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F1 2018

MCLAREN'S MOMENT OF TRUTH

Zak Brown on how F1 giant plans to win again

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A TEAM IN DECLINE?





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Now is the time for McLaren to fight back

THERE ARE NO MORE EXCUSES, AFTER THREE DISMAL

seasons with disappointing Honda power, McLaren has to be better this year following its switch to Renault.

It won't be easy. You could make a strong case for fellow Renault customer Red Bull still being the top team when it comes to producing the best chassis, while Renault's own squad is on the up too.

But, as Ben Anderson's cover piece shows, McLaren boss Zak Brown still believes his team can get back to the front and challenge for its first world championship since Lewis Hamilton's 2008 drivers' title.

McLaren's chassis seemed to be pretty good last year, held back by a lack of power and poor reliability. This season we will find out just how good the car is. In Fernando Alonso and rising star Stoffel Vandoorne, McLaren still has the drivers to claim it is one of F1's big teams — now it has to prove it, at the very least against Red Bull and Renault.

How close any of those teams get to Mercedes (and Ferrari) will, of course, depend on the gains Renault's engine operation can make. It would be great for Formula 1 if its 2018 powerplant allowed one or all of those three to run at the sharp end.

One Renault-powered driver who is finally putting together a championship challenge is Jean-Eric Vergne. The ex-Toro Rosso racer has often flattered to deceive in Formula E, but last weekend's dramatic (and sometimes controversial) race in Chile demonstrated he has a new-found maturity, and propelled him into the points lead. With Audi continuing to suffer bewildering problems, Lucas di Grassi looks likely to lose his crown to Vergne, Felix Rosenqvist, Sam Bird or Sebastien Buemi.







COVER IMAG

COVER STORY

18 McLaren's plan to win again

PIT+PADDOCK

- 4 New start times for Formula 1
- 6 Huff and Michelisz grab tin-top seats
- **9** World Rallycross to go electric for 2020
- 11 Plato aims for redemption with Subaru
- 12 Fifth Column: Nigel Roebuck
- 15 In the paddock: Kevin Turner
- 17 Feedback: your letters

FEATURES AND REPORTS

- 28 Stars remember Formula Renault 3.5
- 36 Great car: Dallara T12
- 38 Formula E: Vergne stakes his claim
- **44** Coulthard tops Race Of Champions

RACE CENTRE

48 Bathurst 12 Hour; Toyota Racing Series; Asian Le Mans Series; MRF Challenge

CLUB AUTOSPORT

- 61 Turner to lead Beechdean's Brit GT return
- **62** Barrie 'Whizzo' Williams retires
- 64 New rules for Historic F1
- 66 What the halo means for club motorsport

FINISHING STRAIGHT

- 70 What's on this week
- 72 From the archive: 1981 British GP
- 74 Motorsport memory: 1990 British GP

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FORMULA1

'It's lights out and away

FORMULA 1'S WEEKEND SCHEDULE HAS been given its biggest shake-up for years ahead of the 2018 campaign.

The entire weekend timetable at European races, plus the Brazilian Grand Prix, will be shifted back in a bid to attract a larger television audience. F1 says that research has indicated a wider TV audience is reachable later in the afternoons, especially during the summer months. As a result, each practice and qualifying session and race at European grands prix, plus the race in Brazil, will start just over an hour later.

Continental European races will begin at 3.10pm local time, allowing broadcasters to better incorporate the pre-race build-up if their programming starts on the hour.

"Some broadcasters usually go on air precisely on the hour, hence missing the tension and emotion that characterise the minutes before the start of each grand prix," said F1 in a statement. "Thanks to this change, television viewers will be brought closer to the teams and the drivers and fully enjoy the spectacle offered just before the red lights go out."

The move comes after changes were made to articles 32 and 33 of F1's sporting regulations, which no longer specify the exact times for free practice and qualifying to begin.

Owner Liberty Media has been keen to make

changes since taking over at the start of last year, and wants to have more flexibility to improve the product and help race promoters attract a wider attendance at grands prix. With that in mind, the start time of the French GP has been moved to 4.10pm local time to avoid a clash with the World Cup game between England and Panama.

Channel 4 makes final F1 TV picks

Channel 4 bosses have ensured that the British and Monaco GPs will be broadcast live on terrestrial television in the UK in 2018.

As part of the deal it took on from the BBC, Channel 4 can screen 10 races live with the remainder — this season it will be 11 — shown as highlights. The other races live on C4 will be the Bahrain, Azerbaijan, Austrian, Belgian, Singapore, Japanese, US and Abu Dhabi GPs.

It means the returning French and German GPs will be exclusive live events for Sky.

This is the final year of C4's three-year F1 broadcast deal, with the championship to be shown exclusively on Sky from next season. There is a stipulation in that deal, which will run from 2019-24, that the British GP is shown live on free-to-air, as well as highlights programmes of all other grands prix and qualifying sessions. It remains unclear on what platform those will be shown.

Steve Jones will continue to front C4's



we go' - a bit later now

coverage, with David Coulthard continuing his partnership with Ben Edwards in the commentary box. Mark Webber, Susie Wolff and Eddie Jordan will again make guest appearances over the course of the season, with Karun Chandhok retaining his role as technical analyst and Lee McKenzie continuing her reporting role.

Martin Brundle headlines Sky's line-up once more, with Damon Hill, Johnny Herbert, Paul di Resta and Anthony Davidson also on the team.

FIA confirms 2018 entry list

Governing body the FIA has released the official F1 entry list for 2018, confirming the race numbers of this year's rookie drivers and new official names for four teams.

Formula 2 champion Charles Leclerc has chosen #16 for his debut with Sauber, while Williams signing Sergey Sirotkin will run #35.

Aston Martin has been added as title sponsor to Red Bull Racing, while its junior squad Toro Rosso will now be known as Red Bull Toro Rosso Honda. Alfa Romeo becomes part of the Sauber name having joined as title sponsor, while McLaren F1 Team reappears on the list after three years as McLaren Honda.

Force India is still listed with its usual name, but a change is expected and set to be formally announced before the start of the season.

LAWRENCE BARRETTO

F1 ENTRY LIST 2018					
NO.	DRIVER	TEAM			
44	Lewis Hamilton (GB)	Mercedes			
77	Valtteri Bottas (FIN)	Mercedes			
5	Sebastian Vettel (D)	Ferrari			
7	Kimi Raikkonen (FIN)	Ferrari			
3	Daniel Ricciardo (AUS)	Red Bull			
33	Max Verstappen (NL)	Red Bull			
11	Sergio Perez (MEX)	Force India			
31	Esteban Ocon (F)	Force India			
18	Lance Stroll (CDN)	Williams			
35	Sergey Sirotkin (RUS)	Williams			
27	Nico Hulkenberg (D)	Renault			
55	CarlosSainzJr(E)	Renault			
10	Pierre Gasly (F)	Toro Rosso			
28	BrendonHartley(NZ)	Toro Rosso			
8	Romain Grosjean (F)	Haas			
20	Kevin Magnussen (DK)	Haas			
2	StoffelVandoorne(B)	McLaren			
14	FernandoAlonso(E)	McLaren			
9	Marcus Ericsson (S)	Sauber			
16	Charles Leclerc (MC)	Sauber			

Belgian fans will have time for more waffles before their race FORMULA1

LAUDA WANTS GRID-GIRL REPRIEVE

NIKI LAUDA WANTS Formula 1 to reverse its decision to stop using grid girls at grands prix.

F1 owner Liberty Media announced last week that it was dropping the tradition because the concept did not fit in with its new brand image.

Three-time world champion and Mercedes non-executive chairman Lauda called it a "stupid" move. "This is a decision against women," the 68-year-old told Austrian newspaper *Der Standard*.

"Men have made the decision over the heads of women. This is not doing any favours to F1 and especially not for women. How stupid can they be? Are they nuts? I wouldn't mind seeing grid boys next to grid girls. Why not?"

Lauda argued that the use of grid girls had no bearing on the perception of women in motorsport. "Grid girls should continue to belong in F1," he added. "Women are stepping up [into senior roles], and they are doing it very well – it is moving in the right direction. But one does not exclude the other. I don't want to hold back women, I want to encourage them."

Grid girls will be replaced by 'Grid Kids', youngsters competing in karting or junior formulas who will be chosen by their motorsport clubs on merit or by lottery. They will be accompanied by their families and also perform duties for Formula 2 and GP3.

MARKUS LUTTGENS & JONATHAN NOBLE





0&A

NORBERT MICHELISZ HYUNDAI STAR SIGNING



You're switching from Honda to Hyundai for WTCR this season. What motivated your move? You have ups and downs; Qatar [the WTCC season finale where he missed out on the title] was a bit painful, but the decision to change

was not related to anything that happened there. It was just a feeling for new motivation, and a new environment. It's honestly not about wanting to leave Honda, it was just seeing something new, something that excited me a lot.

How is your pre-season schedule shaping up?

The main focus is to get to know the car. I had the chance to sit in the car, but I haven't driven it. Gabriele [Tarquini] has done a brilliant job with Hyundai Motorsport and BRC in developing the car. For me, it's rather about getting to know the package before the season starts. We'll have a couple of dates to test, but two months is not long.

What's Gabriele like to work with?

I really like him. He's straightforward. Having a team-mate with his attitude, knowledge and all the experience he has, there's a great possibility for myself to improve as a driver. I was really happy when I knew I had the chance to drive a Hyundai i30 N TCR, and I was even happier that I'd be partnering Gabriele.

What are your aims for 2018?

Seeing the way the car performed at the end of last year I think the i30 N will be one of the best cars on the grid. With the BoP, and success ballast, you need to be consistent and fast to fight for the title, but after finishing second last year the target is to win races and be in a position to fight for the championship.

JACK COZENS





WORLD TOURING CARCUI

Huff switches to Loeb tin-top team

ROB HUFF, GABRIELE TARQUINI and Norbert Michelisz are the latest big names to join the fray for the new World Touring Car Cup, as organisers report a fully subscribed 2018 grid.

Huff, who raced a Munnich Motorsport Citroen in the last year of the old WTCC, has agreed a deal to race for Sebastien Loeb Racing in the WTCR, and will drive a Volkswagen Golf GTI that comes with a technical alliance with Volkswagen Motorsport.

The Briton drove the same machinery in the TCR International Series last year, contesting six of the 10 rounds in support of WRT team-mate Jean-Karl Vernay's successful title bid. He won one race in that time.

Huff became WTCC champion in 2012 and has 29 victories to his name, but only six of those have come in the past five years. He insists, however, that with an updated Golf at his disposal he can challenge for the title.

"It's a fantastic opportunity to join Sebastien Loeb's team," said Huff. "They've won the WTCC independents' title for the past two years, and with no manufacturer entries in WTCR that'll put us right at the front. My aim this year is absolutely to win the title."

Mehdi Bennani will partner Huff at SLR, marking the Moroccan's fourth straight year with nine-time World Rally champion Loeb's squad. Bennani, who was the first driver SLR ran in the WTCC, won six races during his time in the series and was independents'

champion in 2016.

Another significant announcement came from Hyundai squad BRC Racing, which has secured the services of 2009 WTCC champion Tarquini and Michelisz. Tarquini, who will turn 56 before the season starts, was largely expected to drive for the squad after signing up as test driver for the i30 N TCR — Hyundai's first purpose-built circuit-racing car — early last year, but Michelisz's arrival comes as more of a surprise after two years as a factory Honda driver that included a tilt at the WTCC title last year.

"The car was obviously very quick at the end of last year," said Tarquini, who gave the i30 victory in its first TCR International Series race at Zhejiang in October last year. "We have a very good car, but we need to see what happens with the BoP [Balance of Performance]. It's the first championship I have done with BoP in my life. [Even so] I expect to be competitive; my experience of the Hyundai is good, I'm very happy with the level of engineers and mechanics at BRC. We are a couple of experienced drivers, so why not be ambitious and try to win as much as possible?"

Boutsen Ginion Racing has also confirmed that it will campaign a pair of new Honda Civic FK8 Type R TCRs in the series, while Alfa Romeo loyalist Romeo Ferraris stated on Monday that it will run two Giulietta TCRs. No drivers were announced for either team.

JACK COZENS

WORLD RALLY CHAMPIONSHIP

Public roads for Rally GB

THE WORLD RALLY CHAMPIONSHIP WILL use closed public roads in the UK for the first time in history at October's Rally GB.

The Welsh government has followed Westminster's lead in allowing the MSA — British motorsport's governing body — to grant permits for the suspension of the Road Traffic Act for competition. While the October 4-7 event won't turn its back on the traditional forest-based format in favour of the lanes, changes are expected to the route.

Rally GB managing director Ben Taylor was in Wales last week inspecting the route and admitted he's excited about the potential for change. "It gives us the chance for a complete refresh of the route," said Taylor. "Obviously it doesn't change the stages we have on offer, but it definitely does change the way we can use them."

North Wales is the area expected to undergo the biggest change, with sections of public roads being closed to link together shorter stages such as Penmachno, Clocaenog and Gwydir.

"We've always said, we're not advocating the use of mile upon mile of closed public road, nothing like that — that's not the nature of this rally," continued Taylor. "The Penmachno forest has traditionally offered two six-kilometre stages, give or take. But Penmachno North and South were split by a public road going through the middle of them. Including those stages wasn't always the most efficient use of our superb

marshalling force, but closing that road means we have a 12-kilometre stage that we can use twice. That makes a lot of sense.

"It's the same in Gwydir — the cars will come out of the woods, dash down the road and back in, and the potential in and around Brenig and Clocaenog is huge.

"What we're looking for is a very much expanded, full day of action in North Wales. We're aware we have a big population base not far beyond the doorstep of these stages and we want to make it easy for fans to come and see the best action on this fantastic rally."

Running a full day of competition in North Wales will also satisfy the teams' request to see the cars back in the Deeside service park for a lunchtime service. "Last year the cars were only back in service last on Saturday afternoon," said Taylor. "They fitted the [spot]lights and went back out for the night stages. I understand the concerns of the teams and this is why I'm determined to get the cars back for a proper lunchtime service this time. We're very proud of our exceptional service-park facility in Deeside and we want to make full use of it."

Creating a longer day in North Wales will mean the loss of some of the mid-Wales stages, with the need to compact Friday and Saturday's action from last season into just one day this autumn.

The route has to be filed with the FIA for WRC stakeholder discussion in April. DAVID EVANS



IN THE HEADLINES



INDYCAR TO TRIAL AERO-SCREEN

The IndyCar Series is to trial its new aero-screen (above) at this week's test on the Phoenix oval. Scott Dixon was due to perform duties for the screen, developed as issues were raised over visibility with the halo on ovals. "We have been striving to create a safety piece that aesthetically looks good and works in all conditions," said IndyCar competitions boss Jay Frye. "Any piece we put on an IndyCar must work for multiple types of venues and different lighting conditions. It has to be versatile."

VAN DER ZANDE IN DRAGONSPEED LMP1

Sportscar ace Renger van der Zande has joined the DragonSpeed LMP1 team for the World Endurance Championship. The Dutchman joins Ben Hanley and Henrik Hedman in the team's Dallara-built BR1. He will have to skip the opener at Spa as it clashes with his IMSA SportsCar duties with Wayne Taylor Racing.

VAXIVIERE JOINS ASTON LINE-UP

Ex-Formula Renault 3.5 runner-up Matthieu Vaxiviere has become the latest addition to the R-Motorsport Aston Martin Blancpain Endurance Cup team, run in association with Jota Sport and Arden International. Vaxiviere joins a tasty line-up comprising Nicki Thiim, Maxime Martin, Jake Dennis and Alex Brundle, with one driver yet to be named.

BOCCOLACCI SIGNS WITH MP FOR GP3

Highly rated French racer Dorian Boccolacci is to remain in the GP3 Series for a second season. Boccolacci joins series newcomer MP Motorsport, where he will partner Niko Kari. Also in GP3, Leonardo Pulcini has rejoined Campos Racing – where he won the Euroformula Open title in 2016 – after a rookie campaign with Arden.

