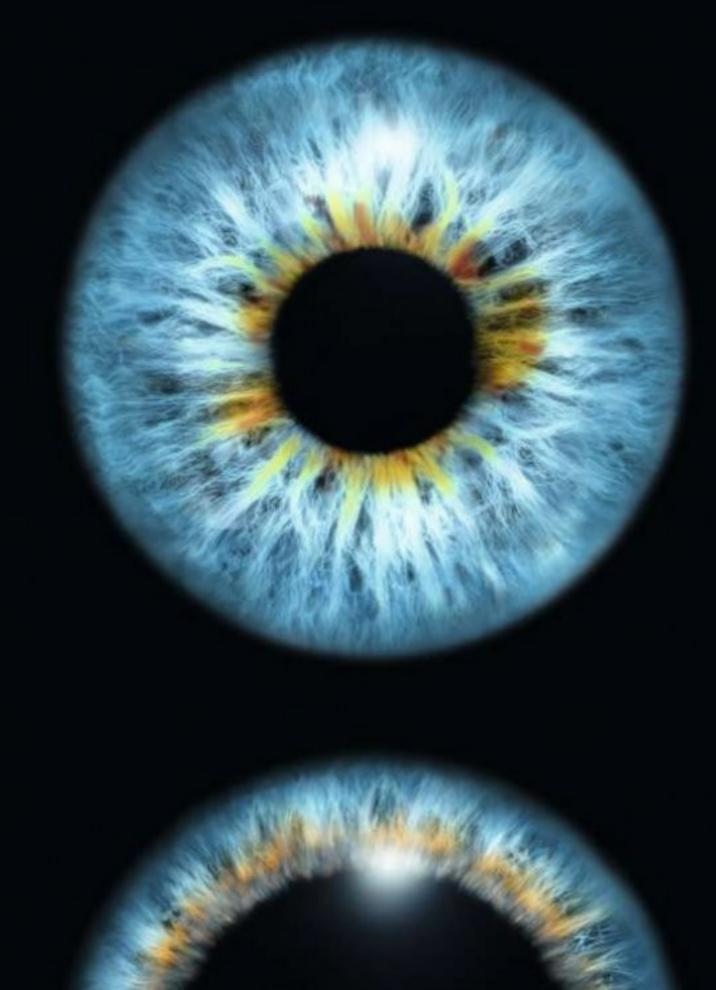
Official government fuel consumption figures in mpg (litres per 100km) for the S-Class AMG Coupé range:

CO₂ emissions 279–237 g/km. Official EU-regulated test data are provided for comparison purposes and actual performance will depend on driving S 63 AMG Coupé at £132,955 on-the-road with optional brake calipers painted red at £620, Carbon Fibre Package at £5,000 and 20" AMG alloy wheels painted features/options may not be available. Please contact your local Retailer for availability. Prices correct at time of print 12/14.



urban 16.5 (17.1)- 20.2 (14.0), extra urban 32.8 (8.6)-36.2 (7.8), combined 23.7 (11.9)-28.0 (10.1).

style, road conditions and other non-technical factors. The new S-Class AMG Coupé range starts from £125,595 on-the-road. Model featured is a new Mercedes-Benz matt black at £1,740 (on-the-road price includes VAT, delivery, 12 months' Road Fund Licence, number plates, first registration fee and fuel). Some combinations of







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British Competition Driver of the Year

Lewis Hamilton

Presented by

HAVING FINALLY GOT HIS HANDS on the official FIA trophy for his Formula 1 drivers' world championship success last week, Lewis Hamilton was always likely to secure more silverware at the AUTOSPORT Awards.

And despite a hugely successful year for British drivers in international motorsport, it was no surprise to find Hamilton pick up the British Competition Driver trophy.

A title triumph, and a tally of 11 wins, had made him a clear winner for AUTOSPORT's readers.

After receiving a standing ovation as he arrived to pick up the trophy, Hamilton reminisced about being back on top - at the event where he first met McLaren Group CEO Ron Dennis.

"I'm thrilled being up here as a two-time world champion," said Hamilton, whose award was presented by Martin Brundle. "I remember being here when I was 10. It was back in 1995 but was exactly the same then."

"We had an amazing season and were fortunate to have the best team and car."





Rookie of the Year

Daniil Kvyat

DANIIL KVYAT BROKE RECORDS IN Formula 1 this year. By becoming the youngest points scorer in history on his debut, the Russian almost immediately justified Red Bull's decision to promote him into F1 straight out of GP3/F3.

From that ninth-placed dream start at the Australian Grand Prix, the Toro Rosso racer didn't always enjoy the smoothest ride, but he out-qualified experienced team-mate Jean-Eric

Vergne 12-7 across the season, and once it became clear Sebastian Vettel was off to Ferrari next year, there was only one driver in the frame to take the quadruple world champion's vacated seat.

Perhaps that's the best vindication of the 'rookie of the year' status bestowed on Kvyat by AUTOSPORT readers.

"It's been great," said Kvyat. "I was lucky to work with great people at Toro Rosso – they supported me all the way."

















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Official fuel economy figures for the BMW i8: Weighted combined cycle: mpg 134.5 (2.1 l/100 km), CO2 emissions 49 g/km, power output (engine) 170/231 kW/hp, power output (electric motor) 96/131 kW/hp, total average energy consumption per 62 miles/100 km (weighted combined cycle) 11.9 kWh, customer-orientated total range up to 373 miles. Maximum electric range value 23 miles, common average electric range value (e-Drive only) up to 23 miles. Figures may vary depending on different factors, including but not limited to individual driving style, climatic conditions, route characteristics and preconditioning. The BMW i8 is a plug in hybrid electric vehicle that requires mains electricity for charging.

GRIFFITHS/LAT

National Driver of the Year

Colin Turkington

MUCH WAS MADE OF THE performance advantage of West Surrey Racing's BMW 125i M Sport in the British Touring Car Championship this year, but you'd be hard pressed to find anyone who begrudged Colin Turkington the title.

National Driver of the Year would have been the perfect end to the perfect season for the likeable Turkington had his immediate future in the BTCC not been thrown into question two days earlier when eBay Motors declined to renew its WSR sponsorship deal.

Despite the uncertainty, the 32-year old was in his usual genial form on Sunday night.

"It's pretty special to win this award for the second time," he said. "It's nice to know that the people sat at home appreciate the effort that we put in and that they saw me as the best.

"I have to say special thanks to my team WSR and Dick Bennetts. They've given me an incredible car. I want to be back with number one on the side of the car. I'm determined to be back and defend my crown."





British Club Driver of the Year

Ben Barnicoat

MOVING FROM KARTS TO CARS IS A tough enough step on its own. So when you carry the weight of expectation a European karting crown and Racing Steps Foundation backing bring as well — not to mention being thrust straight into continental competition — the pressure is intense.

Not that it fazed Ben Barnicoat at all

— the 17-year-old went on to clinch the
Formula Renault Northern European
Cup title as a single-seater rookie.

The McLaren-affiliated youngster received his Club Driver of the Year prize from the F1 team boss Eric Boullier, and was delighted to have won over AUTOSPORT readers.

"I'm extremely happy the readers have chosen me," said Barnicoat, whose title triumph earned him a McLaren AUTOSPORT BRDC Award final berth. "To win the championship in my rookie year was amazing. It was a great season and I hope I'll be back next year!"

















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Subject to official confirmation by the FIA of the results of the 2014 FIA Formula One World Championship.

John Bolster Award

Gordon Murray

IT'S NOW 40 YEARS SINCE A
Formula 1 car designed by Gordon
Murray first won a grand prix. When
Carlos Reutemann took the chequered
flag at Kyalami in Murray's distinctive
trapezoidal BT44 in 1974, he set the
young South African on the path to
becoming an engineering superstar.

But the BT44 was positively conventional compared with some of the ideas that would take shape on Murray's drawing board in the coming years, from surface-cooling to the incredible BT46 'fan car' and beyond.

"It was a fun time," he says. "I was lucky to be operational in that period. And that's one of the reasons I stopped, because the regulations were getting very tight and you couldn't innovate in big steps any more."

In the 1990s Murray oversaw the creation of McLaren's F1, the ultimate road-going sportscar. But he admits that his greatest satisfaction comes from the F1's unlikely track success.

"When I look back over it, we had five Formula 1 championships and two sportscar titles, but winning Le Mans in 1995 was the best for me because it [the F1] was a road car. It wasn't supposed to race and win against prototypes."