HABSBURG AND HINGELEY IN EURO F3

Austrian royal Ferdinand Habsburg has committed to a second season in the Formula 3 European Championship, and will once again line up with Carlin, with which he scored one win as a rookie in 2017. Hitech GP has also added another driver, with BRDC British F3 race winner Ben Hingeley joining the Silverstone squad.

RON WALKER 1939-2018

The charismatic promoter of the Australian Grand Prix, Ron Walker, died last week; he was 78. Walker was a successful Melbourne businessman who, after being appointed to lead the city's bid for the 1996 Olympic Games, was handed the task of luring the Australian GP away from Adelaide. He became one of the most outspoken race promoters and often went out of his way to defend Bernie Ecclestone whenever the F1 supremo was in difficulty. He was chairman of the Formula One Promoters' Association for several years, before stepping down in 2015 due to ill health.

OBITUARY

Gerard Welter 1942-2018

GERARD WELTER, WHO HAS DIED aged 75, was the architect of a line of quirky specials that raced at the Le Mans 24 Hours over five decades. His WM and WR prototypes, built mostly in his garage by a team of part-timers, were designed more with headlines than results in mind.

The WM GTP and Group C prototypes raced at Le Mans from 1976-89 with the aim of hitting the highest possible speed down a Mulsanne Straight then uninterrupted by chicanes. He returned in the '90s under the Welter Racing banner with a series of lightweight open-top prototypes with the target of pole position. Welter would achieve both.

The Peugeot-powered WMs were regularly the fastest things in a straight line at Le Mans, and one of his cars claimed a record for the highest top speed on the Mulsanne: Roger Dorchy officially hit 405km/h – 251mph – through the speedtrap aboard his P88 during the 1988 race.

After a near miss in 1994, a WR-Peugeot claimed outright pole with William David the following year. Patrick Gonin made it a WR 1-2 on the '95 grid in the second LM94 for good measure.

Thierry Boutsen, who contested his first Le Mans with WM in 1981, recalls the Peugeot-engined coupes being "made for top speed and nothing else". Didier Theys has similar memories from his two appearances with the team: "Sure, the car was fast on the Mulsanne, but the lap times were terrible. They were scary to drive; so unstable."

The best Le Mans result for a Welterbuilt prototype came in 1980, when Dorchy and Guy Frequelin took fourth spot in a WM-Peugeot P79/80. It was a rare finish for one of his cars.



Welter's day job was with Peugeot: he became its design director for the nine years before his retirement in 2007 and is credited with the lines of the 205 hatchback. Peugeot allowed him time in its windtunnel and on its dynos, although officially there was never any funding. It is probably no coincidence, however, that WM and then WR attracted sponsorship from companies associated with the

French manufacturer.

The first WM sportscars he built with partner Michel Meunier, another Peugeot employee, appeared in 1969. It wasn't until '76, however, that the marque made it to Le Mans in the GTP class. Welter returned to Le Mans in '92 after a two-year break when the organisers invited cars racing in Peugeot's new 905 Spider series for central-seater sportscars. And he kept coming back in the '90s with variations on the theme in the secondary prototype class.

There were more Peugeot-engined WRs in the 2000s, before a switch to Zytek V8 power in '08. The team made its final Le Mans participation in '10, though Welter didn't disappear. He built the chassis for the unraced GreenGT hydrogen-fuel-cell car and more recently was trying to return with a car powered by bio-methane.

Welter's Le Mans campaigns were not without their tragedies: a marshal was killed when Boutsen shunted in 1981 after suspected rear-suspension failure; and Sebastien Enjolras was killed when he crashed after the car's one-piece bodywork came loose during prequalifying in '97.



GARY WATKIN



WORLD RALLYCROSS CHAMPIONSHIP

WRX to go electric in 2020

ELECTRIC CARS ARE TO BECOME THE headline category in the World Rallycross Championship from 2020.

Autosport broke the news last August that the FIA and WRX promotor IMG were working with a group of manufacturers on a plan to introduce electric cars into events from 2020, but a source has now revealed that the electric cars will replace the existing internal combustion-engined Supercars in the headline category that year.

"Electric cars will absolutely, categorically be the world championship," said the source. "Fifteen cars are required to begin in 2020. Nine different manufacturers have been engaged in the discussions and negotiations so far, but the ability to buy the required components and build a car has to be open to privateer teams if they want to go that way."

Autosport understands that the FIA will issue two invitations to tender in the coming weeks. One of those tenders is believed to be for a common 'chassis kit', including a carbon-monocoque tub and safety structure, suspension and braking systems. The other will be for batteries. Autosport understands that the motors will not fall under the same tender process and will not come from a single supplier. Neither will the composite bodyshells, which will sit on top of the carbon chassis, allowing for different models of cars to be used in the series. The new cars are expected to be marginally wider than the existing Supercars and are likely to feature

larger rear aerodynamic devices.

When quizzed about the future of the series' existing internal combustion Supercars from 2020, Autosport's source said: "Electric World RX cars doesn't mean the current Supercars go away. There's absolutely 100% commitment to keeping the current Supercars and not just as a European championship; as some form of international championship that can race outside Europe if the market dictates."

A number of leading manufacturers have publically reaffirmed their interest in the electric rallycross concept in recent months. In December, Peugeot Sport director Bruno Famin revealed that the French marque's increased commitment to WRX for 2018 is partly to accumulate knowledge and prepare for the electric switch. Volkswagen has stated its interest in returning to top-level motorsport in an electric rallycross series and will compete in the Pikes Peak International Hillclimb this June with an electric prototype driven by Romain Dumas.

In Audi's confirmation that it will continue to support Mattias Ekstrom's team this year, marque sports boss Dieter Gass said: "We gathered very positive experiences in World RX last year and are convinced of the series' growth potential. In the medium run, we hope to see electric cars being fielded in this racing series because electrification is a focus topic at Audi also in motorsport."

IN THE HEADLINES

JERRY SNEVA 1949-2018

The 1977 Indianapolis 500 Rookie of the Year, Jerry Sneva died recently at the age of 68. Younger brother of two-time Indycar champion Tom Sneva, the Washington state native finished 10th in the 500 in what was his Indycar debut in an elderly McLaren. Driving an Eagle-Offenhauser, he scored his best finishes in '79, fourth at Pocono and fifth at Milwaukee. His career lasted until '83, Sneva claiming a total of six top-10 results.

ANDY SCRIVEN 1960-2017

A talented and much-loved designer, Andy Scriven passed away on Christmas Eve aged 57, two months after a collision while cycling near his home in North Carolina. The Briton designed the 1985 Tiga Group C2 car before moving to Jaguar's Group C programme and then the stillborn Brabham Alfa Romeo Procar project. He led design on Lola's Nissan sports-prototype before working for Penske in NASCAR and Indycars, PPI Motorsports in Indycars, and then Crawford Composites. He designed a series of sports-prototypes for Crawford, as well as its US Formula 4 racer and its new Regional F3 machine.

BARRICHELLO RECOVERING AFTER SCARE

Ex-Formula 1 star and latter-day V8 Stock Car ace Rubens Barrichello has been recovering in hospital after a health scare. Barrichello was overcome with a headache while showering at home. "I had a small problem on a vein, but I want to tell you that I am feeling great," he said.

SCOTT HEADS TO US FOR PRO MAZDA

Runaway reigning Euroformula Open champion and two-time McLaren Autosport BRDC Award finalist Harrison Scott is heading Stateside to race in the IndyCar-supporting Pro Mazda series this season. Scott is spearheading a new US project for Italian team RP Motorsport, with which he claimed the Euroformula title, and will be joined by 2017 team-mate Lodovico Laurini. The series has introduced its new Tatuus PM-18 chassis for this year to replace its aged predecessor.

FITTIPALDI BACK FOR MORE F4

Enzo Fittipaldi, the Ferrari-backed younger brother of Formula V8 3.5 champion Pietro, will continue with Prema Powerteam this season in Formula 4, this time attacking the Italian and German titles. Another Ferrari recruit, Brazilian Gianluca Petecof, will join him in both series.

FIA APPROVES ELECTRIC TESLA SERIES

The FIA has given its approval to the Electric GT series, which has been redubbed the Electric Production Car Series. The spec Tesla Model S P100D (below) has passed its FIA crash test. Race formats include a three-heat qualifying format and two 60km races – one in the day, one at dusk – plus a drift-off competition at "suitable circuits" for the two drivers with the best finishes plus two more chosen by a fan vote. Race power will be 785bhp.





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WEC

REBELLION BACK WITH ORECA FOR LMP1 RACER

THE WORST-KEPT SECRET of the World Endurance Championship off-season is out: Rebellion Racing's new LMP1 contender is being developed by ORECA and will be powered by a Gibson normally aspirated V8.

The continuation of a longstanding relationship with the French constructor that encompassed the R-One privateer P1 of 2014-16 and a successful drop into LMP2 last season was the obvious one for Rebellion. ORECA was in a position to develop the new car – to be known as the R13 – out of its 07 LMP2 design in a short timescale because its monocoque has its roots in the R-One (below).

The tub is about the only thing that will be carried over from the 07, according to ORECA technical director David Floury. He's promised something "very different from everything we have produced so far".

"The monocoque is the same, but most of the parts will be very different from the LMP2," he said, adding that it would have been impossible to "develop, build and homologate a completely new monocoque" in the timeframe given by Rebellion.

The design phase of a car that will include Andre Lotterer, Neel Jani and Bruno Senna on its driver roster is almost complete. A launch is planned for the Geneva motor show in early March before a shakedown in the days leading up to the official pre-season WEC test at Paul Ricard at the start of April.

GARY WATKINS





BRITISH TOURING CAR CHAMPIONSHIP

Plato eyes bounceback with new Subaru deal

BTCC FOLK HERO JASON PLATO SAYS THAT BACKroom work by Team BMR will help him grab wins in his Subaru Levorg this year after re-signing for a fourth season with the title-winning team.

Double champion Plato has been with the factory-backed programme since the Japanese firm joined the BTCC in 2015. He has scored just one win in each of the past two seasons, finishing 12th in the points last term, but the 50-year-old — who will partner reigning champion Ash Sutton — believes he can bounce back.

"Last year was one of the worst of my life," said Plato (above). "I'm a competitor, and I was unable to compete. We have looked long and hard at the data and we have found areas where we can improve. We have some exciting new developments in progress that should see the Subaru

Levorgs fighting at the sharp end of the grid yet again. April can't come soon enough."

Although there has been no confirmation, Team BMR is expected to run three cars in this year's championship.

Meanwhile, Ciceley Motorsport will expand in 2018 to run two Mercedes A-Classes. Adam Morgan will again lead his father's team, and will be joined by Porsche Carrera Cup GB racer Tom Oliphant. The 2015 Ginetta GT4 Supercup champion has raced Porsches in Britain for the past two seasons and has finished fourth both years.

A spokesman for Aiden Moffat, whose Laser Tools Racing team also ran a Mercedes in the BTCC in 2017, said they were not ready to release details of the Scotsman's 2018 plans.

MATT JAMES



MOTOGP

Lorenzo tops three-day Sepang test

JORGE LORENZO LAID DOWN A marker to his rivals in the Sepang MotoGP test last week, topping the times on the revised GP18 Ducati.

The three-time champion, who endured a tough first season with Ducati last year, was quickest across the three days by a little under two tenths of a second from Honda duo Dani Pedrosa and Cal Crutchlow.

Reigning champion Marc Marquez

was seventh on his Honda, one place ahead of Yamaha's Valentino Rossi.

Lorenzo said the GP18 was "much closer" to his smooth, high-corner-speed riding style than its predecessor, and after going quickest on the final day added Ducati has a "big margin" to improve further.

Rossi was seemingly flummoxed by his Yamaha's relative lack of speed at the end of the test after an encouraging first two days. "Today was a bit more difficult," he said. "Same bike, same tyres, same temperature, we lose three or four tenths and don't understand why."

Rossi's Yamaha team-mate Maverick Vinales — who has concluded a new deal that keeps him at the team until at least 2020 — was quickest on the second day.

JAMIE KLEIN

NIGEL ROEBUCK

Alonso's star team-mate

Lando Norris, McLaren's reserve driver, shared a car with the F1 great at Daytona — and his career hinges on what Alonso does next



ALTHOUGH THEY WEREN'T SAYING ANYTHING FIRM

at Daytona, it was clear from remarks by Fernando Alonso and Zak Brown that come June McLaren's team leader would be on the grid at Le Mans. What I hadn't anticipated, though, was that he would drive a Toyota in all non-clashing WEC races: at Fuji — a circuit owned by Toyota — they're seeking a date change, for the US Grand Prix is scheduled the same weekend.

In the manner of Pedro Rodriguez half a century ago, for

Alonso a weekend without a race is a weekend lost. "I think," said Brown, "Fernando would live in a race car if he could."

If sundry problems ruled the United Autosports Ligier out of contention at Daytona,

both men were high in their praise of Lando Norris. "For people who don't know Lando," said Alonso, "maybe it was a surprise. In the night we ran wet tyres for one stint, and we were fifth, a minute behind the leader. Then we went back to slicks, in damp conditions: in something like 20 laps Lando recovered 33 seconds — and he's 18 years old..."

So he is, and personable with it. "The Ligier," he told me before the race, "is fun to drive, but we're down on top speed,

and there's no consistency in the car. I think it's mainly tyres — here we have to use Continentals, but in the Paul Ricard test we were on Dunlops, and it was completely different."

Norris and Alonso get along well. "Fernando's a very nice guy, and I think he's the best driver: I've learned a lot from him already that I can add on to how I drive, how I approach a race weekend. I watch how he goes about things — he's amazingly proactive, constantly thinking about what could be

made better. You might think you give good feedback yourself, but he comes at it from a different angle, making suggestions you wouldn't normally think of..."

I've known drivers in Alonso's position,

I said, who've been very circumspect about giving advice to a young driver: Ayrton Senna with Mika Hakkinen comes immediately to mind.

Norris laughed. "Well, if I were Fernando's team-mate in Formula 1, it might be different, but here we're sharing a car! I must say, though, I've been in debriefs with him and Stoffel [Vandoorne] at grands prix, and from what I've seen he tries as much as he can to help everyone."









It was at the Hungaroring test last year that Norris first sampled a current F1 car, and dazzled everyone at McLaren by setting second fastest time. Had it been everything — even with the Honda engine — he had expected?

"Oh, it was more than I expected! Quite quickly you adapt, but — coming from F₃ — the first time you go out of the pits, and accelerate, you think, 'Mmm, this is quite impressive!"

Invariably, I said, when a rookie is asked which aspect of an F1 car makes the biggest impression, he says it's the brakes.

"Yeah, I'd agree with that — even more than the grip. When it's new to you, you think, 'OK, I need to brake now' because it feels like the corner is right there — but other guys are braking there! Everything happens so quickly, but you adapt, and it starts to slow down. The acceleration takes a bit of getting used to because it doesn't plateau, it just keeps going...

"I didn't find it easy to drive — it was way faster than anything I'd been in before, and the g-forces were much higher, so physically it was tougher. And mentally, too, there was a lot more going on, with all the buttons and switches you need to be keeping up with, and changing.

"I'd had experience in the simulator, but I'm not at the point where I can easily do this, this and this while still looking ahead. I'd say I was 60% of the way there, but you've got to get to a point where the engineer says, 'Do this', and you just do it naturally."

When Kevin Magnussen was at McLaren, he told me in 2015 of his difficulty in getting away from the feeling of

being the third driver, waiting in the wings.

"I tend not to think about it too much," said Norris. "Although I want to drive as soon as possible, I respect that someone like Stoffel has worked hard to get where he is, and you kind of want to let him drive it for a bit — maybe I'm too nice sometimes!

"I've never thought in terms of replacing anyone - it's probably going to be more a matter of Fernando deciding to stop F1, and I've no idea when that will be. At the moment he seems to live for racing as much as he ever has."