Pioneering and Engineering Award Presented by TATA COMMUNICATIONS

Formula E

WHEN THE FIA FIRST FLOATED THE concept of an urban-based clean-energy racing series, some cynics dismissed it as a gimmick that would never happen.

But under the energetic leadership of Formula E Holdings CEO Alejandro Agag, who picked up the award, the vital elements have coalesced: a globe-trotting calendar featuring competitive cars and drivers, and some spectacular racing broadcast live on free-to-air TV in many territories. "It's fantastic," he says. "Really the achievement is to have made it to the first race. It was really difficult, but we had some great partners. To have names like McLaren, Williams and Renault behind us was very important to give credibility to this kind of racing.

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"We've proved that electric racing is possible, and this award is very special because it comes from the motorsport industry, so it shows recognition from racing people."

















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Gregor Grant Award

Richard Petty

FORGET LIFETIME ACHIEVEMENT, Richard Petty has achieved enough in his 78 years for several Gregor Grant Awards. The King won 200 races in NASCAR's top division, seven championships and seven Daytona 500s, making him the most successful stock car driver in history.

The award was presented by Sir Jackie Stewart, who knows Petty from his time commentating in the US. To mark the occasion, the famous footage was screened of the finish to the Daytona 500 in 1976, when Petty and David Pearson clashed on the final lap.

"That was what's called a racing accident - I was trying to get to the same place he was trying to get," said Petty. "It didn't work out too good.

"More people remember that race than the seven [Daytona 500s] I won!"

Stewart summed up Petty's achievements: "This man has a bigger following than anyone in the history of motorsport. When people see him walking down the pitlane, he is The King. It doesn't get much better than that."





WILLIAMS SEARCHES FOR A STAR

AT THE AUTOSPORT AWARDS TWO years ago, Claire Williams - now deputy principal of the F1 team that carries her family's name - had an idea. The announcement of the AUTOSPORT Williams Engineer of the Future award was the realisation of that idea.

"I sat here and thought Williams needs to be doing something," she said. "Anyone who's talked with my dad will know how important



engineering is to Williams. It's the bedrock of what we do. We need to make sure we are encouraging kids in secondary education and universities to come into our sport."

Full details of the award, open to those studying engineering at selected UK universities, will be revealed next year. But the winner will spend two years working with the Williams team, mentored by chief technical officer Pat Symonds.

"We're looking for the next Ross Brawn or Adrian Newey," said Symonds. "We're looking for someone who is well above average and we'll be testing them to the full."

















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"GO ON McLAREN... GIVE BUTTON THE DRIVE"

WITH THE F1 WORLD'S ATTENTION focused on whether or not 2009 champion Jenson Button will remain at McLaren, the team's racing director Eric Boullier was placed firmly in the line of fire when he took to the stage to present the Club Driver of the Year award. Steve Rider wasn't going to pass up the opportunity to pile on the pressure.

"What you need is an experienced and settled driver line-up," said Rider. "I know you don't want to rush into these things, but exactly where are we with who is going to drive alongside Fernando?"

"We have never been so close, that's

one thing," said Boullier. "There is actually no decision taken yet." Cue boos and hisses from the floor. Later, it was Button's turn on stage.

Rider: "So, there's no news. We tried to put a word in earlier on. Your phone is definitely switched on?"

Button: "I've got a new Japanese number, so that might be why I haven't heard anything. Do any of you think I should be racing in F1 next year?" Cue cheers from the audience.

"If it was my first year in F1, it would be a lot more difficult," added Button. "But I've had an amazing career in F1. It's been an amazing experience for a kid from Somerset."

















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Racing Car of the Year



Rally Car of the Year

Volkswagen Polo R WRC

VOLKSWAGEN MOTORSPORT director Jost Capito collected the Rally Car of the Year Award for the Polo R WRC. VW dominated this year's manufacturers' championship, taking the title with three rounds remaining after winning 12 rallies.

The team fielded three Polos throughout the season with Sebastien Ogier, Jari-Matti Latvala and Andreas Mikkelsen driving the cars. The Polo was only beaten in Germany. Capito said: "This award is like the world championship for the cars. Last year, a sports prototype got lost on its way back from Pikes Peak and found its way in among the rally cars... [Peugeot's 208 T16 Pikes Peak beat the Polo R WRC]

"Seriously, it's a big honour for us to take this award and incredible to take the world championship with the car for the second year. And we're already working hard for next year!"





















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Rally Driver of the Year

Sebastien Ogier

SEBASTIEN OGIER BACKED UP HIS second WRC drivers' title with a second AUTOSPORT Award on Sunday.

The Frenchman was a dominant force in this year's series, winning eight rounds, including the season finale in Wales. He took the 2014 crown in Spain, with one round to spare.

After starting the evening with the 'world champion's walk' down the stairs into the room, Ogier took Volkswagen technical boss François-Xavier Demaison with him on stage to collect the Award from next year's Toro Rosso duo Carlos Sainz and Max Verstappen.

"I wanted to bring F-X with me," said Ogier. "If I won, it's mainly because of the team and because of F-X. He did a fantastic job; he gave me the perfect car for the last two years.

"This year was tougher than last year. Like in Formula 1, it was the same in rallying - an intense battle. My team-mate Jari-Matti Latvala offered me a great fight this year. It was not perfect all of the time - there was some problem in the middle of the year - but I'm happy with the way I reacted to this."





RIDER v HORNER: IT'S SERIOUS

AUTOSPORT AWARDS HOST STEVE Rider and Red Bull team principal Christian Horner have made a habit of some lively clashes on the stage in recent years. But this year, the pair agreed to be a little more serious.

"You've got off mighty lightly tonight, haven't you?" asked Horner of Rider before he presented the Rookie of the Year award to 2015 Red Bull driver Daniil Kvyat.

"We're playing it straight tonight, and I assume that you are too," Rider fired back.

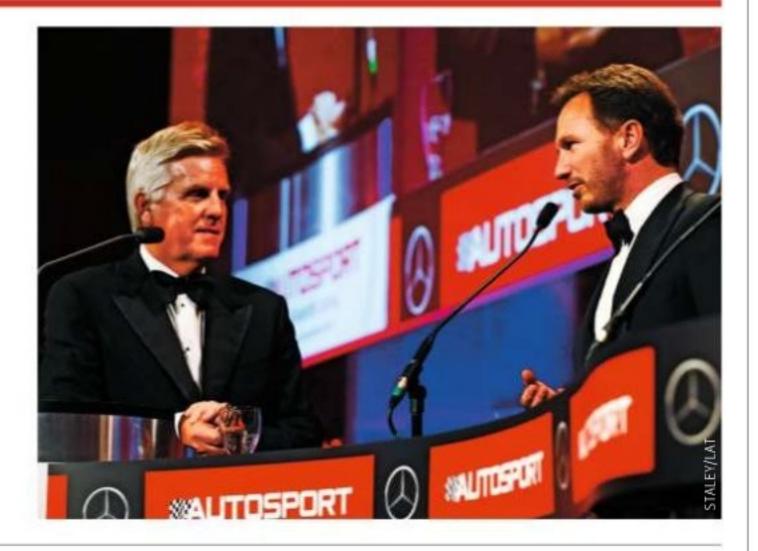
It was a very sensible start, before attention turned to the theft, on Friday night, of silverware from Red Bull's Milton Keynes

base. That didn't seem to be a topic suitable for levity. Until Horner's pay-off.

"We had a ram raid the night before last and 62 trophies were taken," said Horner. "Unfortunately, the ones they left behind were the AUTOSPORT ones...

"The problem is, it's not the value, it's what they stand for. Anybody that's won any trophy, any of these AUTOSPORT trophies, any of these international trophies, it's the hard work, it's the effort, it's the passion behind them. That's the great shame, the meaning they have to the team.

"Hopefully, Sebastian will return them..."

















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Congratulations George Russell

McLaren AUTOSPORT BRDC Award winner 2014

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The McLaren AUTOSPORT BRDC Award judging panel:

Andrew Kirkaldy, Jason Plato, Kevin Turner, Ian Titchmarsh, Mark Williams Chairman of the judges: Derek Warwick













Awards 2014 in association with Mercedes-Benz

McLaren AUTOSPORT BRDC Award winner 2014

George Russell

The finalists

Alexander Albon Ben Barnicoat Sennan Fielding

Seb Morris George Russell Harrison Scott

WAITING TO FIND OUT IF YOU'VE won the McLaren AUTOSPORT BRDC Award can be a frustrating process, even if you've passed some of the time making impressive GP3 and Formula 3 testing debuts.

In London on Sunday night, George Russell became the youngest-ever winner of the biggest prize in junior motorsport - aged just 16 years, nine months and 22 days.

It capped an incredible maiden season in car racing for the former karting star, one in which he dramatically claimed the BRDC Formula 4 title in a final-round shootout and made a race-winning appearance in the Formula Renault Eurocup as a wildcard entrant in the finale at Jerez.

His Award triumph came a month after a whirlwind fortnight that comprised his Eurocup triumph, the BRDC F4 title decider and then the Award assessment days at Silverstone.

"It's been an extremely long wait,"





he said. "I gave it 110 per cent and I knew if I did the same thing as I've done all year I'd be in with a shout."

Russell's move into single-seaters was always going to be under great scrutiny following a karting career that included four consecutive titlewinning seasons from 2009 to 2012.

After back-to-back British titles in the Cadet and Minimax classes, he became a double European KF3 champion at just 14 with a secondsuccessive triumph.

His move into the European KF championship - won by Formula 1-bound Max Verstappen – was slightly more difficult but he was fifth in the WSK Euro Series before starring in the Formula Renault Eurocup end-of-season test.

Single-seater racing beckoned for 2014, with his BRDC F4 campaign with Lanan Racing dovetailed with a Koiranen-run Formula Renault ALPS assault - though not before frantically-arranged races in Peugeot 206, Toyota MR2 Roadster and Citroen 2CV machinery in a bid to gain licence signatures.

His path to the BRDC F4 crown looked serene at first under the guidance of Lanan's Graham Johnson, but two incidents with the same rival threatened to ruin his title bid.

A stellar performance in the Snetterton finale, in which he clinched pole in qualifying and won the third and final race, meant he beat team-mate Arjun Maini by just three points. British title glory was complemented by a podium-finishing run to fourth in Renault ALPS and his superb Eurocup victory, which was all the more impressive given that it came in his first appearance with French team Tech 1 Racing.

Subsequent testing performances in Formula 3 and GP3 machinery have convinced him to look beyond two-litre Renault next season, something he is confident his Award triumph will help play a part in.

"There's been a number of amazing drivers who have won this Award in the past," he said. "I don't know exactly how it will open up doors but it will open up a lot. I'm over the moon."

George Russell

Age: 16

From: Wisbech, Norfolk



2014: BRDC Formula 4 champion (5 wins, 5 poles, 5 fastest laps, 11 podiums); 4th in Formula Renault ALPS (1 podium); 1 win in Formula Renault Eurocup

2013: 5th, WSK Euro Series 2012: CIK-FIA Euro KF3 champion

2011: CIK-FIA Euro KF3 champion

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McLaren AUTOSPORT **BRDC** Award Roll of Honour

David Coulthard Gareth Rees Oliver Gavin Dario Franchitti Ralph Firman Jamie Davies Jonny Kane Darren Turner Andrew Kirkaldy Jenson Button Gary Paffett Anthony Davidson Steven Kane Jamie Green Alex Lloyd Paul di Resta Oliver Jarvis Oliver Turvey Stefan Wilson Alexander Sims Dean Smith Lewis Williamson Oliver Rowland Jake Dennis Matt Parry George Russell

FIVE TO WATCH

The Lotus F1 junior and Formula Renault Eurocup

frontrunner is set to join Russell in the Formula 3 European Championship in 2014, with a Prema test already under his belt.

1 Alexander Albon 2 Ben Barnicoat The Racing Steps Foundation ace's graduation from the Formula Renault NEC to Eurocup has already been confirmed after his impressive title-winning rookie season in cars.

3 Sennan Fielding Russell's BRDC

F4 title rival has targeted a jump to the GP3 Series, although a move into two-litre Formula Renault is a possibility after missing out on the MABA prize.

4 Seb Morris

The Formula Renault NEC race winner missed out on the Award for a second time but his GP3 testing performance was very promising ahead of a planned 2015 switch.

5 Harrison Scott After losing out on

the Formula Ford title in acrimonious circumstances, Scott is planning a move into the Formula Renault Eurocup next season, and has already started winter testing.

































AUTOSPORT Awards 2014 Thank you





















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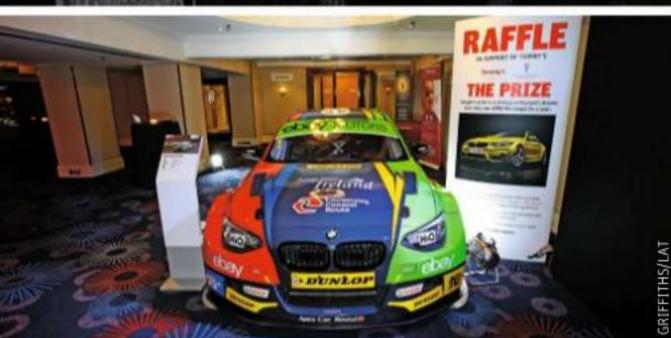














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Andrew Kirkaldy, Jason Plato, Kevin Turner, Ian Titchmarsh, Mark Williams Chairman of the judges: Derek Warwick

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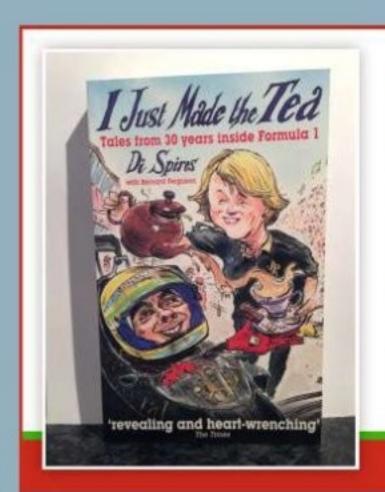