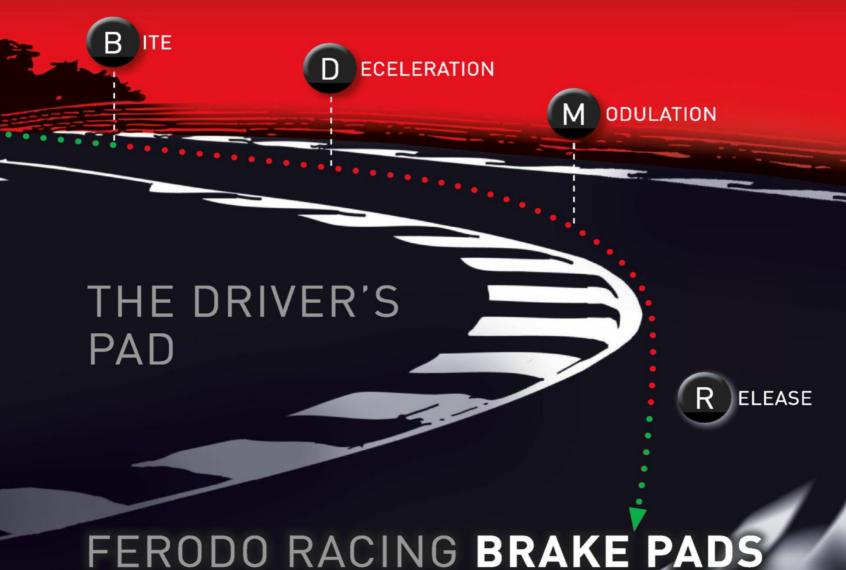
This season Norris will drive for Trevor Carlin in F2, and he looks forward not least to the quality of the racing, which he acknowledges is way better than in F1. "At the moment I watch a grand prix up to about lap five, and then... it gets a bit boring! I can't wait to get into F1, but I really hope something is done to improve the racing."

Alonso and Toyota apart, the big news story of the week seemed to be Liberty Media's expected announcement of its ban on grid girls. First a new 'F1' logo, now this: Lordy, whatever next? Other than to pray this is not a prelude to the introduction of grid kids (sorry Nigel, see page 5! — ed), I've got more sense than to get involved in the debate — in today's world, after all, to venture any opinion on such a matter is to invite vitriolic opprobrium, and I long ago tired of that. I did, though, rather care for the words of one mercifully light-hearted blogger, who'd anticipated more grid girls in 2018, to take viewers' minds off the halo... **



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F1 makes right call

The most remarkable aspect of Liberty Media's decision to dispense with grid girls is why it took so long for F1 to catch up with the rest of the world

By Kevin Turner, Editor



ABOUT BLOODY TIME. THE PRESENCE OF GRID GIRLS

in motorsport has been an anachronism for what is supposed to be a cutting-edge sport for far too long.

It's been a few years since Autosport decided not to run pictures of grid girls in the magazine and, in truth, it's a decision we should have made earlier. Even the World Endurance Championship's laudable similar move in 2015 could be described as a decade or two too late.

Fortunately, society's attitudes towards (and treatment of) women have improved in recent years (albeit more slowly and less extensively than they should have done). And yet the pinnacle of motorsport, in which some of the most intelligent men *and* women in the world push technology forwards, has remained mired in old-style thinking in certain areas.

But Liberty's decision to get rid of grid girls in Formula 1 is not just about catching up with society. There are now many more ways for people to spend their free time (and money) than in the past. That poses a big challenge for motorsport, and one of the tactics tried by many a race or series promoter

is to appeal to the family. Providing off-track entertainment may be irrelevant to the hardcore enthusiasts, but if it attracts new fans — and helps keep them — it's easy to see why manufacturers, promoters

and sponsors support such efforts.

So, you get the family to the racetrack, try to make things as inclusive as possible, then wheel out the old-school role of women as wallpaper. There are talented women in many other roles in motorsport, but one you'll see the most of is based purely on looks. Not only is that not the right message, it's going to put people off.

Many women (and, indeed, men) rightly have no time for this nonsense. On more than one occasion I have been put on the defensive, when trying to extol the virtues of motorsport, because of the role of grid girls. What are they really there for? Who are they for? Shouldn't women be seen as more than just decoration? Motorsport has enough issues to deal with without scoring such obvious own goals.

Despite the apparent no-brainer logic behind Liberty's decision, it has proved to be surprisingly controversial. The worst reaction you might have expected would be, 'Oh, that's a shame, I quite liked seeing them.' But the level of fury from some people has been remarkable. Indeed, the vociferousness of the backlash underlines why moves like this are still important.

Autosport has already received some quite staggering messages about the loss of grid girls. It's odd how progressive developments and attempts to make things more equitable get derided with comments about the 'loony left' and 'liberal brigade', usually without any coherent counter-position. All of which rather begs the question: why so much anger?

Nobody has yet put forward a convincing argument for keeping grid girls. Niki Lauda suggested using grid girls and grid boys would be better than having no-one at all. That certainly works better from an equality point of view, but how about objectifying nobody? Giving children the opportunity to meet their heroes seems a much more constructive way of doing things.

Another argument is that using grid girls is 'harmless'. Quite apart from this being wrong, you could respond by turning things around and asking what it is they bring to F1. 'Glamour' would be one answer, but that is surely provided by the fastest and most technologically advanced cars in the world, not (scantily clad) women holding poles. And in some instances,

the gap between 'glamour' and 'seedy' can be worryingly small...

The point that gets closest to credible is that it deprives some women of earning a living, women who 'make the choice' to fulfil this role. But even

"What are they there for? Shouldn't women be seen as more than decoration?"

ignoring the obvious flaw that this thinking has also been used to defend more dubious lines of work, this is fatuous. If those that use this argument are *really* concerned about female employment, how about addressing the issue that women still earn less for doing the same jobs as men? Or boosting the number of women looking at motorsport for potential careers, something that *not* presenting the younger generations with grid girls may actually assist.

No, that argument seems more like a smokescreen for other motivations or issues people have. One is, as ever, the standard anti-any-change reaction. Change is one of the constants of human history, and yet we aren't programmed to deal with it very well. But that doesn't mean change shouldn't happen.

Ultimately, the foundation underlying the move is an attempt at equality, at being more inclusive, of being less sexist. Surely everyone agrees those are good aims... And for people who still don't agree, what are they actually losing?

If the disappearance of grid girls really turns people away from motorsport, then it's hard to believe they were really motorsport fans in the first place. **

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FEBBACK

Numbers count in motorsport

I know there are some who see this as a trivial matter, but I must comment on the poor standard of numbering to be found on the otherwise gorgeous 2018 IndyCars. After all these years of holding up the old IRL and IndyCar series as examples to other championships, they have regressed to the dark days of Champ Car with useless, tiny race numbers. You need a microscope to see them on the superspeedway endplates!

Did they not learn from Formula 1 last year when it actually listened to the fans for once? Race numbers matter, for they become part of the identity and history of a driver or rider. The #7 is forever linked with Stirling Moss and Barry Sheene, Gilles Villeneuve's Ferrari with #27 on its flanks, Valentino Rossi's #46, while for those of us of a certain age #351 still means Barry Lee in a short-oval Hot Rod Ford Escort.

Even more so in the US, a number becomes immortalised by its driver, #48 with the late Dan Gurney, #14 with AJ Foyt, while #3 will be eternally linked with Dale Earnhardt.

When you see the new IndyCars, as well as the dreadful numbering found in touring car racing and the WRC, you have to ask, is there any other sport that does so much to hide the identities of its competitors from its spectators and the media like motor racing?

Peter Kerr Hamilton, South Lanarkshire

Time for a rethink

One of the contributing factors in the accident that claimed the life of Jules Bianchi was the failing light as the race was being run late in the day for a variety of reasons, and one of the things the FIA instigated was that a minimum of four hours should be available prior to sunset at any venue to ensure this did not contribute to future accidents, etc. And now what has happened...

The new management team has put drivers' and marshals' lives at risk by reducing the time available in which to run the races at numerous venues just so it can attract more European viewers at what it considers a more favourable time slot.

Utter, utter, madness.

Paul Hewitt Luton, Bedfordshire

Silverstone's 4-3-4 grid

"F1's last 4-3-4 grid, the 1967 German GP" (January 18). Well, no, actually. The BRDC retained Silverstone's traditional 4-3-4 line-up for the 1970 and '71 International Trophy races, even though a 3-2-3 formation had been adopted for the British Grand Prix at the circuit in '69.

It's true that the entry had been augmented by F5000 cars (just as the entries had been bolstered by F2 cars on occasion in the 1950s), but the German GP fields at the Nurburgring



Kudos to reader Cole, who pointed us in the direction of our April 30 1970 cover image... had also been supplemented by F2 cars five times, including 1967.

It's interesting to note that Chris Amon pipped Jackie Stewart for pole position for both International Trophy races and, while Graham Hill could only manage seventh place both times, at least he was still on the second row of the grids.

These were not world championship grands prix, of course, but the cars were still just as wide and, from memory, the drivers just as keen to make up places at the start, even if they could not all be into the first corner first...

David Cole Oakham, Rutland

Alonso's dream year?

Great news that Fernando Alonso is doing both the Formula 1 and WEC seasons (bar Fuji) this year, harking back to the 1960s and '70s when most drivers entered different categories of racing.

A massive if — and humour me here — but imagine the McLaren-Renault is an outstanding car and can compete for wins. The Toyota LMP1 car will clearly be winning. Alonso could be leading two world championships this year at some point!

How amazing would that be!? **MASmith**

By email

HAVE YOUR SAY, GET IN TOUCH

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How McLaren plans to escape its



The Honda darkness is over, but there is still much work to be done. Zak Brown tells Autosport why he believes McLaren is on the right track

By Ben Anderson, Grand Prix Editor

y @BenAndersonAuto



"I think we're fortunate that we have a very committed

t's now been almost 20 years since
McLaren last won a Formula 1 constructors'
championship. It's been 10 years since it
last won an F1 title of any description.
Five full seasons have passed since this
mighty British team last won a grand prix.
That's almost 100 races ago. Three seasons
have gone by since one of its drivers
legitimately stood on the podium.

That is not the track record of a top team. In fact, for the past five years McLaren has been categorically mired in F1's midfield, consistently misfiring in attempts to recapture past glories. One season of underachievement can be considered a blip; two a bump in the road; but how much momentum does it take before this becomes a worrying pattern of decline?

There is a cautionary tale seen in that other great British giant of F1, seemingly stuck permanently in the midfield, dreaming of a return to glory days that may never come again. Two decades ago, Williams won its last championship double with Renault. Then followed two arduous years with Mecachrome and Supertec-badged units, before a six-season stint with BMW that (narrowly) failed to deliver the requisite return to championship-winning ways.

Williams has spent the past 12 seasons flitting between different customer-engine programmes, trying to claw its way back to the front, but never quite making it. Williams remains a wonderful name, with a proud heritage, but the world has changed. Williams is no longer the top team it once was, consigned instead to a constant fight for survival in the midfield maelstrom.

Despite its own championship drought since the turn of the millennium, McLaren remained a consistent contender with Mercedes as its works engine partner, winning races in all but two seasons (2006 and '13) until the end of F1's V8 era. Then V6 hybrid-turbo engines arrived and Mercedes began dominating as a works entity in its own right. McLaren decided that winning in Formula 1 as a customer team was impossible, so jumped into bed with Honda, and now here we are — three seasons of abject failure later and McLaren is back to being a customer team again.

All the while the ticking timebomb of decay does its dirty work. Confidence seeps away, sponsors leave, the team's finances suffer, which makes it even tougher to compete as successful rivals stretch ever further away. This is the fate that befell Williams more than a decade ago, and it's one that surely awaits McLaren too if it cannot find a way to properly arrest this slump.

"I think we're fortunate we have a very committed ownership base," argues McLaren executive director Zak Brown. "Williams, because they're a publicly traded company, have to live within the financial means they're given — they had to take, in the past, [Pastor] Maldonado, and drivers that



McLaren has been battling Williams in the midfield of late (top) – a far cry from 2003 (far right), when Montoya and Coulthard fought for victories. Brown (centre right) reckons his team can recapture that



ownership base"

weren't world championship quality, to stay alive.

"We can make decisions purely based on performance, knowing we've got the financial resources. Our shareholders are very open on a case-by-case [basis]. So far they have given us all the tools we need. We certainly don't have an unlimited chequebook — which it appears some of the competition has — but they give us what we need to go racing.

"We can make that big financial decision that short-term has economic impact but long-term is the right thing. Our shareholders can take a long-term view, which is exactly what they've done. We've got the racing budget we requested."

Financial support from its Bahraini backers creates a welcome safety net for McLaren during this time of strife, cushioning the financial blow of the Honda divorce while allowing the purchase of Renault customer engines for the next three years, plus retention of star driver Fernando Alonso — for 2018 at least.

Maintaining positive momentum when results are not >>>





Keeping Alonso onside

Retaining a star driver is vital to any team that wants to be taken seriously and stand any real chance of success. Stoffel Vandoorne is a potential star of the future, but still with much to learn after a trying first full F1 season. Fernando Alonso is McLaren's man of the moment a driver rated one of the absolute best on the grid (by Lewis Hamilton among others), and someone McLaren has done everything in its power to keep happy during its disastrous dalliance with Honda.

Alonso was properly sold on the McLaren-Honda project, signing a three-year deal with no early-exit clauses. McLaren signed the double world champion to a new deal upon securing Renault engines for 2018, but Autosport understands Alonso's contract is only guaranteed for this season, so it seems both parties are keeping their options open.

There is sense in this for Alonso, who is running out of time to add to the world titles he won in 2005 and '06. He cannot wait forever for McLaren to become properly competitive again. Equally, his alternative F1 options are limited,

with Mercedes and Red Bull uninterested, Ferrari still run by similar management to that which oversaw Alonso's departure in '14, and former team Renault still several years away from being a serious contender again.

McLaren knows Alonso's value as a reliable reference in the car, and seems determined to give him as few reasons as possible to look elsewhere – even allowing him to race in IndyCar and sportscars in pursuit of motorsport's unofficial 'triple crown'.

This is all well and good, but Zak Brown realises too that Alonso, as happy as he may be in his current environment, will probably seek pastures new for 2019 if McLaren doesn't get its act together quickly. Honda was an easy scapegoat for the recent travails. No more.

"Performance of the car this year is going to decide that," Brown confirms. "He wants to win races and championships. I think he likes the McLaren environment – the way we work together and the things we let him do. I think he just needs to get in the race car and feel it's a car he can run at the front in. I think everything else will take care of itself."



COVER STORY/McLAREN'S REVIVAL





"We've assembled a world champion team off-track.

for the coming for so long is extraordinarily difficult. The financial impact of the failed Honda experiment was twofold — causing sponsors to leave McLaren, then costing the team Honda's substantial monetary support upon the premature dissolution of the partnership.

Brown acknowledges the serious impact of the Honda nightmare on the team, but says the end of that era also represents an opportunity to remake McLaren anew. "If you look at the history of McLaren, it's one that retains partners for a long time, and if you look at our race car it's got fewer sponsors than it has ever had, so commercially we've not bought on partners at the same rate they historically have," Brown concedes.

"There are two types of sponsor: those that leave the sport and you don't know if you're responsible for that or they're not happy with the sport, and those that leave you and go somewhere else.

"Exxon Mobil left, Tag Heuer left, Hugo Boss left. These are all companies that stayed in the sport, so what that tells you is they weren't happy with McLaren. Now, probably a lot of that was results driven. As you get into poor performance, if you're not a nimble, flexible, adaptable partner, then someone goes, 'If this is all about buying and winning, I'm going to go to the team that's winning.'"

Losing sponsors to Red Bull and Mercedes is indicative of the recent decline in McLaren's standing within Formula 1. The challenge now is to find a way to reverse that trend, before it becomes a permanent feature.

"A great team like McLaren can survive a year or two, but these past few years — especially last year because we've gone backwards — it's been difficult," adds Brown. "We're going about working with partners in a new and innovative way. It's fortunate that because of my background, I've worked with all the teams, so I know all their strengths and weaknesses.

"What we've assembled at McLaren is a world championship [winning] team off-track. Now we just need to get our results

back there, back to the McLaren that we all know, which is being a leader, being at the front of the field and being innovative, because I think we've become a bit'me too'in the look and feel of the brand."

It's a sure sign of midfield mediocrity when your team is forever aping faster rivals and playing catch-up. But maybe, just maybe, there is something innovative in becoming a 'me too'F1 team in certain respects.

For so long McLaren was all about trying to outsmart its rivals with clever ideas: from Adrian Newey's never-raced MP4-18, to the abandoned octopus' exhausts of 2011, or the rear-suspension blockers' that were quietly shelved in '14, to the much trumpeted size-zero' packaging on the '15 McLaren-Honda, which proved a development cul de sac for the engine.

Since restructuring the technical team in 2014, racing director Eric Boullier has tried to move McLaren away from endless revolutionary responses to the regulations, aligning more closely with Red Bull's aerodynamic approach. Not



Brown and Boullier (top left) know their team will be measured against Red Bull (main). McLaren needs to avoid trying to be too clever, like with MP4-18 (centre left) of 2003, here tested by Alex Wurz



Now we just need to get our results back there"

exactly 'if you can't beat 'em, join 'em'; perhaps more a case of 'join 'em, then beat 'em at their own game'.

That's a pragmatic approach to take given Red Bull's relative success during McLaren's recent drought. The feeling now within McLaren is that it is back to producing aerodynamically sound cars that can develop properly through a season, rather than forcing itself to develop out of trouble each year — something that ironically affected Red Bull quite badly last season under F1's latest aero-rule changes.

But there's no real doubt that Red Bull finished 2017 with one of the best chassis on the grid, if not the best. With McLaren and Red Bull both using Renault engines in '18, we will finally get to see how Boullier's McLaren stacks up technically.

"I've got a lot of confidence in Eric and the organisation," says Brown. "Look at what he did at Lotus — winning races in a pretty unstable environment, not brilliantly funded, with drivers that people thought were tricky. Look at how happy Fernando is.



I think he loves the McLaren environment. Eric and the whole leadership team is very strong. It's a real team environment."

Boullier admits the constant cycle of bitter disappointment created by the abortive Honda project damaged morale and threatened to dismantle his work, so it's probably a testament to the new working culture, the bold moves made to switch engines and do everything necessary to retain Alonso, and the residual historical pull of McLaren's status as the second most successful team ever in F1, that it hasn't "lost anyone that we didn't want to lose", according to Brown.

"I think it shows the passion of people at McLaren to work for McLaren, and the great job that Eric has done," Brown adds. "We've seen an immense amount of loyalty. I wouldn't use the word 'depressed.' I would use the word 'frustrated.' A frustrated, eager McLaren is a good place for McLaren to be. And there's lots of enthusiasm. People have five years of built-up frustration and that's healthy for the organisation.

"It's about getting all the pieces in place. Automotive [McLaren's sportscar/road arm] is going great — we had a record year last year. The shareholders' situation has been resolved. When you put that all together, everything is headed in the right direction."

Mention of 'the shareholders' situation' brings us to Ron Dennis, namely the end of his role in the defining era of McLaren's history. Dennis was ousted at the end of 2016, before finalising the split in the middle of last year by selling his shares and relinquishing his directorships of McLaren Automotive and the McLaren Technology Group.

That the remaining shareholders have stumped up the cash to extract McLaren from its Honda nightmare represents something of a final cleansing of the organisation from the last major deal Dennis struck during his otherwise long and successful tenure at the helm.

"He's the most successful team principal ever," says Brown of Dennis. "While it's been a team effort to get McLaren"

A new broom has been sweeping through McLaren. Out have gone Ron Dennis and Honda, whose Yusuke Hasegawa is pictured with the former team principal (left)



"If Red Bull can win races, I don't see why McLaren can

where it is today, he is the most single-handedly responsible person. I want to celebrate Ron, but there's a new era [now].

"I don't want to cleanse anything. I want to celebrate it, but it's about moving on and looking forward. A lot of the baggage we were carrying — a whole different variety of companies, engine partners not working out, and shareholders [disputes] — all that stuff is behind us now. Now we're looking out the front windscreen, instead of looking in our mirrors."

Looking ahead to 2018, there is little doubt within McLaren that its new partnership with Renault will yield better results, but the 'anything-is-better-than-Honda' mantra will only get the team so far. If McLaren-Renault finishes fourth in 2018 that is obviously better than finishing ninth in '17 with Honda, but fourth is still nowhere near good enough for a team that exists to win.

But winning in this V6 era of Formula 1 means dethroning Mercedes — a now mighty force with a bigger staff, a better car and a much stronger engine than McLaren can boast. Aligning with Honda was meant to be the innovation that returned McLaren to the front. Renault is improving gradually, but it's difficult to see the French manufacturer properly threatening Mercedes in the near-term, perhaps not until the engine rules change again for 2021.

"We know who won six of the last 13 [constructors'] championships, and they may be the third best engine right now but they're still winning races," Brown counters. "They've won [races] every year since they started winning championships. Just because they maybe had the third best engine in Abu Dhabi, I wouldn't just take to the bank that they're going to be the third best engine forever. If Red Bull can win races, I don't see why McLaren can't win races."

Aiming to win races again would be a logical first step after such a protracted period of underachievement. Brown says McLaren is "very convinced" Renault is the right engine partner and expects fresh competition with Red Bull to "raise everyone's game". He also hopes McLaren's expertise can influence Renault's engine development, particularly the hybrid systems, though Renault F1 team boss Cyril Abiteboul has suggested McLaren will have little sway until the final season of its current deal in 2020.

Questions also remain concerning Renault's ability to increase power without compromising reliability, or vice versa, as well as produce sufficient parts to supply three teams properly, following the cooling-related problems Toro Rosso suffered at the end of last season, which caused a very public spat between the Red Bull sister team and its former engine partner. Renault says it is taking steps to address these problems, but doubts will linger until Renault teams are fighting regularly with Mercedes, without recourse to strategic grid penalties.

"They [Mercedes] are on the top pedestal and to knock them off for anyone is going to be hard," concedes Brown.



RARO/LAT

McLaren needs to beat engine supplier Renault (main pic) for credibility as the works team bids to improve. Good old days: McLaren's last title with Hamilton in 2008 (centre left); Boullier celebrating with Raikkonen (centre right) after '13 Australian GP victory with Lotus



n't win races"

"When you look at the sport, we went through our eras of dominance, [so did] Williams, Ferrari, Mercedes, Red Bull... It's hard. Rules stability tends to [help the field] catch up, so I think that'll close the gap. Mercedes are pretty close to flawless. They've everything they need to be a world champion team, and they're delivering."

Maybe Renault will match Ferrari and Mercedes this year; maybe McLaren will produce a better car than Red Bull, but it seems unlikely given F1's iterative nature under stable regulations. Ostensibly, McLaren will likely have the fourthbest car on the grid and has swapped the worst engine in F1 for the next worst. This move will alleviate some symptoms, but is unlikely to be a panacea. Realistically, this is about survival until 2021, when the engine rules will change again, commercial terms will be recast, cost-caps may come in, and F1's new owners will finally stamp their own mark on grand prix racing.

"I'd be surprised if we were world champions this year," >>>





An uneasy alliance?

McLaren says it is "very convinced" Renault is the right engine partner for 2018, but anything is better than what McLaren endured with Honda. Bolting in Renault engines is a quick fix and has prevented the team's potential collapse, amid fears Fernando Alonso would walk away and morale would sink so low as to threaten McLaren's careful reconstruction over the past few seasons.

But this new venture is not without potential pitfalls.

McLaren can no longer count on its engine partner to make specific allowances for its chassis.

McLaren will bolt in whatever Renault provides and needs to work around the consequences. The major one concerns the different positioning of the Renault turbo and compressor arrangement compared to Honda, which sites the whole assembly at the back of the engine instead of splitting them up.

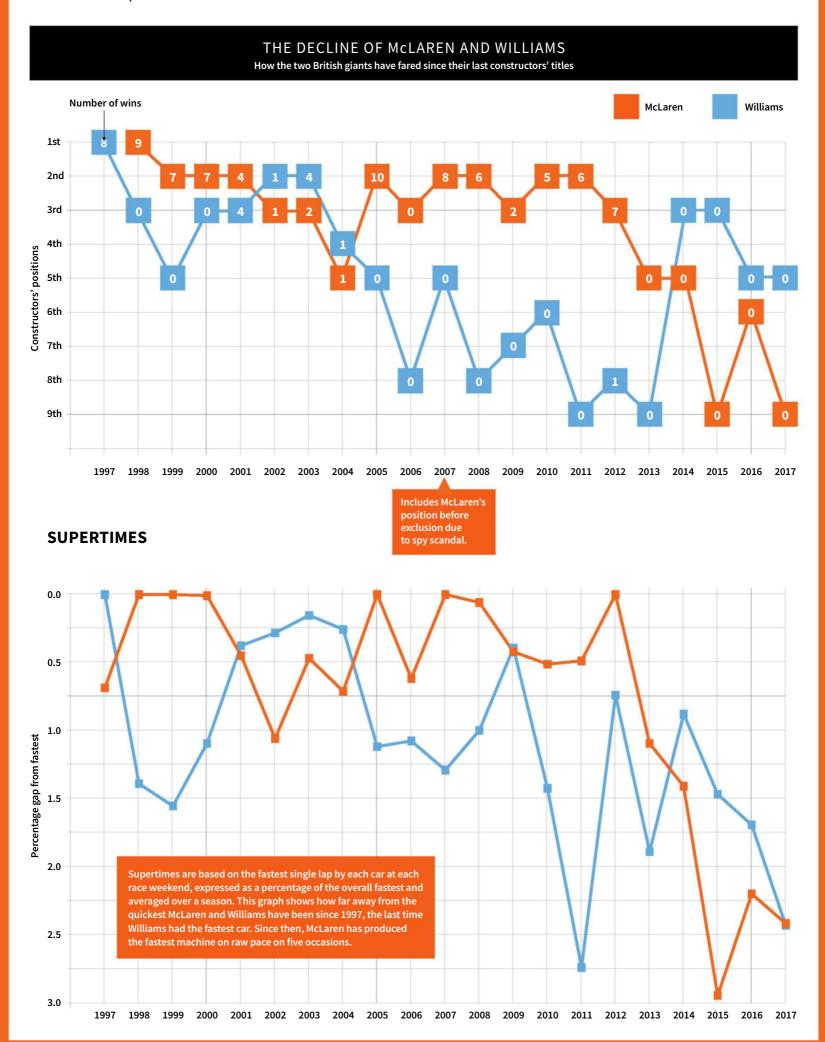
McLaren technical director
Tim Goss says the team had
to reconfigure the chassis,
cooling system and gearbox to
accommodate the new engine, but
did so "without any significant
compromise to the chassis".

So far so good. McLaren also hopes to use its recent experience working closely with Honda to influence Renault's future engine designs, but there will naturally be limits on what McLaren can achieve in this respect, given it is 'merely' a customer of Renault, which also has its own works team to focus on, in direct competition with McLaren.

"We will take it step by step," says Renault F1 boss Cyril
Abiteboul. "We want to be very pragmatic. Clearly for 2018 and even '19, it's very late for McLaren to have any influence on the engine hardware. Having said that, we want to be humble. We accept we can improve our product, that we have to improve our product, and we will be open to their suggestion.

"I think it's more on the medium to long-term – if we see that the relationship is working well, if it's fruitful and positive, then there is no reason it could not go further than this cycle of regulation, and therefore we can have a different and more connected way of working together for the medium to long-term future. But it's not something for before 2020 in my opinion."







"I believe McLaren is the best race team in the world"

says Brown. "Then again, no-one thought Brawn was going to be world champion [in 2009], so, you know, the sport can throw out. But that was a big rule change and they found something. With the rules stability now it's harder to find something.

"I wouldn't want to say we're not gonna try to win world championships before 2021, but certainly it's an unlevel playing field right now, which makes it a tall task. The budget deficit is quite huge between us and the top three teams. You can spend more efficiently, as Force India does. Force India is beating teams that spend more, so it's not purely money, but the discrepancy is too big.

"Given the amount of change that is going to come in 2021, I think right now all we can do is focus on the next three years and stay very in tune with what's going to happen. We used to have one of the biggest budgets in the sport, now we don't, so we need to find more budget and at the same time work real hard to get ready for the cost cap, which I think is gonna be a positive thing.

"When we get on equal footing [financially] with the other teams, I like our chances of winning world championships as much as anyone else."

Incidentally, cost-capping is exactly the sort of thing new Williams technical chief Paddy Lowe feels he needs before his team can stand any real chance of making proper progress back towards the front of the grid. In the meantime, McLaren must also tread water to a certain extent, hoping that Renault can find a consistent level of performance that has proved largely beyond its reach since the current V6 engines were introduced.

Wherever Renault's 2018 engine sits compared to main rivals Ferrari and Mercedes, McLaren will be measured against Red Bull — one of F1's most successful teams since McLaren last won a championship — and Renault's own works squad, which is coming up fast, determined to become a championship challenger in its own right. Can McLaren truly compete with that, or are its best days now firmly behind it?

"We've accomplished a lot in 2017 that the viewers can't

see on television," Brown says. "We're now one group, which makes us stronger. New leadership, restructuring, some investment into the team that we've not had in the last few years. We weren't spending what we needed to, we weren't investing in the right areas. We've corrected that. We've got our two drivers that we wanted. We've got a lot of energy in the company. We've got new sponsors coming on board.

"All that started to take shape in 2017 so we can come out strong in '18. We've got the drivers that can win. We've got the talent inside the organisation to win. What we need to do now is go on the race track to prove it. We need to get back to the front of the field, to get back to our winning ways, and, ultimately, get back to winning championships."

This is undoubtedly the beginning of a new era for McLaren. A new broom has swept through the corridors of the McLaren Technology Centre, consigning the Ron Dennis age — McLaren's most successful period overall — to the annals of history. The team he built into a true force, then dragged into decline, now stands at a crossroads — between paths that may lead to bettering the glories of yesteryear or becoming a permanent ghost of its former self.

Brown is convinced that McLaren can take the correct route. "I've been a massive McLaren fan since 1988," he says. "I have always thought it's the best race team in the world, and has proven that many times.

"I still have that belief. I'm a massive believer in the team and in the people. The same people are still there. If you look at our facility, the people, the ownership, we've got all the right ingredients. Now we just need them to come together."

It's a mantra Williams oft repeated and is still yet to make good on. McLaren seems determined to avoid the same fate, seems structured to ensure a different outcome. But it's been a long time since McLaren last tasted success in Formula 1 and all the while the clock is ticking. McLaren must escape decline soon, or else surely the damage will be permanent. **

Honda has gone. Now McLaren needs to ensure the sun doesn't set on its time at the top of F1

GREAT SERIES





ebastian Vettel, Robert Kubica, Daniel Ricciardo, Carlos Sainz Jr and Kevin Magnussen all graduated to Formula 1 without taking in the conventional final step on the ladder.

To most the alternative route was known as World Series by Renault, although the French manufacturer, which heavily backed the series for a

decade and offered free tickets to most of its events, preferred you to call it Formula Renault 3.5. As the centrepiece of the 'World Series' events, FR3.5 drivers enjoyed ample track time, although unlike GP2 it was arguably out of sight of the F1 teams by not running on grand prix weekends. But that became a virtue when F1-affiliated juniors flooded the grid for 2012, just as an updated, faster car was introduced.

Prior to that, Red Bull led the way in providing the high-profile names, with FR3.5 considered a vital step in the development of Helmut Marko's juniors, and Vettel's stunning debut performance at Misano in 2006 firmly cementing his credentials as a star of the future. Other teams caught on to the series as a viable alternative when it became the norm for junior drivers to be put to work in F1 simulators during grand prix weekends, making a GP2 programme on the F1 support bill impossible. But over time most teams moved towards

"F1 TEAMS CAUGHT ON TO FR3.5 AS A VIABLE ALTERNATIVE TO GP2"

specialised simulator drivers, freeing up their juniors to hang out in the F1 paddock again and race on the same weekends. Some people considered this a crucial shift in the battle between the two championships.