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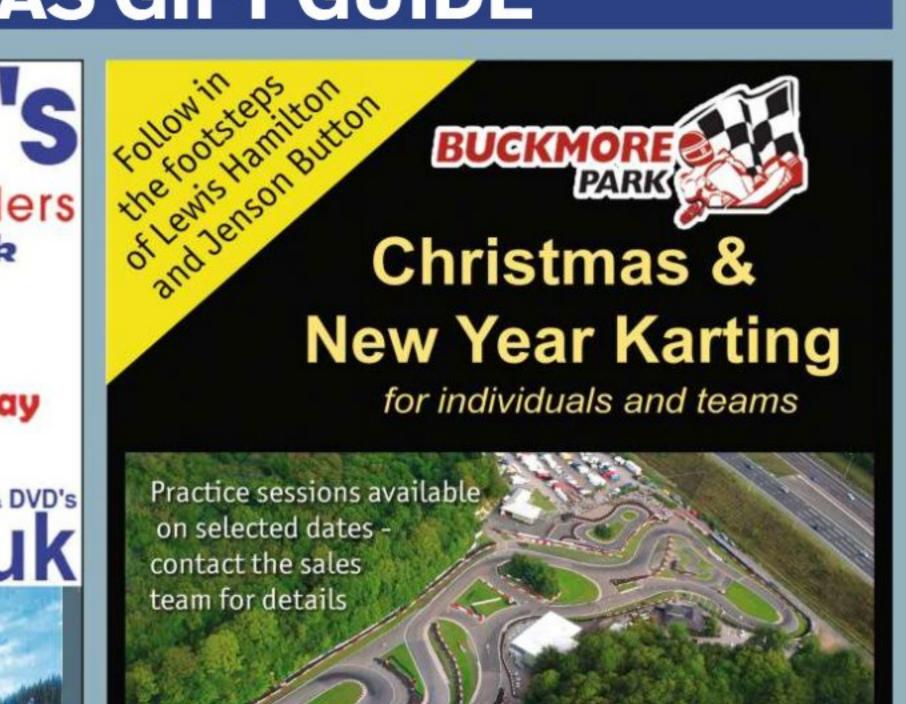
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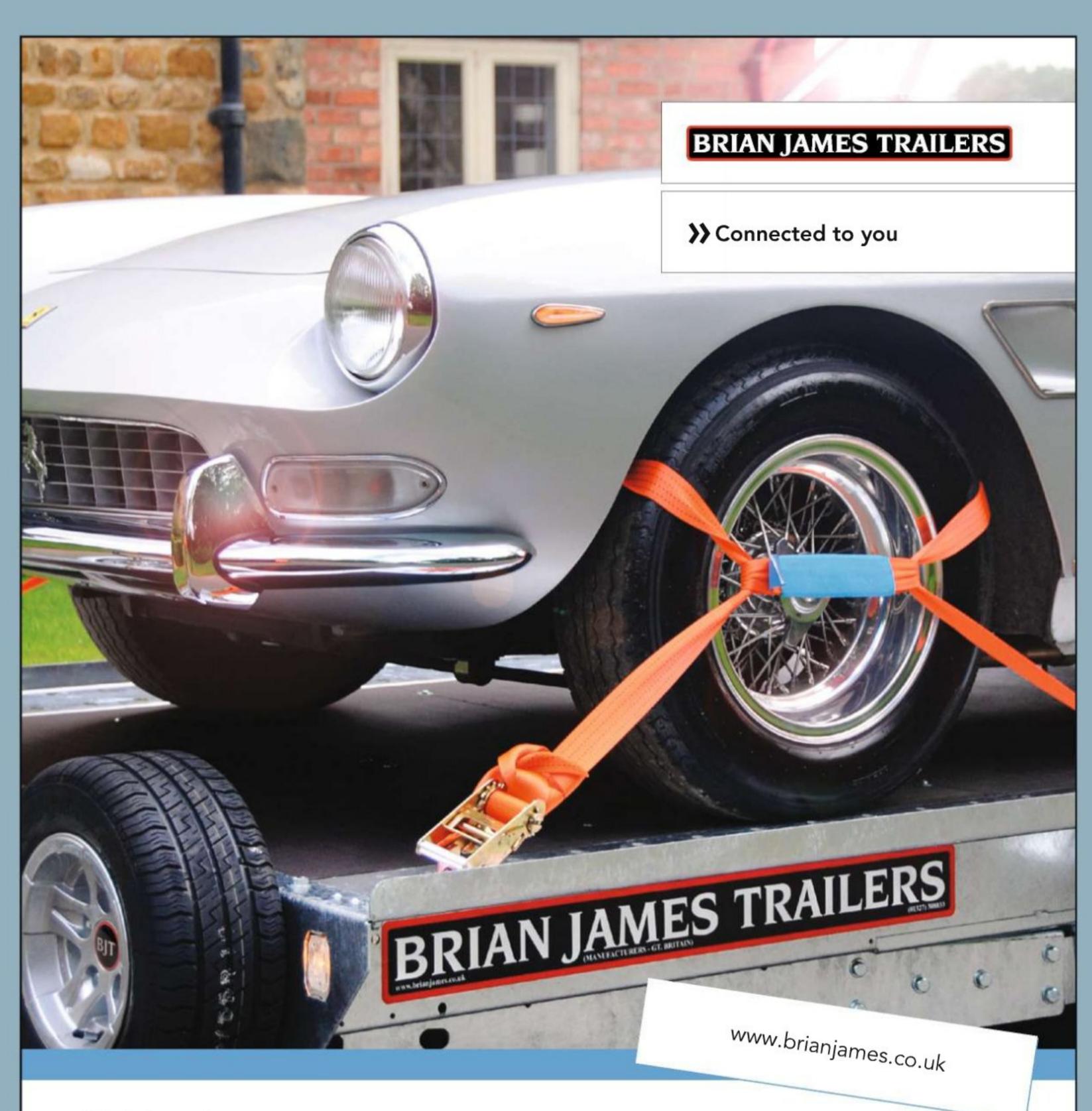


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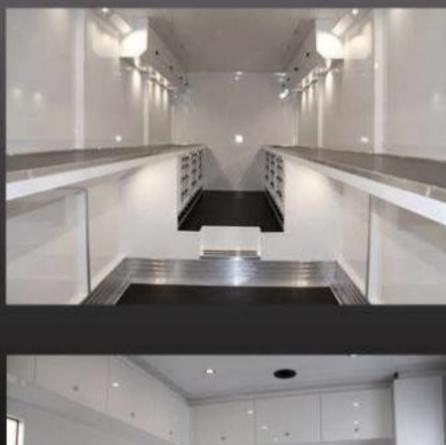
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Steve Hallam, Director of Competition, Michael Waltrip Racing





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Attard, Sims back in British GT

Champion to fight for second title alongside factory BMW ace in 2015

BRITISH GT CHAMPION MARCO

Attard will bid for a second title next season, with BMW factory driver Alexander Sims set for a full campaign alongside him.

The Barwell BMW Z4 GT3 team-mates were the class of the 2014 field, claiming four pole positions, two victories and two more podiums from the season's 10 races as Attard took the title.

Former single-seater ace Sims finished third in the points after missing the two races at Snetterton owing to clashing commitments with the works BMW team at the Nurburgring 24 Hours.

"You need all the jigsaw pieces to fall into place but with Alexander, the team and the car, I'm confident it will work," said Attard. "Alexander deserved to be champion last year; I learned so much from him."

Sims, who was full of praise for his co-driver throughout 2014, said he was pleased to be rejoining the team.

"Marco was brilliant to work with and proved himself to be one of the best amateur drivers on the grid," he added. "I am extremely excited to be back again with him and the team. I'm sure we can be very competitive again and fight for another championship."

FACTORY GINETTA RETURNS

Mike Simpson and Steve Tandy will continue their partnership from the final round of the 2014 season into a full campaign next year.

The duo will run one of two factory-entered Ginetta G55 GT3s from Lawrence Tomlinson's Team LNT concern, which did not take part in British GT last year in favour of a V de V Endurance campaign.

Ginetta is building a brace of new

Team LNT will field two G55s next season

G55s for the 2015 programme, which Tomlinson said was encouraging after its one-year hiatus.

"It's great to have Team LNT back on the British GT grid following a strong year in V de V," he said. "The Ginetta G55 GT3 car is now well-proven on the national and international stages - it is fantastic having another UK car in British GT."

AMD PLOTS GT4 ENTRY

British touring car squad AmD is planning to expand into the British GT4 class next year.

Shaun Hollamby's team wants to add a GT4 programme in the UK, alongside its BTCC Ford Focus and Ginetta Junior entries.

"AmD wants to do GT4 and we're evaluating which is the best car and package," said Hollamby. "It could be that the other driver owns the car or AmD does. We're looking for a quick young driver with a view to challenging for the championship and we're speaking to people already."

Sisters Jade and Chloe Edwards will also compete in British GT4 next season, stepping up from sporadic outings in the Aston Martin GT4 Challenge. The duo will race Stratton Motorsport's V8 Vantage, with which they won the Challenge season finale at Donington Park.

SCOTT MITCHELL

scott.mitchell@ haymarket.com @ScottMitchell89



THE PLAN TO INTRODUCE

a Silver Cup to British GT next season put 2014 champion Marco Attard's planned continuation in the series temporarily on hold.

It was always Attard's preferred option to return with Barwell and its Ecurie Ecosse-badged BMW Z4 GT3 alongside factory driver Alexander Sims, but the possibility existed of an all-Silver pairing coming along and wiping the floor with Pro-Am combinations.

Given the series is built on Pro-Am foundations, that did not sit well with some - Attard included. But series organisers have allayed his concerns that Silver Cup duos will dominate, and that's good on two levels.

First, it's always preferable to have a good champion in the field. British GT's growing reputation has meant it has more of a pull factor for drivers, rather than just being a means to an end. That champions want to remain on the grid instead of moving to Blancpain or the ELMS is important for the series.

Second, it means Sims will be back again. Circumstances conspired to deny him a share of the 2014 crown, but with no apparent clashes on the 2015 calendar it looks as though the former McLaren AUTOSPORT BRDC Award winner will have a proper run at the title. Success would be his first championship in car racing (he lost the 2008 Formula Renault UK title on dropped scores) and his name would be a fine addition to the trophy.

Speaking of MABA winners, congratulations are due to BRDC Formula 4 champion George Russell - the 26th winner of the McLaren AUTOSPORT BRDC Award, at just 16 years of age. We will be watching his 2015 season with great interest.





Mini Challenge

Neal Jr to swap Legends for Mini Cooper

MULTIPLE BRITISH TOURING

Car Championship title-winning squad Team Dynamics plans to run a multi-car team in next year's Mini Challenge, with Matt Neal's son Henry driving in the Cooper class.

Dynamics has been a mainstay of the BTCC since 1991 and in that time has racked up seven teams' titles, four drivers' championships and six Independents' crowns. In recent years the squad has run the factory Honda programme, with Neal Sr and Gordon Shedden both winning titles in its Civics.