In the end GP2 won that fight, which never quite played out in public. But both sides were watching each other very closely, and at times an obsession with lap time comparisons on circuits bordered on unhealthy.

The championship grew out of the World Series by Nissan and Formula Renault V6 Eurocup categories in an era when there was demand for a strong alternative to GP2, and there's no question that at times during its existence it boasted the stronger grid. But more drivers give up on

the F1 dream earlier in their careers now, instead pursuing paid professional drives elsewhere, and that eliminated the need for two premier sub-F1 categories.

Renault pulled its backing from the series at the end of 2015, and the category limped on for two more years — latterly known as World Series Formula V8 3.5, and supporting the World Endurance Championship — as a shell of its former self. But too many top drivers came through Formula Renault 3.5 for it to be remembered only for the way it faded out. **GF**



FR3.5 was considered a vital step for Red Bull's young up-and-comers; Vettel's star quality was immediately apparent

WILL POWER

"OF ALL THE CARS I'VE driven, the World Series was one of the best-balanced," recalls 2014 IndyCar champion Will Power. The Aussie raced for Carlin in '05, scoring two wins and three pole positions, and finishing seventh in the championship after skipping the last two rounds to embark on his US open-wheel career.

"There were 30 cars on the grid, it was very tight, and it was very spec – there was very, very little you could change on the car. So it came down to driving, and to me that car had the right power and grip for a junior formula."

Asked if it was a big step up from Formula 3, Power says: "Yeah, it was a lot faster, but remember at the end of 2004 I'd done that Formula 1 test for Minardi – and that

"There was very little you could change. It came down to driving"

was just another world! Nothing was gonna compare with that."

Although Trevor Carlin has gone on record as regretting the reliability niggles in practice, qualifying and races that prevented Power from truly challenging the other ace in the pack, eventual champion Robert Kubica, Power himself defends Carlin.

"That year the car was new to everyone," he says, "so I think there were problems up and down pitlane. Maybe we suffered more than others, I don't know. They were teething issues, new-car issues – often to do with the gearbox, because that

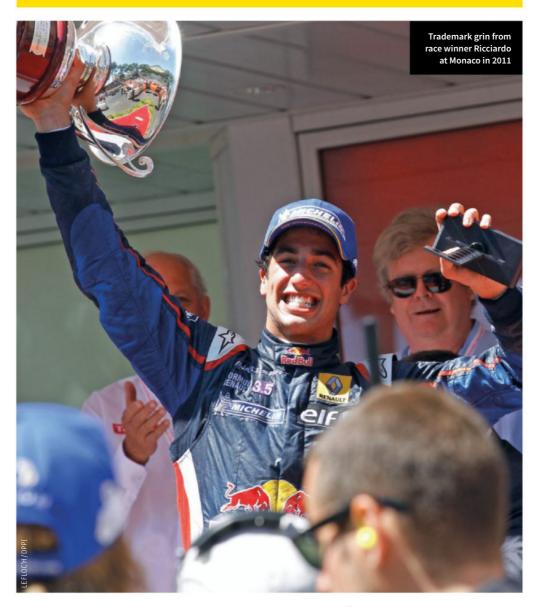
was the first year of the paddleshift on those cars, and that took a while to sort out. Carlin did everything they could, it's a quality operation... I mean, I knew that even before I joined them because I'd spent the past couple of years trying to beat them in F3! But when a car is so spec like World Series. the teams can't do much about things like gearbox sensors. It's in the hands

of the suppliers."

Rather than the frustrations, Power recalls the good times. "It was cool to get my first wins since 2002, first wins outside of Australia," he says. "And we raced at some interesting places – Monaco, Zolder... oh, and Bilbao street course! Man, that was just an awesome track. Getting a pole and a win there felt great." DM



DANIEL RICCIARDO



HAD THE CARLIN TEAM not successfully crowbarred Mikhail Aleshin out of a locked toilet ahead of the 2010 Barcelona finale, then Daniel Ricciardo would likely have beaten his rival to that season's Formula Renault 3.5 title.

The Red Bull
Formula 1 ace chuckles
at the memory. "It
certainly went down to
the wire!" says the man
who finished runner-up
in his rookie season in
Renault's premier junior
single-seater series with
Tech 1 Racing, having
arrived as the reigning
British F3 champion.
"It was Red Bull's choice
pre-F1, so it was an

important category," says Ricciardo, now a five-time grand prix winner with the drinks company's F1 squad. "It was the first category I raced where there were pitstops. It always looks so easy on TV, pulling into the box, but I soon realised it wasn't that easy!

"Little things like that I was glad I wasn't learning in F1, because simple things can sometimes be the most difficult.
There were longer races, so race fitness was starting to come in, and there were more experienced drivers.

"Mikhail had done it I think a couple of years, and there weren't many

"It was the first category I raced where there were pitstops"

rookies running at the front. Racing against older guys and learning a few tricks with racecraft and stuff like that – just taking points when you could, thinking about more of a championship, as opposed to balls to the wall every race."

Ricciardo describes that generation of FR3.5 cars as "fun" and "cool" to drive, and says they allowed him to usefully "experience a little bit of tyre degradation" for the first time. "And there was no power-steering, so my biceps got bigger that year!"

Ricciardo returned to the category in 2011, with Czech team ISR, but only completed a partial campaign alongside free-practice duties for Toro Rosso and his mid-season fulltime F1 graduation with HRT.

"After the first year, in my mind I was ready to go to F1," Ricciardo says. "It was another step closer, but to be honest F1 was still a pretty big step back then – especially the tyres, driving on the Pirellis and having quite a bit more horsepower. It [FR3.5] was a different beast, but I'm glad I did it." BA

CHAMPIONS

2005 Robert Kubica Epsilon Euskadi

2006 Alx Danielsson Comtec Racing

2007 Alvaro Parente Tech 1 Racing

2008 Giedo van der Garde

P1 Motorsport

2009 Bertrand Baguette

International Draco Racing

2010 Mikhail Aleshin Carlin

2011 Robert Wickens Carlin

2012 Robin Frijns Fortec Motorsport

2013 Kevin Magnussen DAMS

2014 Carlos Sainz Jr DAMS

2015 Oliver Rowland

Fortec Motorsport

2016 Tom Dillmann AVF

2017 Pietro Fittipaldi Lotus (Charouz)

MOST WINS

Oliver Rowland	10
Egor Orudzhev	9
Esteban Guerrieri	7
Antonio Felix da Costa	7
Carlos Sainz Jr	7
Bertrand Baguette	6
Jean-Eric Vergne	6
Robert Wickens	6
Kevin Magnussen	6
Pietro Fittipaldi	6



MOST POLES

Kevin Magnussen	11
Daniel Ricciardo	10
Oliver Rowland	10
Pietro Fittipaldi	10
Robert Wickens	8
Matthieu Vaxiviere	8
Carlos Sainz Jr	7
Tom Dillmann	6
Pastor Maldonado	5
Esteban Guerrieri	5
Jules Bianchi	5

MOST STARTS



Daniil Move (above)	107
Mikhail Aleshin	102
Anton Nebylitskiy	58
Fairuz Fauzy	57
Pasquale di Sabatino	55
Alfonso Celis	55
Sten Pentus	53
Roy Nissany	53
Miguel Molina	52
Andre Negrao	52

FUTURE F1 RACERS

	STARTS	WINS
Jaime Alguersuari	17	1
Jules Bianchi	18	3
Karun Chandhok	5	0
Max Chilton	1	0
Jerome d'Ambrosio	7	0
Pierre Gasly	17	0
Brendon Hartley	42	0
Robert Kubica	17	4
Kevin Magnussen	34	6
Pastor Maldonado	24	3
Roberto Merhi	25	3
Esteban Ocon	3	0
Charles Pic	33	4
Daniel Ricciardo	31	5
Alexander Rossi	35	2
Carlos Sainz Jr	26	7
Sergey Sirotkin	34	1
Will Stevens	51	2
Giedo van der Garde	31	5
Stoffel Vandoorne	17	4
Sebastian Vettel	10	2
Jean-Eric Vergne	23	6
Markus Winkelhock	17	3

JEAN-ERIC VERGNE

WITH RED BULL'S backing, Jean-Eric Vergne was supposed to embark on a dual campaign of British F3 and Formula Renault 3.5 in 2010, but the deal with SG Formula to run in the bigger class fell through, leaving him free to concentrate solely on F3 with Carlin.

With the F3 championship wrapped up early following 13 wins in 25 races, Red Bull slotted 'JEV' into 3.5 in place of Brendon Hartley and alongside **Daniel Ricciardo at** Tech 1 Racing for the final three rounds of the championship. He was instantly up to speed, winning on only his third start and taking three more podiums in the six races he contested.

"It was good. I really

liked the car and I was on a good momentum, winning many races in F3, and I had nothing to lose, nothing to prove," says Vergne. "I was battling against a guy who was already in F1, so I was completely free in my mind when I arrived in the championship, and it was great."

Naturally he was among the favourites for the 2011 title, alongside Robert Wickens, with whom he was paired at Carlin: "I didn't enjoy that season so much. There was too much politics in the team. We were the only two drivers winning races so for Carlin it must have been a difficult season to handle. The last three races of the year - the pitstop races - were

completely screwed up by the team. It can happen once, but three times in a row was way too much. And that's where I lost the championship."

But Vergne was still in the fight for the championship going into the final race of the season at Barcelona, where there was a predictably controversial

"I really liked the car, and I had nothing to lose, nothing to prove. I was completely free in my mind when I arrived in the series" conclusion. "I braked late [for Turn 1], he [Wickens] saw me at the last moment – he was on the outside, I remember like it was yesterday – and then completely turned into me," he says. "Then at the little left he just went straight and broke his steering column."

But a point would have been enough to take the championship and, despite yet another slow pitstop, he was in contention for that vital 10th position when he was divebombed by Fairuz Fauzy. His championship was over but his graduation to F1 and Toro Rosso had been sealed, and FR3.5's position as the breeding ground for the best young drivers was enhanced once more. **AVDB**



OLIVER ROWLAND

AFTER THREE SEASONS in Formula Renault 2.0 one in the UK championship and two in the Eurocup - Oliver Rowland graduated to Formula Renault 3.5 for 2014 with Fortec Motorsport, as part of the Racing Steps Foundation scheme. This was a break in tradition for RSF. which in the preceding seasons had favoured the GP2/GP3 ladder.

"It was pretty much my choice in the end," recalls Rowland. "In Renault I'd just missed the championship [to Pierre Gasly], and I did some World Series tests, and also two days in Abu Dhabi with GP3. The reason I chose it was the competition – Gasly, Carlos Sainz, Roberto Merhi... The names doing it were really



"It was just mindblowing. I smiled every time I drove the car"

impressive and I wanted to challenge myself. Although whether or not that's the right decision in hindsight I'm not sure." Rowland immediately loved the FR3.5 car: "It was just mindblowing - the amount of downforce was incredible. I just loved it. I smiled every time I drove the car really."

What was notable about 2014 was not only the fierce battling between champion Sainz, Gasly, Merhi and Rowland, but the respect they had for each other. "You were the pinnacle of the [World Series] weekend, and you knew all the drivers," says Rowland. "We all knew we were fighting at a high level. That's why even if we crashed into each other one weekend, we'd be friends the next - off the track anyway." Rowland remained in FR3.5 for 2015, taking the series' wins record on his way to the title. "It was a really good year," he remembers. "I was consistent in terms of qualifying on the front row [he did this 12 times in 17 races] and I won a race on every World Series weekend."

Success here brought

Rowland into Renault's F1 programme, but he won't knock the rival GP2/Formula 2, in which he raced full-time in 2016 and '17: "There are different aspects of each that are challenging. The performance of the tyres is nowhere near as good [in GP2/F2], but that's another aspect you've got to master." MS

ROBERT KUBICA



BY THE END OF 2004, Robert Kubica had started 34 races over one and a half seasons in the Formula 3 Euro Series, but had failed to follow up on his sensational, belated, winning debut at the Norisring in '03 with Prema Powerteam – he'd missed the opening few rounds due to injury in a road-car crash.

After finishing seventh

in the '04 points with Mucke Motorsport, he showed his potential with second in the Macau Grand Prix with Manor Motorsport. Kubica was obviously a star on street circuits – he'd also won the non-championship Cagliari F3 race at the end of '03 – but, having previously been dropped by the Renault junior programme, his career

was at a crossroads.

Kubica joined Epsilon Euskadi for the inaugural season of Formula Renault 3.5, and again proved to be a streetcircuit king – he shared

"It was a very important year for me, with good memories"

the wins and poles in Bilbao with Will Power. But, crucially, he added three further victories to clinch the title with three races to spare.

"It was a very important year for me," says Kubica, "and I have very good memories. At that time the World Series was on the same level pace-wise as the GP2 cars: some tracks maybe a bit faster, and

some maybe a bit slower. We had a very good year with Epsilon Euskadi with some great results; some unexpected results at some tracks. Some really good races; some difficult moments as you can always imagine during the year. We had a very good team, with a nice atmosphere."

His title success put Kubica into the seat of a current Renault F1 car for a test at Barcelona.

"I think this was the biggest highlight of my career – or the most important one," he reflects. "After that test I was signed by BMW Sauber to be third driver in 2006, so a very important moment which, thanks to the World Series, I had by testing an F1 car for the first time in my life." RC

ALEXANDER ROSSI



DURING HIS 2010 GP3 Series campaign with ART Grand Prix, which led to fourth in the points race, Alexander Rossi was called up by ISR Racing - with whom he had scored wins in the International Formula Master series - to drive at Monaco in Formula Renault 3.5. That was the taster that led to a full FR3.5 season in '11 with Fortec Motorsport, resulting

in two wins, four other podiums, third in the championship and top rookie. He would then switch to Arden Caterham for the first year with the new Dallara T12, leading to his brief time in F1.

The 2016 Indy 500 winner recalls the FR3.5 cars fondly. "The best comparison I could make is that from 2011 to '12, the series did the opposite of what IndyCar

is doing now," he says. "They added a huge amount of downforce. pretty much the same as F1, so there were just absurd cornering speeds, absurdly late braking - like IndyCar has been the last few years, but without the straightline speed. But they added an iteration of DRS that made the racing better. Without it, it was virtually impossible to pass anyone.

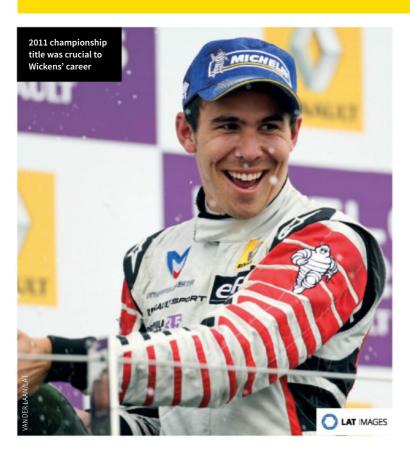
"The F1 team owners paid attention. It was the place to be"

"Despite that, I loved my time in that series more than GP2, because the guys competing in it were top quality – Vergne, Ricciardo, Wickens, da Costa, Frijns, Bianchi, Bird... Properly good drivers, and the F1 team owners paid attention to it. It was the place to be.

"And the format was fantastic too. You had two races, but you didn't have the reversed grid – you had two qualifying sessions, so it meant that if you had a bad Saturday, that didn't ruin both races.

"In hindsight, I'd say the only downside of the series was the Michelin tyre - it was fantastic for performance and raceability, but didn't prepare you at all for the characteristics of the Pirelli in F1. GP2, on the other hand, ran similar tyres to F1 but with a slightly different construction and a lack of tyre blankets. But other than that, World Series was the better series, and I'm really sorry to hear it's gone." DM

ROBERT WICKENS



WICKENS WAS JUST 17
when he clinched the
Formula BMW USA title in
2006, and the following
year took third in Champ
Car's Atlantic series and
first sampled Formula
Renault 3.5. Then, after
winning an A1GP race
near the start of '08, he
went on to race in both
the Formula 3 Euro
Series (with Signature)
and FR3.5 with Carlin,
winning a race in each.

But it was in 2011 – after finishing runner-up in the '09 Formula 2 championship and the '10 GP3 Series – that Wickens was able to really show his mettle in a Carlin FR3.5 car. He scored five wins, seven poles, and beat team-mate and future F1 driver Jean-Eric Vergne to the title.

"It's tough to pinpoint why the cars worked so

well for me," he says, "because I ended up driving three different eras of the cars. But every 3.5 race I did was with Carlin and I'm a huge fan of them because you know you're getting the best. For a team to be that far ahead in a singlemake championship is incredible. Like if I had a really bad qualifying, I'd be on the third row, and cursing that I'm not on pole! The team found the sweet spot for extracting lap times."

Wickens recalls the experience far exceeding anything he had encountered in other junior formulas. "Being the headline show was spectacular," he says. "I remember thinking, 'Why would you want to do GP2 and be a support class with minimal track time?' In 3.5,

"You were the headline show. Why would you do GP2?"

we'd sometimes have a Thursday test day, then two one-hour practices on Friday, and an F1-style structured event for the rest of the weekend. You got an amazing amount of seat time racing a sophisticated high-downforce car. It was great training.

"I'd say 2011 was crucial to my career because winning the 3.5 championship is what got me a test with Renault. I had a strong test, which interested Norbert Haug and Toto Wolff and that got me the test at Mercedes for the DTM." DM

CARLOS SAINZ JR

HAVING FINALLY
emerged from Max
Verstappen's shadow
to make a lasting
impression on Formula 1
with Toro Rosso, Carlos
Sainz Jr is now – for a
year at least – a fully
fledged works F1 driver
with Renault.

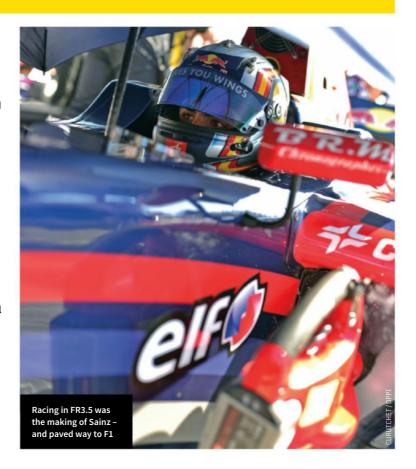
He has become a hot property in grand prix racing, but it could all have turned out very differently had Sainz not made such an impression on Red Bull while racing in Formula Renault 3.5, which ultimately proved the making of him as a junior single-seater driver.

Sainz made his debut in Red Bull's favoured F1 prep school at Monaco, five races into 2013. Armed with knowledge from a special track walk with his hero Fernando Alonso, Sainz produced a top-six performance with the unfancied Zeta Corse team. This partly mitigated a troubled campaign in GP3 and helped Sainz retain his place on Red Bull's driver programme.

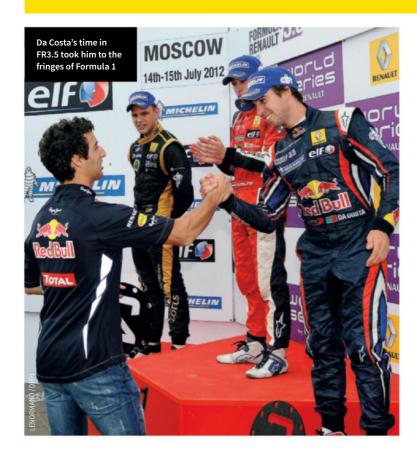
Sainz did enough in subsequent outings with Zeta Corse to earn "the last chance from Helmut [Marko] to win World Series the year after". He won seven races with DAMS, beating Pierre Gasly, Roberto Merhi, Oliver Rowland and Sergey Sirotkin to the championship something he had to do or face the prospect of never realising his F1 dream with Red Bull.

"I learned about proper downforce. It was seriously impressive" Sainz found the professionalism of FR3.5 teams to be very close to F1, and says the series' "fair-and-square" purity in avoiding reversed-grid races, while including pitstops and allowing certain freedom to adjust differential and suspension settings, provided excellent preparation for F1.

"The car was just stuck to the ground," recalls Sainz. "I learned about how proper downforce works. It had even more downforce than the 2015 [F1] car I drove the year after! I fell in love with it. The power was not spectacular, but good enough. But the downforce was seriously impressive. I remember we went with the highdownforce wings in the damp in Spa and I went flat through Pouhon. That was really cool." BA



ANTONIO FELIX DA COSTA



FORMULA RENAULT 3.5 was the series that launched Antonio Felix da Costa to the fringe of Formula 1 with Red Bull. While it was also the championship in which the Portuguese did not quite do enough to earn his grand prix graduation, he remembers the category very fondly.

"It's always been a great series," he says.
"The Red Bull guys never went to GP2, they always went to World Series.
If you did that, it was like, 'We're getting close now!' To win races there, you know it's getting even closer."

Da Costa joined FR3.5 for round four of the 2012 season, in place of the dropped Lewis Williamson, and finished fourth in the championship after winning four of the last

"Corners like Copse and Pouhon were quicker than F1 cars"

five races. That should have been the precursor to a title bid in 2013, but he couldn't match Kevin Magnussen or star rookie Stoffel Vandoorne. Though his rise to F1 halted, FR3.5 had allowed him first-hand experience of Red Bull's grand prix operation.

"I was working as a
Red Bull simulator driver
and going to the races a
lot, sharing that role with
Sebastien Buemi," he
explains. "GP2 always
clashes, so you couldn't
do that. You probably
had three times the track
time than GP2, and it
was, I think, twice as
expensive in GP2.

And the only advantage is you learn the Pirelli tyre. But if you're talented, you learn it quick. Racing in 3.5 was just a win-win situation."

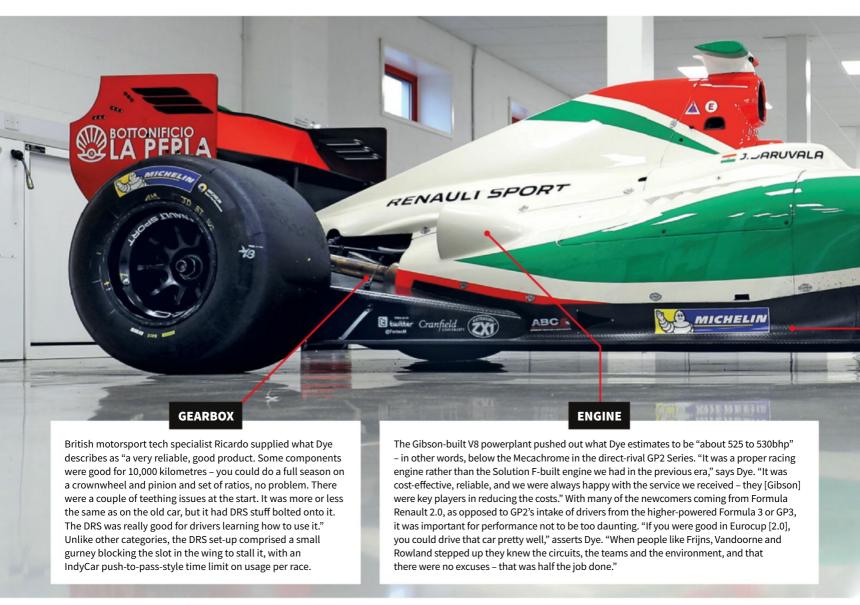
Da Costa's move from GP3 to FR3.5 coincided with the introduction of a new chassis, but he had driven the old car too. The performance step left a lasting impression. "Corners like Copse and Pouhon were auicker than F1 cars when they went to Pirellis," he says. "I remember Copse being flat with a headwind. It brought me to the limit of my body. I spoke with Jules Bianchi, who had done a free practice with Force India a couple of weeks before, and he said the 3.5 car is quicker!

"It was a simple, pure, great car. To push, it was the perfect car." SM

GREAT CAR

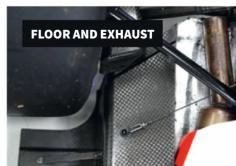
Dallara T12

The final generation of Formula Renault 3.5 is arguably the greatest racing car in the









The Dallara T12 was the third generation of Formula Renault 3.5 racer, introduced in 2012 and continuing until the category's demise at the end of last year. Powered by a Gibson-built engine, it featured enhanced aero that some of its young drivers rated as better than the Formula 1 cars they were testing. The chassis here is the one run by Fortec Motorsport and raced by Alfonso Celis to third

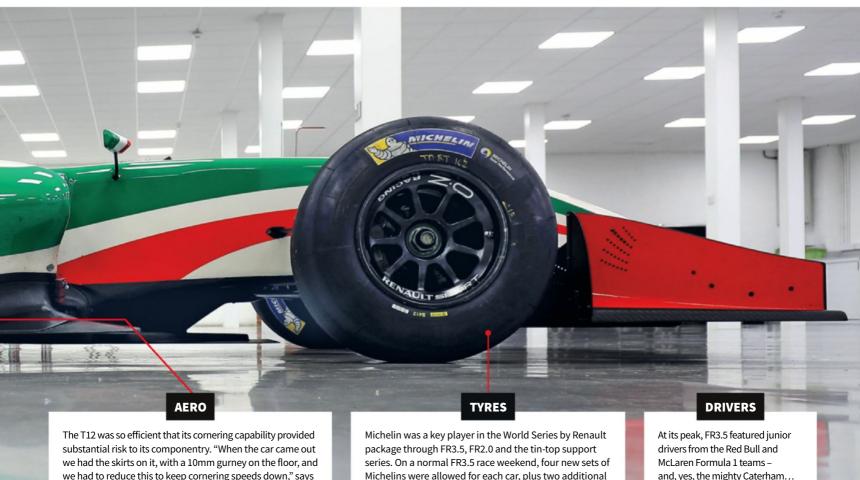
position in the 2017 standings, and has an illustrious history that makes it the most successful FR3.5 racer in the series' 13-year history. Driven to the title by Robin Frijns when new in 2012, it also passed through the hands of Stoffel Vandoorne (runner-up in '13), Oliver Rowland (fourth in '14 and champion in '15) and Louis Deletraz (runner-up in '16), notching up 20 race wins.

"Everyone wanted that package,

that engineer and that car, and whoever signed up first got it," laughs Fortec managing director Jamie Dye. "But there was nothing wrong with our other car. The car gave an equal platform for all the teams, and to a certain degree a driver could win with any team. Having the manufacturer support from Renault was really good, and losing that was the key to it falling on its bum."



history of junior motorsport. Marcus Simmons talks to Fortec team boss Jamie Dye



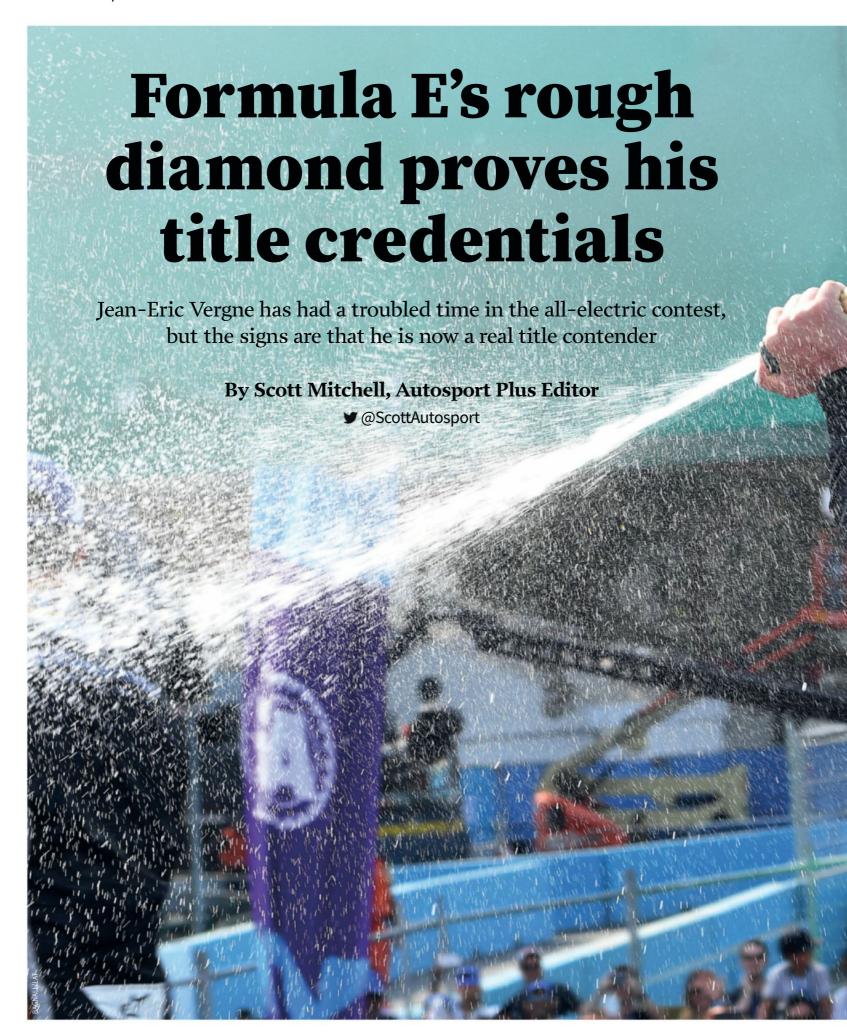
The T12 was so efficient that its cornering capability provided substantial risk to its componentry. "When the car came out we had the skirts on it, with a 10mm gurney on the floor, and we had to reduce this to keep cornering speeds down," says Dye. "That cost us about a second, and a reduction in the side skirt cost a bit as well. They had to reduce the lateral load on the gearbox and components, and wanted to keep brake and tyre wear under control. But we'd rather have gone faster and spent more! When we went to Monaco, GP2 had to go on the supersoft tyre to keep with our lap times."

Michelin was a key player in the World Series by Renault package through FR3.5, FR2.0 and the tin-top support series. On a normal FR3.5 race weekend, four new sets of Michelins were allowed for each car, plus two additional used sets for free practice. "We never had any qualms, and you never had the odd one blistering," says Dye. "Everything the drivers learned on them was consistent, and relevant to whatever they did next. Over a stint the difference in lap times would be 1.0 or 1.5 seconds maximum – while GP2 could be 6.0s as they degraded."





and, yes, the mighty Caterham... "A lot of young-driver programmes looked at it because it was a cheap alternative to GP2," says Dye. "GP2 was €1.2million and World Series should have been €850,000. The teams were good - us, Carlin, DAMS, Tech 1 - and that made a good buzz for it." Dye believes that the manner of Renault's withdrawal of support during 2015, effective from the end of that season, could have been handled better and led to a dramatic weakening of the series' position in the driver market: "They could have done a soft exit with a much smaller impact. But there was a big row at the Red Bull Ring and then 'boom'. It was just 'crikey'. They could have carried on badging it, but with less involvement."





e can't race these cars.
He can drive them very fast, but he can't race them. That is essentially how Jean-Eric

Vergne was viewed as a Formula E driver until the very last race of last season, when he finally took his first win — 30 races after a debut pole position had amounted to nothing.

The Montreal victory, which was built upon superb race management and execution, the perfect drive that Vergne hadn't previously produced, changed the perception — but it wasn't completely transformed. The problem is, in the early races of the 2017-18 season he was only on the periphery of the lead battle. That meant there was no validation of his Montreal success. Until last weekend, it looked like a one-off. On paper, at least.

Then, in Santiago, on the series' maiden trip to Chile, he produced an assured drive in very tricky circumstances to vault into the championship lead for the first time. Under extreme pressure from team-mate Andre Lotterer and facing a communications blackout and energy-related misunderstanding, Vergne was flawless.

Three things stood out. The first was his patience. Though he was on pole in Hong Kong and finished second, Vergne called that "lucky" and said: "I knew there and Marrakech I didn't have the car to do a win or even get a podium." His points-make-prizes ethos in the opening races was a much more calculated, calm approach than the rapid-but-erratic style

"Sometimes you need to be content with finishing fifth"

with which he had become associated. "Formula E is a difficult championship; to win you need more than just being able to win a race," he said. "You need to content yourself with finishing fifth sometimes."