The expansion coincides with Neal Jr's first full season of racing. The 19-year-old contested sporadic Scottish Legends events last season.

"It's very exciting to get out there and to try new championships and we see the Mini Challenge as a great platform for up-and-coming young drivers," said triple BTCC champion Neal Sr. "We started looking around for options for Henry and the Minis fit the bill perfectly.

"At the moment we have just the one car confirmed, but we're open-minded about running more should the opportunity arise. I like the look of the new F56 Challenge car because it should be a great bit of kit."

The Dynamics team will run out of its Pershore base and have assistance from its existing BTCC engineers. Series bosses claim more than 20 drivers have signed up for the 2015 championship, which will feature split grids for the new F56 and R56 JCW cars and the older Coopers, and hope to double that by the first round.

Renault Ciio Cup UK

Rivett returns for 10th Clio season as WDE expands

TRIPLE RENAULT CLIO CUP UK

champion Paul Rivett will return to the series in 2015 to spearhead a three-car effort from WDE Motorsport.

Rivett, whose 2015 campaign will be his 10th full season in the series, took on a dual driver-manager role with the new WDE team this season. He will be partnered by 2014 team-mate Charlie Ladell and series rookie Rory Green, who raced with WDE in Ford Fiestas.

Rivett's final-round victory at Brands
Hatch took his record win tally to 43 in
the Clio Cup and the 36-year-old is
keen to build on the team's maiden
year in Clio racing.

"I want to compete for the championship," said Rivett. "The first year with a new team and working as the team manager as well was always going to be a challenge, but WDE has come a long way in just one season.

"We've got some great staff, some more experienced guys joining us this year too, and we've moved into new premises as well. Next year looks set to be really fantastic."



Aston Martin GT4 Cup

AMOC return for Aston GT4 series after British GT loss

ASTON MARTIN'S ONE-MAKE

series for its V8 Vantage will not run on the British GT package next season.

The championship, which will be rebranded the Aston GT4 Cup for 2015, is set to rejoin the Aston Martin Owners Club bill after one year in support of the national GT series.

Former coordinator Andrew
Williamson had been keen for the
series to amalgamate into a standalone
British GT4 grid for 2015, after a year
of poor grid numbers in its previous



guise as the GT4 Challenge. The Aston GT4 Cup will also return to Dunlop rubber after a year using British GT supplier Avon Tyres.

James Bailey, director of motorsport communications at Dunlop, said:
"Having previously worked closely with Historic Promotions in promoting major racing events, we are confident that Duncan Wiltshire and his team will be able to grow the grids and attract new competitors to race the GT4 Aston Martin V8 Vantages."

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BRDC Formula 4

JHR makes BRDC Formula 4 move with Zip karting tie-up

EXPANDING BRITISH TEAM JHR

Developments will dovetail its foray into MSA Formula next season with a BRDC Formula 4 campaign in association with leading karting squad Zip.

Steven Hunter's team, which has won titles in each British Touring Car Championship support category, plans to run two cars in both junior singleseater categories in 2015. Former Minardi and Arrows Formula 1 chief



engineer Paul Leach will head up the new single-seater arm of JHR, which has now purchased a BRDC F4 chassis from leading team Lanan Racing and is in negotiations for a second.

"We're always looking for a new challenge and there's already some good talent in both series," said Hunter. "Both ourselves and Zip see this as a driver programme which takes racers up the ladder into professional motorsport. I don't see why it won't be a success."

JHR's driver line-up is likely to comprise existing car racers and karting graduates, with Zip Kart's Dan Parker planning to offer a prize test to several of its drivers, not just title winners.

"Zip is very aware that young drivers are wanting to move from karts to cars at a younger age," he said. "It will make the transition into car racing smoother for Zip drivers, as they know they will be going down a trusted route."



British Rallycross

Mondello return for BRX

THE BRITISH RALLYCROSS

Championship will return to Mondello Park next season for the first time since 2009.

Held over eight rounds, the 2015 season will get under way at Croft in March before the traditional Easter Monday slot at Lydden Hill in April. The Mondello event in June will be sandwiched by two events at Pembrey in South Wales.

Croft will again host the final round of the series in October, accompanied by the Rallycross Grand Prix the following day.

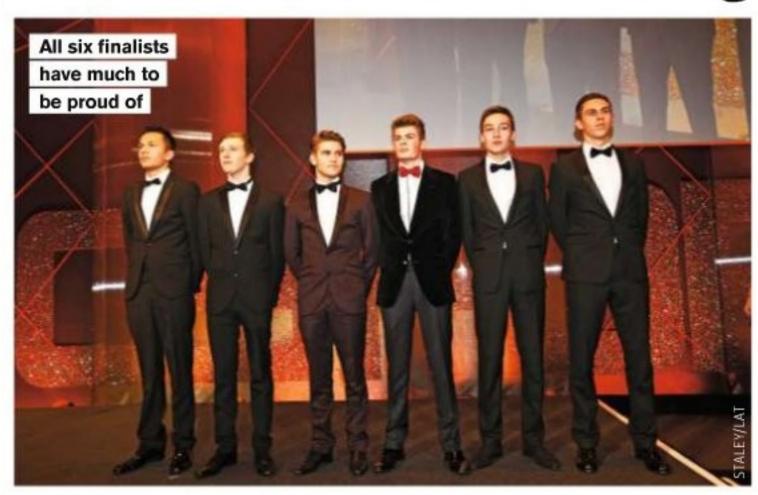
Four-time champion Julian Godfrey said: "The calendar looks good – it's much better spread out than last year where we were really bust at the start of the season and then had a big gap in the summer.

"I like Mondello, and I always seem to go well there."



HUMBLE PYE

The voice of club racing



Russell's star on the rise as Brits celebrate success

s symbolism goes, the sign in the East as I headed for the AUTOSPORT Awards in London's swanky Park Lane on Sunday could not have been more powerful, or a more poignant pointer to the evening ahead.

I did not know at that stage that NASCAR's 'King' Richard Petty would be there, mingling with newly crowned world champions Lewis Hamilton, Sebastien Ogier and Petter Solberg, motorsport's wise men and even a Shepherd at the Grosvenor House Hotel, venue for the magazine's showcase of talent since 1991.

As I beheld the wondrous harvest moon that illuminated the M3's intersection with the M25, it struck me that the natural phenomenon represented parallel journeys in pursuit of the McLaren AUTOSPORT BRDC prize for the six drivers.

Massive and low in the sky at this point, the golden orb appeared tantalisingly within reach, only to fade and mysteriously re-emerge small, high and distant under the planes on Heathrow Airport's flightpath as the motorway took a couple of seemingly insignificant turns.

I was involved in the Award judging process most years from 1990-2012 and attended every AUTOSPORT Awards ceremony bar a couple since the first in '82, so I feel for the candidates, who as ever put everything into the Silverstone run-offs. While one deservedly carries off a 'party bag' of potentially life-changing opportunities at the night's climax, five are consoled by families, teams and backers. Some may earn another shot, but all should be proud, regroup and learn from their priceless experience.

For George Russell, who capped

his first season in cars by snatching the BRDC F4 title at the final hurdle, though, the rollercoaster has already gathered momentum. As he takes his place alongside Jenson Button and Anthony Davidson as the 26th member of the Awards elite, we fervently hope the 16-year-old ultimately has the ability – and gets the breaks – to emulate them.

This has been a red-letter year for

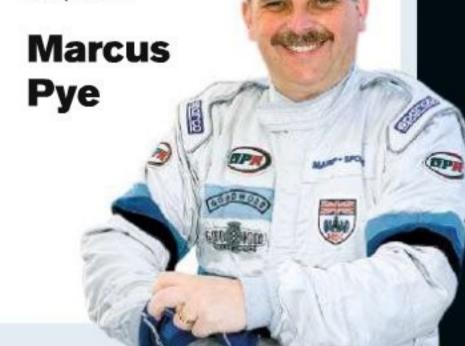
"Some finalists will

get another shot but

all should learn from

the experience"

British racers, with Jolyon Palmer and Alex Lynn aceing the GP2 and GP3 title races and Davidson landing the coveted WEC crown, won back in 1988 by fellow Sky F1 commentator Martin Brundle. Without schemes such as enthusiast Steve Sydenham's Racing for Britain, which stretched Martin's limited resources. far-sighted benefactor Graham Sharp's multi-pronged Racing Steps Foundation initiative and the MABA, our islands' modern racing heritage would be immeasurably the poorer.