A set-up breakthrough after intense work in the rookie test in Marrakech with the experienced James Rossiter and Frederic Makowiecki boosted Techeetah's performance, while Vergne claimed the team also discovered "we had suspension that was basically not working in some corners". Another pole duly arrived in Santiago, and this time it was converted into victory.

"I knew there would be a moment I could challenge for wins, so I needed >>>

FORMULA E/SANTIAGO



to score points — that's what I did in the first few races," Vergne said. "Today, I knew I had chance to win the race."

This was a different kind of win too — in Montreal he caught and passed Felix Rosenqvist using a superior energy strategy, whereas here he was the hunted.

The second thing that stood out was that Vergne managed to win in difficult circumstances, in which he would probably have wilted in previous seasons. Lotterer was aggressively pursuing a first victory after a trying start to his rookie season, and Vergne was hampered by a pair of problems.

"We didn't have the same weapons to fight," he said. "I have no idea what happened but basically my energymanagement system was saying I needed to save a lot more energy to finish the race [it was suggesting he needed an extra lap's worth].

"I was seeing Andre coming massively quicker in a straight line, so I thought at first he was never going to finish the race. I was pushing very hard in the corners, nearly hit the wall twice, and then I lost communication completely with the team. He tried to attack me on the outside, flat. I was thinking there was no way he would finish the race, but actually I was saving one more lap [of energy] than him."

Vergne was unrecognisable from the fragile-minded youngster who was dropped from Formula 1 by Red Bull. He remained resilient as his race threatened to implode.

He was a sitting duck as he lifted-andcoasted at the end of two long straights, with Lotterer attacking several times into Above: Vergne holds on to the lead as Piquet attacks at the start. Below: Vergne and team-mate Lotterer celebrate one-two – a first for any team in FE



the heavy braking zone of Turn 3, a tight right-hander. Twice he drew alongside his team-mate on the wrong line, but the most dramatic moment came when Vergne moved across to defend just as Lotterer, with a significant closing speed, had committed to trying to dive down the inside late on the brakes.

Lotterer nailed his team-mate square in the rear, but somehow the two connected cars — both with locked wheels — stayed out of the barriers. Vergne was arguably too aggressive in his defence and Lotterer certainly thought so, but he should be given the benefit of the doubt because of the closing speed.

The final point is connected to this: Vergne's energy management. OK, it was ultimately unnecessary. But to have needlessly used a lap's less energy than his pursuers and still hold on is very impressive, particularly given the pressure he was under and a circuit layout that left him exposed at the end of two long straights. In the past, Vergne has slipped into an erratic, almost desperate, style in stubborn defence of a position, which is an inefficient use





of time and energy. There was no repeat here and his energy use remained consistent in the face of rising pressure.

It bodes extremely well for races in which he will be in a legitimate energy fight, and Vergne knew the significance of what it represents: "It means even more for me to win knowing I had one more lap [of] energy in the car."

The one arguable caveat is that Vergne was pressured by his team-mate. Lotterer confessed to feeling conflicted in battle: "I was quite confident with the speed I had that I should be able to pass him comfortably. But he's my team-mate, he's got quite good points in the championship, it's a bit mixed feelings."

Lotterer didn't drive like a man playing rear-gunner though, and threw everything he had, car included, at Vergne, someone who's not always reacted particularly well to pressure from a team-mate. This was a very real battle, as the side-by-side and nose-to-gearbox action attests, so Vergne deserves due credit, even if a more experienced hand like Sebastien Buemi or Rosenqvist, third and fourth and part of the lead battle in the last few laps, >>>

AUDI'S LATEST BLOW LEAVES DI GRASSI FE'S WORST PERFORMER

LUCAS DI GRASSI WILL NOT CARE TO BE reminded that it's meant to be easier to make a fast car reliable than a reliable car fast. If this racing cliche was ever to be disproved, the reigning champion's terrible campaign should do it.

Four races in and the Audi Sport Abt driver is the only full-time participant who has failed to score a point. His latest setback was a mirror of two previous problems: a loss of power and an on-track stoppage. And this after a "miracle" drive from 13th on the grid, following a 10-place penalty, back to the top five.

"The fact we're very unreliable at the moment is just really, really unbelievable," he said. "To have so many issues consecutively, like that, it's really frustrating because we have the pace. In Marrakech I would easily have fought for the win. Here, I was in the fight for a podium. Hong Kong, I fight for a podium. We have a very, very good car. It's just not reliable. The first thing in racing that you learn is 'to win a race, first you have to finish'. We're not finishing any races!"

Audi is confused. It thought it had identified the problem, hence di Grassi's grid penalty: the team had replaced the inverter on one of his cars, suspecting a component fault. Di Grassi even declared on Sunday morning that the problem was fixed and the reliability would be there.

What is bewildering is that team-mate Daniel Abt's reliability has been fine, so it's not a fundamental design flaw. But if it was a faulty component or assembly, it would have been fixed with the replacement part.

Audi team principal Allan McNish is similarly baffled. "It's something that's confusing because on the other side of the garage it runs," he said. "I honestly, at this stage, don't know the answer. I don't know if it's the same problem we had in Marrakech, or not. We're not going to know until the next couple of days when we get back and are able to go through it from start to finish.

"That's the frustrating part for us and hugely frustrating for Lucas, and massively for the guys that put in so much effort from Marrakech until now. We thought we'd got a solution and we came away with no points."

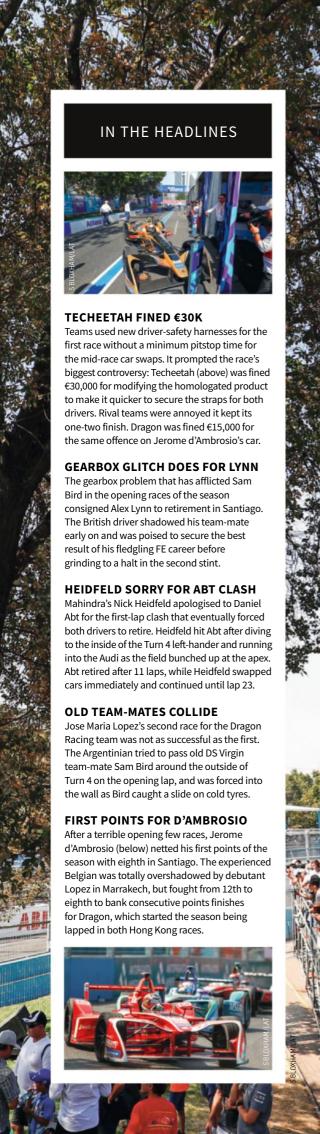
The upshot is that di Grassi trails new championship leader Jean-Eric Vergne by 71 points, and di Grassi effectively conceded the title post-race – along with issuing a clear message to the team.

"The title is not in my mind at the moment," he said. "In my mind is 'try to fix the car', to get a car that finishes one race, so I can fight for wins.

"Even if we manage to score points now, if the car isn't reliable in the next races the title is impossible to fight for. The first thing we need to do is to sort out this issue. That's down to the team and engineers to sort this out as quickly as possible."

Audi's Chilean woe was compounded by Abt also retiring after picking up front-end damage when Nick Heidfeld sent him into the wall on the opening lap. It leaves the team just eighth in the championship, level on Dragon Racing with just 12 points and only ahead by virtue of a higher best finishing position.







might have thrown more at him.

Simply put, this was not the straightforward lights-to-flag win the history books will suggest. He's had precious few moments like Rosenqvist — the man he replaced at the top of the standings — let alone someone like Buemi or reigning champion Lucas di Grassi. But what Vergne did in Santiago was the strongest indicator yet that he is a driver on the rise, not one battling stagnation.

It's taken some time for Vergne to find his comfort zone in Formula E, and a disjointed stint with DS Virgin in 2015-16 didn't help. But now in the Techeetah fold he is flourishing as the driver he always had the potential to become.

On the evidence of Santiago, Lotterer has also found his feet. Second place meant he scored his first FE points finish in emphatic fashion after a difficult baptism with an incident-filled Hong Kong debut and retirement in Marrakech.

He put the improvement down to the set-up work by the team in the Marrakech rookie test and significant simulator time for himself, plus the fact that Santiago was new to everyone, so he was starting one step fewer behind his rivals.

"It is a big deal because it's not a championship where you can risk so much to build up confidence, build up speed," he said. "If you make a mistake, you bomb it in the wall. It kind of clicked and I feel that was a big step. I understand a lot more how to race these cars."

Techeetah's one-two finish was the first by any team in the series' history, and a fine achievement given that it is the only customer operation in the championship. That the works Renault of Buemi had to cling on to the final place on the podium — another FE record, as one powertrain manufacturer locked out the rostrum — shows that the privateer is doing a better job than the factory e.dams squad at present, and Buemi knows it.

"I'm disappointed to be behind the customer team," he said. "They've done an amazing job and it's right to congratulate them. It's the first one-two in the history of Formula E and they deserve that. It shows we need to be pushing to be back in front."

Buemi qualified second but slipped behind Lotterer at the start and then to fourth when Nelson Piquet Jr launched his Jaguar around the outside of the first







corner from fifth on the grid. Buemi eventually overhauled the inaugural champion, who retaliated with a late dive into Turn 3 — and ended up needing to find reverse down the escape road.

Charging drives from the recovering Rosenqvist, who only qualified 14th after a set-up mistake, and Sam Bird meant Buemi's focus switched to securing third, rather than attacking the warring Techeetahs. And Buemi admitted afterwards that a mystery problem that first emerged in Hong Kong has returned.

"In the first few laps I was really quick, and the second part of the second stint I had exactly the same problem as in Hong Kong, which I thought we had fixed," he said. "Clearly I lost lots of pace. The first three laps I was really quick, saving lots more energy and we [then] found ourselves back with the same issue. We really need to get on top of that because that's holding us [back].

"Driving the car through the corners we don't get the tyres to work properly. It's costing lots of lap time and energy."

Renault's problems pale in comparison to those suffered by the works Audi team and di Grassi (see page 41). But in the absence of his traditional rival, Buemi has found plenty of willing new opponents. Rosenqvist, so superb in Marrakech, recovered well from qualifying poorly and salvaged fourth to remain just five points behind Vergne in the championship. The close top five was completed by another title protagonist, Bird, who ran a lap longer in his first car than his rivals and sacrificed track position in the hope that he'd be able to attack late on — but he was not able to make further progress.

A first win of the season made Vergne and Techeetah the latest names to be thrust into the thick of both title fights. FE's status quo is no longer under threat: it has been eradicated. **

Above: Rosenqvist charged from 14th on the grid to finish fourth; above, right: Renault man Buemi took final podium slot, but was disappointed to be beaten by a customer team

RESULTS ROUND 3/10, SANTIAGO (RCH), FEBRUARY 3 (37 LAPS – 56.787 MILES)			
POS	DRIVER	TEAM/CAR	TIME
1	Jean-Eric Vergne (F)	Techeetah · Renault Z.E.17	1h01m24.514s
2	$\textbf{Andre Lotterer}(\mathbb{D})$	Techeetah · Renault Z.E.17	+1.154s
3	Sebastien Buemi (CH)	Renaulte.dams · Renault Z.E.17	+1.959s
ļ	Felix Rosenqvist (S)	$\textit{Mahindra Racing} \cdot Mahindra M4ELECTRO$	+2.793s
5	Sam Bird (GB)	DS Virgin Racing · DS Virgin DSV-03	+4.490s
	NelsonPiquetJr(BR)	<i>Jaguar</i> ∙JaguarI-type2	+6.364s
7	Mitch Evans (NZ)	<i>Jaguar</i> ∙Jaguarl-type2	+7.099s
3	Jeromed'Ambrosio(B)	<i>Dragon Racing</i> ⋅ Penske EV-2	+13.308s
)	AntonioFelixdaCosta(P)	Andretti · Andretti ATEC-03	+14.811s
О	NicolasProst(F)	Renaulte.dams · Renault Z.E.17	+21.092s
1	TomBlomqvist(GB)	Andretti · Andretti ATEC-03	+32.924s
2	Luca Filippi (I)	<i>NIO</i> ·NextEVNIO003	+44.127s
3	Edoardo Mortara (I)	<i>Venturi</i> · Venturi VM200-FE-03	+49.398s
4	$OliverTurvey \hbox{$($GB)$}$	<i>NIO</i> ·NextEVNIO003	+1m12.282s
?	Alex Lynn (GB)	DS Virgin Racing · DS Virgin DSV-03	26 laps-gearbox
2	NickHeidfeld(D)	$\textit{Mahindra Racing} \cdot \texttt{Mahindra M4ELECTRO}$	23 laps-out of energy
	Lucas di Grassi (BR)	Audi Sport Abt · Audi e-tron FE04	21 laps-loss of power
?	DanielAbt(D)	<i>Audi SportAbt</i> · Audi e-tron FE04	11 laps-accident damage
	Jose Maria Lopez (RA)	Dragon Racing · Penske EV-2	0 laps-accident
2	MaroEngel(D)	<i>Venturi</i> · Venturi VM200-FE-03	0 laps-accident

Winner's average speed 55.484mph. Fastest lap Bird 1m20.235s, 68.863mph.

SUPER POLE

1Vergne 1m19.161s; 2 **Buemi** 1m19.355s; 3 **Lotterer** 1m46.429s; 4 **Bird** no time; 13 **di Grassi** 1m19.673s*.

QUALIFYING

 $\textbf{Lotterer1m18.796s;} \ di \ Grassi \ 1m19.053s; \ Bird \ 1m19.076s; \ Vergne \ 1m19.124s; \ Buemi \ 1m19.182s; \ 5Piquet \ 1m19.300s; \ 6Lynn \ 1m19.447s; \ 7Turvey \ 1m19.574s; \ 8Lopez \ 1m19.662s; \ 9Abt \ 1m19.726s; \ 10Prost \ 1m19.623s^*; \ 11Engel \ 1m19.877s; \ 12 \ d'Ambrosio \ 1m19.923s; \ 14 Rosenqvist \ 1m19.984s; \ 15 Heidfeld \ 1m20.012s; \ 16 \ da \ Costa \ 1m20.132s; \ 17 Mortara \ 1m20.157s; \ 18 \ Blomqvist \ 1m20.422s; \ 19 Filippi \ 1m31.271s; \ 20 Evans \ 1m40.540s^*. \ *= grid \ penalty.$

CHAMPIONSHIP

1 Vergne 71; 2 Rosenqvist 66; 3 Bird 61; 4 Buemi 37; 5 Piquet 33; 6 Mortara 24; 7 Evans 21; 8 Heidfeld 21; 9 Lotterer 18: 10 Abt 12.

Coulthard delivers a shock for the new

The Scottish veteran made his annual trip out of retirement to win the Race of Champions for a second time among a glut of debutants

By Graham Keilloh, Special Contributor

■ @TalkingaboutF1

uch was new at the 2018 Race
Of Champions. A new track
layout; a new venue, the King
Fahad International Stadium
in Riyadh; and, indeed, a
new region, as Saudi Arabia
became the annual event's
first Middle Eastern host.
There were new drivers too

— more than half of those competing were making their first appearance in this most peculiar of get-togethers. E-racers were among them for the first time, as were several locals. But in the end it was experience that counted.

In the Champion of Champions individuals' contest the old hands beat the new guys time after time. Only one rookie survived to the semi-final — World Rallycross champion Johan Kristoffersson. And the final was an old-hand face-off: ex-Formula 1 racer David Coulthard, in his 11th RoC

appearance, took on 2003 World Rally champion Petter Solberg, in his fifth. It was therefore appropriate, perhaps, that it was Coulthard, a man so experienced that his racing career is supposedly behind him, who won.

"My son switched off watching when I went out of the Nations Cup"

"I'm always surprised when Fredrik [Johnsson, ROC president] invites me because I don't race any more," said Coulthard. "Mentally I've very much moved on from being a racing driver."