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What you think of the motorsport news of the past week Who's it going to be: Kevin or Jenson?

LETTERS • BEST PICS • LATEST GEAR • ON TRACK & SCREEN • ONLINE

It's time to make your mind up

Dear McLaren,

For a team long known for its meticulous planning, your current inability to choose your driver line-up is embarrassing. From the moment you considered bringing on Fernando Alonso for next year you knew that you would have to sack either Kevin or Jenson, and yet here it is months later and you still can't come to a decision.

Yes, there are pros and cons either way you go, but you need to show a little compassion for the individuals involved and get on with it. You will hurt one or

the other; procrastinating won't make the decision any less painful, so put on your big boy pants and choose one or the other. (Or sack them both and bring up Stoffel!)

From the looks of it, you'll have your hands full getting your new engine (or whatever it's called these days) up and running. Get your drivers lined up and you'll have one less thing to worry about, and the 'loser' can get on with his life and career. Grow a pair and decide!

Mac Rand, Lake Placid, New York

Interesting lead letter extolling

the virtues of the World Endurance Championship (November 27). lagree it's an excellent series, but to claim (did I detect a hint of tongue in cheek?) that it's toppled Formula 1 from the pinnacle of motorsport is lapsing too far into hyperbole.

There's an awful lot wrong with F1 at the moment, but the sport's far greater than those currently running it (some might say running it into the ground...). It will survive, and eventually thrive again, so I have to say of its current travails that 'this too shall pass'.

The fact is F1 will always be most fans' gateway to motorsport, certainly in terms of the numbers required to

make it a globally popular sport. Frances Stewart

London SE13

Having watched Mark Webber's

terrible accident during the World Endurance finale at Interlagos live on television, I was delighted to hear that he escaped without serious injury

In these days of super-safe cars and circuits, it's thankfully rare to see such sickening accidents. When his mangled Porsche came to rest, I feared the worst.

Congratulations to all those who have played a part in raising safety standards over the years. It's too easy to talk about drivers not being gladiators like they were in the old days. But it's for the better of the

sport that injuries are rare and we get the chance to see our heroes not only have great careers, but long lives.

I'm looking forward to watching Mark get his first WEC win in 2015! James Taylor By email

I was delighted to see Petter

Solberg honoured with an AUTOSPORT Award on Sunday.

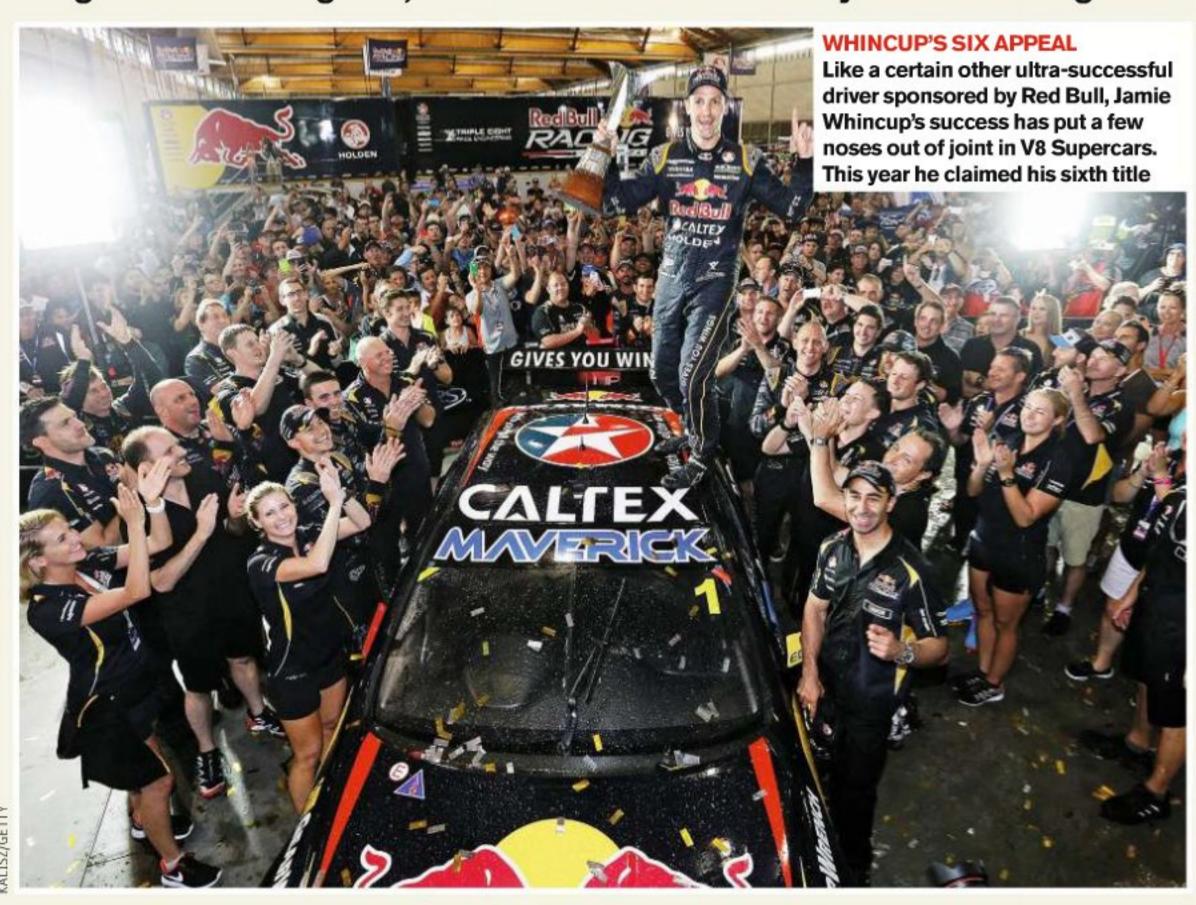
Winning a second world title in a different category is no mean feat, especially in a discipline as niche, competitive and riddled with talent

as rallycross. Steve Mitchell

By email

In pictures

Images around the globe, from Australia to Milton Keynes via Las Vegas



CONNAUGHTS WERE NEVER THIS FAST

Straight after the Lewis Hamilton had a date at the Grand Connaught to collect yet more silverware



HAVE YOU SEEN THIS MAN?

62 trophies were stolen from Red Bull's factory just days after Seb Vettel's farewell visit. "Hopefully he'll return them," joked team boss Christian Horner



CELEBRATING THE WYNN-ERS

Joey Logano smokes past the Wynn Las Vegas resort ahead of NASCAR's annual gala prizegiving party, hosted by TV funnyman Jay Mohr



In the shops

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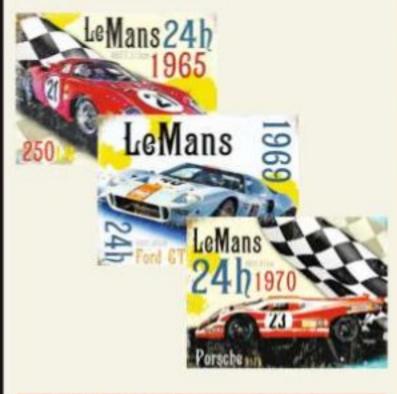
Due for release next week, the 2014 instalment of the annual official F1 season-review DVD packs almost five hours of action. It includes a round-up of pre-season testing, full race action from all 19 GPs, onboard footage, interviews with drivers and team members, and carefully edited radio banter. And all for under £15. Result.



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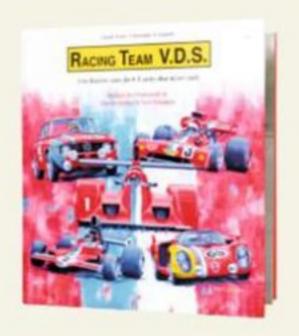
These retro metal wall signs depict key moments in the history of the Le Mans 24 Hours: Ferrari's last win, with the 250 LM, in 1965; Ford's fourth-in-row success - in the race's closest unstaged finish - with the GT40; and Porsche's maiden win with the 917K in 1970. Each measures 30 x 40cm and is ready to hang up on the garage or 'man-shed' wall.



RACING TEAM VDS BOOK

£49.99 - autosport.com/shop

Can-Am and Formula 5000 fans: gather round, for this one'll get the retro-reading juices flowing. Belgian Count Rodolphe van de Straten Ponthoz started his little team in 1964 and went on to win in Can-Am with his own car and in F5000 with Lola and Chevron chassis. It's a well-told tale with plenty of good stories from former drivers and team personnel.



AKOB EBREY

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Bushy Park, Barbados December 13-14 raceofchampions.com

MAUTOSPORT

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WILL STEVENS, who made his Formula 1 debut for the Caterham team in the season-ending Abu Dhabi Grand prix, is the latest big name to confirm his attendance at AUTOSPORT International in January.

Stevens, whose regularseason drive was in Formula Renault 3.5, caught the eye



with a strong performance on his debut, making him a driver to watch in 2015.

You already knew about World Rallycross champion Petter Solberg attending, but the latest news is that he will demonstrate his spectacular WRC-spec Citroen Xsara in the Live Action arena.

MY FAVOURITE DRIVER

GREG MOORE

A great talent left tantalisingly unfinished, the cool Canadian found a west country fan in a teenaged MATT BEER. Here's how he did it

It was hard to get passionate about

mid-1990s Formula 1. Michael
Schumacher had too many blemishes to
comfortably idolise, but all his extraordinary
performances (particularly in the wet)
underlined that whichever alternative hero
you'd just put your faith in wasn't worth
jumping up and down on a chair about
after all. So this west country teenager
looked elsewhere.

In 1996, what was then still called Indycar provided inspiration (and chair punishment) with two explosive newcomers: Alex Zanardi and Greg Moore. With satellite TV beyond our means, following their exploits required bombarding any Eurosport-enabled vague acquaintance with blank videos and recording instructions then dodging the



few info sources that existed. Accidentally learning of a jaw-dropping Moore/Zanardi pass or impossible race charge before watching it 'as live' was always crushing, if good news for my chair.

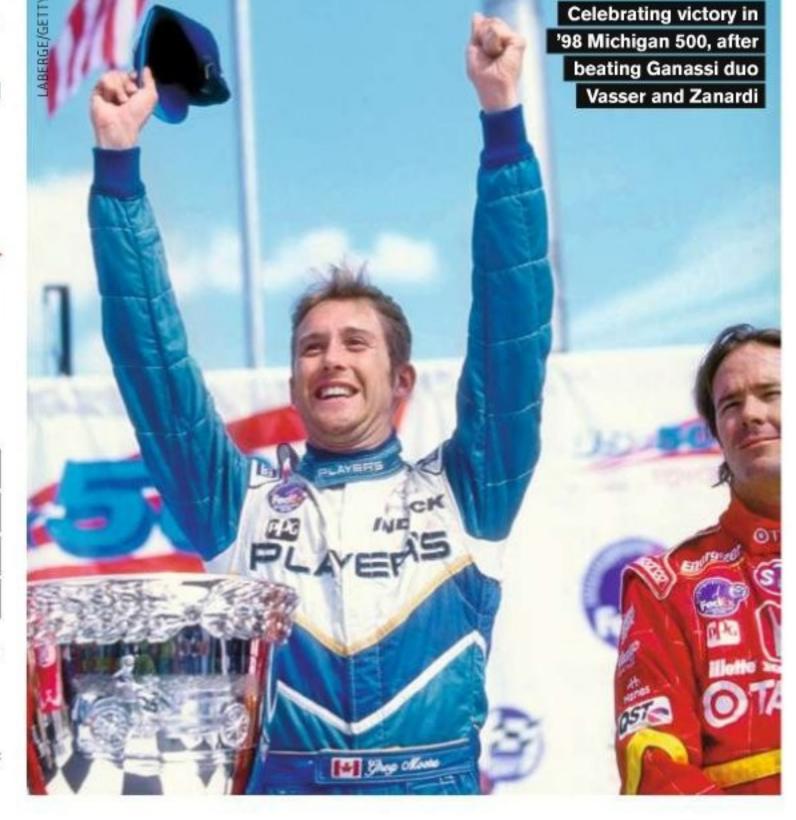
I'd begun 1996 as an oval sceptic, but was converted by Moore's extraordinary outside-line passes, the

'Moore's tally could've been much greater had he lived'

magic ability to get among the Penske and Newman/Haas pack on the short tracks when all his fellow Firestone runners floundered... and that beyond-belief car control. Who else could've kept a car out of the wall on an oval with water from a split radiator pouring onto their rear tyres? Or out-Zanardi'd Zanardi with the winning move at Rio in 1998? Or come so close to winning his first two top-level races?

This oval convert became an oval preacher, my best mate Patch receiving a pile of Indycar videos plus annotations to ensure he saw the light. He did, and two chairs were being jumped on in Dorset when Moore's first win came at Milwaukee in 1997 – or rather a few days later, when we'd finally got the video of it off the bloke who ran the carpet shop nearby.

Moore's Canadian cool contrasted with Zanardi's Italian effusiveness but was just as endearing – particularly when he left Christian Fittipaldi sprawling across his car by simply stepping out of the other side



when the Brazilian was trying to punch him after a Long Beach collision.

He also proved, long before Harry
Potter, that gigantic nerdy glasses and
coolness were not mutually exclusive
(though both Moore and I switched to
contact lenses for 1997 and our
respective fortunes improved: he won
races, I got into more pubs).

Moore gets the nod ahead of Zanardi in the evocative hero stakes because his was a story tantalisingly unfinished. Zanardi had his two titles (should've been three but for ambling backmarker PJ Jones in Vancouver in '96), but had he lived to take up his Penske contract, Moore's tally could have been so much greater still. Instead he



left this world with just five (all spectacularly-earned) wins for the relative underdog Forsythe team. One less than Gilles Villeneuve's F1 victory tally.

Villeneuve's actual descendent was an F1 champion, but I'll always feel his spiritual successor was the Canadian who stayed put in the Player's car.

Your guide to the best events taking place in the UK and around the world - plus TV and online

ON TELEVISION

THURSDAY DECEMBER 11

2300-0115 Sky Sports F1 Classic F1: 2010 Belgian GP

FRIDAY DECEMBER 12

2300-0115 Sky Sports F1 Classic F1: 2008 Canadian GP

SATURDAY DECEMBER 13

1600-1905 Motors TV Live

Race of Champions Nations Cup 1700-1930 ITV4 LIVE

Formula E: Punta del Este 2330-0130 Sky Sports F1 Classic F1: 1999 Austrian GP

SUNDAY DECEMBER 14

0930-1030 ITV4

Formula E: Punta del Este highlights 1600-1905 Motors TV Live

Race of Champions Nations Cup 1815-1845 Sky Sports F1

Classic F1: 1983 Monaco GP



TUESDAY DECEMBER 16

1330-1430 BT Sport 2

Formula E: Punta del Este highlights

WEDNESDAY DECEMBER 17

2100-2200 Motors TV

Andros Trophy: Andorra highlights



ONLINE

HOT ON THE WEB THIS WEEK

You Tube ROSBERG AND HAMILTON CELEBRATE 2014 SUCCESS



SEARCH FOR: EPIC! Ride Along with Lewis & Nico at Stars & Cars (1:36)

The annual Mercedes Stars & Cars event took place in Stuttgart recently. This video, produced by the Mercedes F1 team, takes you onboard with Lewis Hamilton and Nico Rosberg as they impress the crowds on the streets of the German city.

WAUTOSPORT+

Exclusive content coming up in our premium website this week

The F1 season review continues online, with AUTOSPORT's expert panel giving their verdicts on 2014's big talking points, and our whole team voting in the year's definitive top-10 driver poll. Plus a technical analysis of the McLaren-Honda package from Craig Scarborough.

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Revved up over what's on the box

There are more hours of specialist

sports-channel broadcasting to fill than there are top-line sports to broadcast, or so it seems – especially in the off-season. With little live motorsport to watch, there is plenty of filler needed to bulk up the schedules until the 2015 season starts.

Motors TV gets a big thumbs-up for its abundance of club racing (a good chance to check out Dario Franchitti-backed teenager Ciaran Haggerty's FF1600 success). BT Sport lost points by rebroadcasting pre-World Cup football fillers long after July. Sky Sports F1 HQ must own a bingo machine that randomises recent F1/GP2/GP3 races, Steve Rider interviews, and Ted Kravitz meanderings, with its classic grands prix

currently sadly banished to a very late night slot and rather too heavy on can't-call-it-a-classic-yet 2010s fare.

But Sky's deal with Brunswick Films proved a classy retro way to fill some gaps during 2014, especially with an oddity called Grand Prix Heroes: Mika Hakkinen – Road to F1. Or as it should be called:



Every Bit of non-FOM-Snaffled Pre-1994 Mika Hakkinen Footage That Exists.

That means highlights from whichever of his Formula Opel Lotus and Formula 3 races were televised, and a lot of tests. The editorial touch is pretty loose, seemingly a case of 'if it exists, put it in. In full', rather like a racing parent's home movie. That alienates casual viewers expecting a coherent Hakkinen profile, but for the hardcore (and if you're watching Sky Sports F1 when there's no GP on, you're hardcore), it creates a visual treasure trove where everyone will be fascinated by something different.

That could be the long-forgotten junior series rivals, how chirpy a young Mika's interviews were compared with his guarded F1 TV persona, McLaren or Lotus background crew who went on to greater things, everyone with hairstyles like Bernard Sumner's during New Order's heyday, or the primitive tech of the 1990s Lotus F1 design office.

One gem is Hakkinen testing a
Formula 3000 car after his 1990 F3 title.
Fellow Marlboro protege and 1989 F3
rival-turned F3000 star Allan McNish is on
hand to talk him through the car. There's
no narrative or editing to interfere, you just
eavesdrop on two future stars chatting.
And when Hakkinen giggles and raises
an eyebrow at the (rapid) laptime McNish
suggests, the Scot smiles back and
replies: "No, I remember you from '89..."

Revved Up

Harri Toivonen

"Without reverse gear, if you spin or make a mistake the rally is over"



AS YOU CAN IMAGINE, THE

first time I drove in the World Rally Championship after my brother Henri died in Corsica, there was a lot of emotion.

I was just going through scrutineering for the Welsh Rally when David Llewellin's co-driver Phil Short came to me and told me about Henri's accident.

It took me a month or two thinking, would I continue or not? I was at Dai's farm for about three weeks during this time, just shooting clay pigeons and thinking. And then I went to do the Scottish Rally. On some stages it was OK, but on some we had really bad times when I thought about Henri.

Coming home to Finland to do the rally, there were a lot of people coming up to tap my shoulder to say hello. People came to see the name Toivonen again.

I was driving for Austin Rover as I had been in the British Rally Championship – and the rally went well for me. I really enjoyed driving

the 6R4. It was not easy to drive, but the engine was really good. Even for the recce, we had the proper 6R4 with the dog box and everything. The whole feeling was unbelievable and the atmosphere was nice.

We had about 420bhp when we started the event, but for sure we were losing a lot to the Peugeots and Lancias. But the rally started well for me. I was happy. We were lying in

fifth position for a while, ahead of Stig [Blomqvist] who was in a 205 T16 and Kalle Grundel and Mikael Ericsson, who were both in S4s. We were also beating Per [Eklund] who was also in a 6R4. This was good.

But then we jumped too far in a stage, maybe Ouninpohja on day two. I don't remember which stage.

There were three jumps. I wanted to take off on the first, clear the

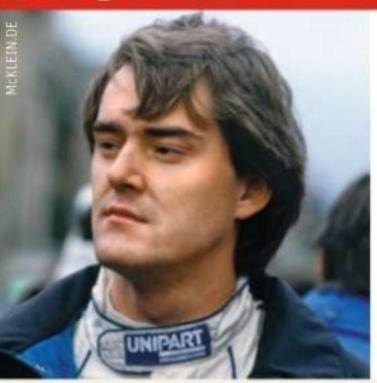
second and land ready to take off on the third. But I went too far and landed on the uphill for the third, which broke the front differential. We had one and a half days left in the event and I had to remember all the time that the front diff was really just hanging there and there was nothing we could do.

I had to start each stage in second gear and I couldn't use reverse. Once we got going we could be almost flat out again. But all of the time, in the back of the mind, you know that without reverse, if you spin or make a mistake, the rally is finished.

And still we made eighth place and took some points for the team. That was nice. It was emotional at the finish, especially on this rally.

I drove this car again earlier this year at Rallyday at Castle Combe. It was amazing to see. When I looked inside it, the knee support I made to be more comfortable was still there it had been there since 1986! Harri Toivonen was talking to David Evans

PROFILE



FINN HARRI TOIVONEN IS THE younger brother of the late Henri

Toivonen. After retiring from WRC action, he continued to compete in national rallies - and recently drove Tuthill Porsche's 911 RGT at Rallylegend in San Marino. He also raced in the Le Mans 24 Hours on five occasions, with a best of ninth in 1991 in a Kremer Porsche. Now 54, he's a board member of Finnish drinks firm Ioni.

NEXT WEEK CHRISTMAS DOUBLE ISSUE We choose our top 50 drivers of the 2014 season

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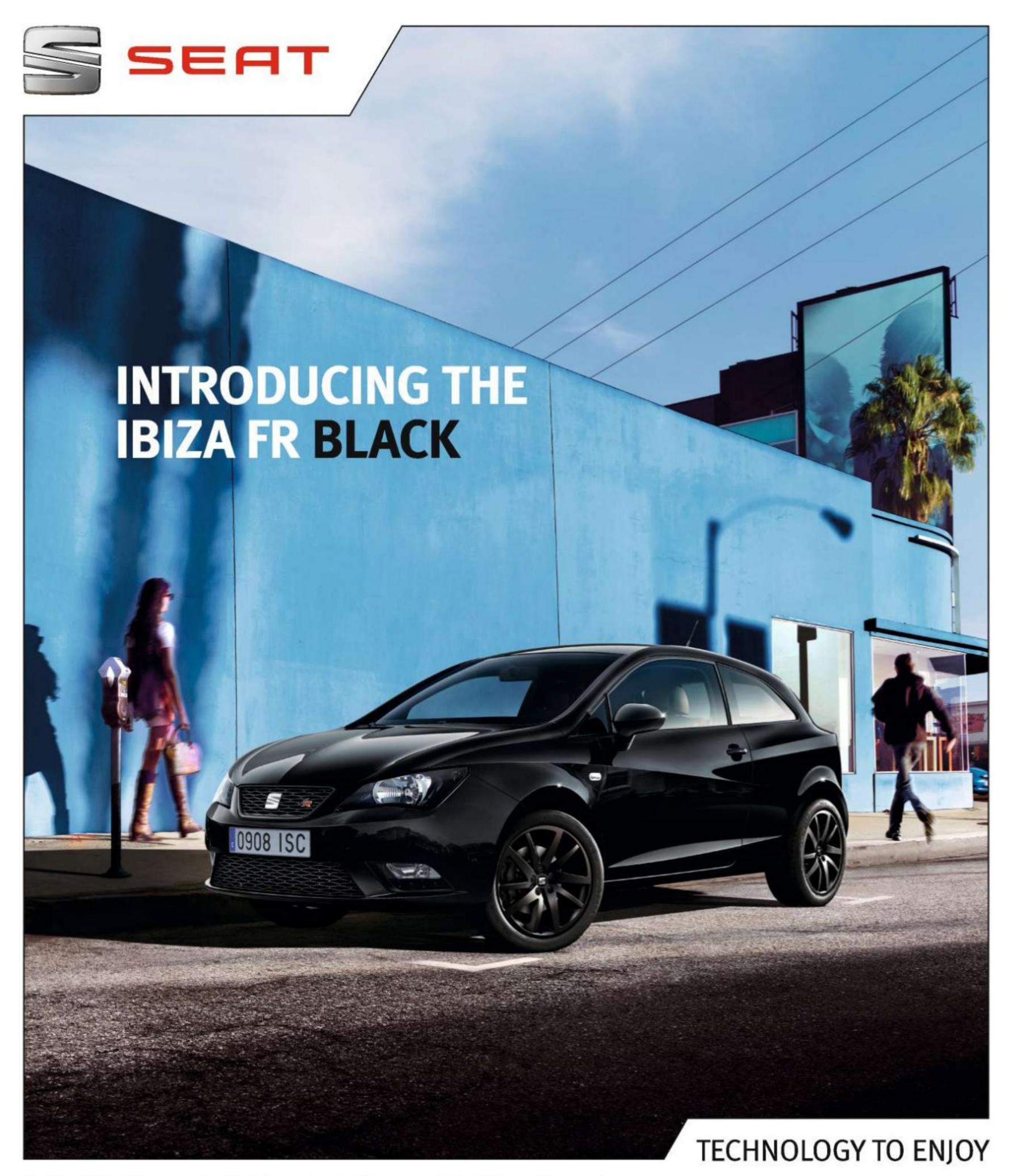
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