It didn't show, however, as he not only won but dominated, never losing so much as a single heat all day. He left nine-time Le Mans 24 Hours winner Tom Kristensen, 2012 IndyCar champion Ryan Hunter-Reay, double Le Mans winner Timo Bernhard and e-racer Rudy van Buren second best.

Coulthard continued in that vein in the final, taking the opening heat ahead of Solberg in Euro NASCARs by just over half a second, then sealing the best-of-three contest by winning the following heat comfortably by over a second and a half after swapping to Vuhl o5 machinery. Thus Coulthard secured his second Champion of Champions triumph after winning in Barbados in 2014.

He insisted, however, that his second victory was something he hadn't actually anticipated.

"My son switched off watching yesterday when I went out of the Nations Cup," he said, "because he thought 'Daddy's too old'! He would have been watching today..."

Solberg still awaits his first individual RoC win, even though he is now a veteran of the event. But the irrepressible Norwegian seemed about as delighted for Coulthard afterwards as he would have been had he claimed the honours himself.

"I'm actually very impressed with him every time he goes into the car," Solberg said of Coulthard, "because his mentality is so strong to do well. OK, you do it [the RoC] for fun, but there's a switch in his head...

"OK you've beaten me, but I know that you're very, very good at this and I'm very proud to drive beside you."

Solberg also gave Coulthard his gloves "for a good fight and a good friend". Coulthard said it was "a lovely gesture", but "in true Scottish style I'm giving you nothing!"

And this cuts to the essence of what this event is about. "It's great to wear the old helmet again, and to have the camaraderie among the drivers," Coulthard added. "The format, luck of the draw, how you fit in the different cars, against very talented racers. That's the great thing about this event — it's

serious but fun."

And Solberg of course saw things the same way. "It's been incredible to get all these drivers together, we always enjoy it. I will be back — I'm still young!"

This year's RoC wasn't entirely a tale of woe for

the debutants, though. Some noted e-racers took part — not only in an inaugural eROC gaming event, where gamers took on racers (and gamers wiped the floor with them), but also pitching themselves against the professionals on track.

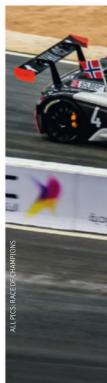
Blancpain GT iRacing champion Enzo Bonito won a four-way face-off to join McLaren sim racer van Buren in the e-racers' pairing in the Nations Cup, while van Buren got into the Champion of Champions contest too. Neither looked out of place, both impressed the establishment drivers, and van Buren even won three heats. Bernhard and McLaren reserve Lando Norris were among his scalps (see page 47).

The new venue also also attracted praise, and the clear consensus was that the first visit to Riyadh was a positive one. The stadium was by no means full, but the locals gathered in sufficient number and enthusiasm to provide a decent atmosphere, especially when a local driver was circulating.

"It's nice," said Coulthard, "a good group of people are in, and it's great to see the family enclosure as well."

Last year's Champion of Champions Juan Pablo Montoya concurred. "It's been an amazing experience for all of us," he said. "It's been great." >>>













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Debutants Timo Bernhard and Rene Rast kept up Germany's winning **Nations Cup run**

IndyCar veteran and three-time Indy 500 winner Helio Castroneves agreed: "It's great to learn the culture, and to be in a location where everyone welcomes us really well."

The drivers liked the track layout too, and the drop in temperature after the blazing sun had retired for the evening added to the challenge.

"I think the track is amazing," Montoya added. "It's a lot quicker [than last year's venue]. I think it's a little hard on the cars, since if you make mistakes you end up hitting the wall, because you're going so much quicker."

In contrast to the individual contest, the Nations Cup the previous day had been a triumph of what was new. Team Germany taking its record eighth victory was in itself familiar, but this time it achieved that with a fresh driver line-up winning for the first time without Sebastian Vettel, and for only the second without Michael Schumacher.

Bernhard and DTM champion Rene Rast, both making their Race Of Champions debuts, steered the decorated German ship to Nations Cup victory, although neither got past the Champion of Champions group stages the following day.

They beat a strong Team Latin America pairing of Montoya and fellow IndyCar and IMSA Penske pilot Castroneves, first in the group stage, then again in the final. Rast defeated Castroneves in the best of three's decider by 1.5s, after



"It's a little hard on the cars, since if you make mistakes you end up hitting the wall"

the Brazilian made a couple of small errors.

"How cool is that?" said Rast afterwards. "There was a lot of pressure in the final race, the pressure was on me. It was just so much fun. I watched Juan in Formula 1 when I was a kid. Now driving against those names is an honour."

Bernhard admitted that he hadn't anticipated being so competitive. "To be honest we had no expectations today, we just wanted to survive the first round," he said. "We kept on exchanging the ideas and thoughts. It was a real team effort."

The Latin American team was quite a story in itself, since for a time it looked to be out well before the final. The best group runner-up was to progress to the semi-final with the group winners; the two second-placed squads (Latin America and Team Sweden) were tied on four wins, and the best opening-heat time was to be used to split them.

The trouble was that initially the organisers compared Latin America's time with that of Team Nordic, who had in fact topped Sweden's group, and announced Latin America was out.

TV interviewed us and asked, 'How do you feel to be out?' and I thought we were in!" said Montoya. "It's crazy as they showed Sweden first and then Nordic, and then came to realise actually Nordic was first. And when they checked Sweden against us we were actually quicker."

Such are the perils of running a live event... #

The game begins anew

IS THIS THE FUTURE? IF SO the Race Of Champions is embracing it. This year, for the first time, e-racers took on the professionals, on track.

Enzo Bonito joined McLaren sim racer Rudy van **Buren in the Nations Cup** e-racers' pairing. Van Buren then represented e-racers in the individual contest. They both have similar stories, since each one turned to gaming after failing to secure funding to progress through karts.

On-track they never disgraced themselves;

van Buren won three heats. In the Nations Cup he beat Lando Norris and then Joel Friksson when the Swede crashed. In the individual competition he defeated double Le Mans winner and this year's Nations Cup victor Timo Bernhard.

The pair was embraced by the pros, drawing compliments from even the most prestigious.

"I got some great tips from most of the drivers," said Bonito. "Many of them helped me out a lot. Terry [Grant] has been an amazing coach."

Bonito also became the first eROC champion. On the sim, the gamers showed the racers the way.

So will the gamer take over from the racer? Van Buren doesn't think it's so simple. "It's more than just track time," he said, "it's about getting the feeling."

"It's unbelievable where we are now," Bonito concluded. "I think it's going to keep growing a lot as well.

"You can apply things from the sim in real-life racing and make it feel pretty natural."



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Race-stopping shunt h

BATHURST 12 HOUR

MOUNT PANORAMA (AUS) FEBRUARY 4

INTERCONTINENTAL GT CHALLENGE, ROUND 1/4

THE ENDURANCE RACING CLICHE OF needing to be there at the end was in full swing at the Bathurst 12 Hour, as the WRT Audi crew flew under the radar to take a sensational win.

It took the #37 R8 LMS a long time to emerge as a contender at Mount Panorama but, as the race ticked into the crucial final stint, it was Robin Frijns who found himself heading a depleted field. And, thanks to more than a little bit of good luck, Audi's Dutch DTM new recruit turned that lead into victory for himself, fellow Blancpain GT Sprint Cup champion Stuart Leonard, and Dries Vanthoor.

For much of the race, the smart money was on a showdown between the #43 Schnitzer BMW – which dominated the early morning stint with Chaz Mostert at the wheel – and the pair of locally run Jamec Pem Audis. But Mount Panorama had other ideas.

The first of the 'big three' to tumble was the

#22 Audi, Kelvin van der Linde making a crucial mistake while working through traffic and hitting the wall with a little over four hours to go. The car was out on the spot.

Then, with two and a half hours remaining, the Schnitzer BMW — also driven by Marco Wittmann and Augusto Farfus — was taken out of contention. The issues for the runaway early leaders started just after three hours when Wittmann was pinged for a restart infringement and forced to take a drivethrough penalty.

The BMW worked its way back into contention quickly enough but, as the warmer conditions took their toll on the M6's power, Mostert found himself struggling to make progress during his big push for the finish. In a moment of desperation with two and a half hours to go, he tangled with the Bentley of Steven Kane and a lapped Carrera Cup Porsche, the BMW and the Porsche knocked out of the race, while the Continental was forced into the garage for lengthy repairs. Kevin Estre, in the #991 Craft-Bamboo Porsche, narrowly avoided getting caught up in the mess.

That should have sealed it for the #74 Audi,



elps Frijns Audi to top

only for that car to roll to a stop with a broken driveshaft while Markus Winkelhock - sharing with Christopher Mies and Christopher Haase was at the wheel with 90 minutes to go.

Through all the chaos, which included 15 safety car periods, we were left with a fuel race for the final hour. A lean fuel strategy helped Frijns and Jamie Whincup in the SunEnergy1 Mercedes get track position, with a train of Porsches – more comfortable on fuel – in tow.

With 20 minutes to go the top two were sweating on another stoppage, which arrived when Ash Walsh (Audi) and John Martin (Porsche) crashed heavily on the mountain. The race was quickly red-flagged, before being declared as the clock ticked down.

It meant victory for Frijns/Leonard/Vanthoor and second for Whincup/Kenny Habul/Tristan Vautier/Raffaele Marciello, and both crews admitted afterwards that they would never have seen the finish if it had stayed green.

The Porsche of Laurens Vanthoor/Estre/Earl Bamber was third when the race was declared, but a strategy software glitch meant Vanthoor had overstayed his welcome in the car by two

minutes, and a 30-second penalty dropped them to fifth. That elevated the Black Swan Porsche of Tim Pappas/Jeroen Bleekemolen/Luca Stolz/ Marc Lieb onto the outright podium, to go with their Pro-Am honours. Thanks to a countback for the red flag, the Audi of Walsh/James and Theo Koundouris/Duvashen Padayachee was declared the Am class winner, despite their Audi ending the race destroyed and Walsh being taken to hospital for suspected broken ribs. ANDREW VAN LEEUWEN

RESULTS

1 Robin Frijns/Dries Vanthoor/Stuart Leonard (Audi R8 LMS) 271 laps in 11h38m04.1333s; 2 Raffaele Marciello/Tristan Vautier/Jamie Whincup/Kenny Habul (Mercedes-AMG GT3) +1.5369s; 3 Marc Lieb/ Jeroen Bleekemolen/Luca Stolz/Tim Pappas (Porsche 911 GT3-R); 4 Patrick Long/Matt Campbell/Alex Davison/David Calvert-Jones (Porsche); 5 Laurens Vanthoor/Kevin Estre/Earl Bamber (Porsche); 6 Romain Dumas/Frederic Makowiecki/Dirk Werner (Porsche): 7 Lewis Williamson/Cameron Waters/David Fumanelli/Nick Leventis (Mercedes); 8 Dean Canto/Ivan Capelli/Ryan Millier/ Jim Manolios (Lamborghini Huracan GT3); 9 Timo Glock/Philipp Eng/Steven Richards (BMW M6 GT3); 10 Ash Walsh/Duvashen Padavachee/James Koundouris/Theo Koundouris (Audi).

Ferrari boy takes Hulme trophy win

TOYOTA RACING SERIES

TAUPO (NZ) FEBRUARY3-4 **ROUND 4/5**

RUSSIAN FERRARI PROTEGE ROBERT Shwartzman scooped the Denny Hulme Memorial Trophy after taking his first TRS victory in the main race that climaxed the penultimate round at Bruce McLaren Motorsport Park.

In doing so, Shwartzman closed the points gap to Ferrari stablemate Marcus Armstrong, who he will partner this season in the Formula 3 European Championship, but the Kiwi is still in the box seat heading into this weekend's New Zealand GP finale.

Juan Manuel Correa put in a surprise performance to take pole for the opening race, the Florida-based Ecuadorean surviving an investigation into a suspected jumped start as he took victory. Briton James Pull dived down the inside of Richard Verschoor to grab second after the start, with Shwartzman and Armstrong following the Dutchman home in fourth and fifth.

Shwartzman took a stunning pole for the finale, in which he overcame a safety car restart, the interruption caused by a crash for Clement Novalak. Armstrong was next from Verschoor and Correa as the field struggled with fading tyres in this longer race on the challenging Taupo circuit.

The reversed-grid race was dominated by Brendon Leitch, who drove away into the distance as Ryan Yardley defended stoutly from Verschoor for second.

Race 11 Juan Manuel Correa 15 laps in 21m18.640s; 2 James Pull +4.111s; 3 Richard Verschoor; 4 Robert Shwartzman; 5 Marcus Armstrong; 6 Reid Harker. Race 2 1 Brendon Leitch 15 laps in 21m21.244s; 2 Ryan Yardley +15.182s; 3 Verschoor; 4 Armstrong; 5 Shwartzman; 6 Taylor Cockerton. Race 3 1 Shwartzman 20 laps in 29m45.193s; 2 Armstrong +5.523s; 3 Verschoor; 4 Correa; 5 Leitch; 6 Cameron Das. Points 1 Armstrong 761; 2 Shwartzman 728: 3 Verschoor 701: 4 Correa 612: 5 Pull 581; 6 Clement Novalak 539.



Chan team upholds martial law

ASIAN LE MANS SERIES SEPANG (MAL) FEBRUARY4 **ROUND 4/4**

THE JOTA SPORT-RUN JACKIE CHAN DC Racing claimed LMP2 honours in the Le Mans 24 Hours-qualifying Asian Le Mans Series after victory in the finale.

Stephane Richelmi, Harrison Newey and Thomas Laurent took the win and the title, but they had to work hard for it. A battle with the sister Jackie Chan DC ORECA petered out when the Jazeman Jaafar-led all-Malaysian crew lost eight laps at the final pitstop with an alternator problem. Up to second came the BBT Ligier of Pipo Derani, Anthony Liu and Davide Rizzo. But this car only held onto the position by a few seconds as Marko Asmer, in the Eurasia Ligier qualified on pole by Nabil Jeffri and also driven by Jake Parsons, went on a charge in the last stint.

The Chan squad also claimed the LMP3 title with Guy Cosmo and Patrick Byrne,



joined here by new GP3 recruit Gabriel Aubry. But there was heartbreak for the KCMG squad. Led by Asia-based Aussie Josh Burdon, the team was ahead in the LMP3 points coming into Sepang. Burdon was battling Aubry for race honours, but the final stop was 0.2 seconds too short, so KCMG copped a stop-go penalty. Burdon then stormed after Aubry but ran out of fuel on the final lap.

Fist-Team AAI claimed two Le Mans spots for a GT class one-two, Jesse Krohn leading its BMW to final-round victory.

Richelmi and Laurent were joined by F3 graduate Newey for win and the title

1 Stephane Richelmi/Harrison Newey/Thomas Laurent (ORECA-Nissan 05) 117 laps in 4h02m06.258s; 2 Pipo Derani/Anthony Liu/Davide Rizzo (Ligier-Nissan JSP2) +1m01.702s; 3 Nabil Jeffri/Marko Asmer/Jake Parsons (Ligier-Nissan JSP2). LMP3 1 Gabriel Aubry/Guy Cosmo/ Patrick Byrne (Ligier JSP3); 2 Shaun Thong/Hanss Lin (Ligier); 3 Richard Bradley/Philippe Descombes/William Lok (Ligier). Points 1 Richelmi/Newey/Laurent 95; 2 Derani/Liu/Rizzo 70; 3 Konstantins Calko/Miro Konopka 51. LMP3 1 Cosmo/Byrne 77; 2= Josh Burdon/Louis Prette/Neric Wei & Lin 54. GT 1 Jesse Krohn/Jun San Chen 95; 2 Ollie Millroy 78; 3 Chaz Mostert 69.

Drugovich double - and the title

IRUNGATTUKOTTAI (IND) FEBRUARY3-4 **ROUND 4/4**

BRAZILIAN FELIPE DRUGOVICH claimed the title last Saturday, then stamped his mark on the series with victory in both of Sunday's races at the Madras Grand Prix.

A fantastic opening lap carried Dutch teenager Rinus van Kalmthout from third into the lead of race one, and from then on the US-based racer pulled away. Drugovich put the pressure on second-placed Formula Renault Eurocup competitor Preslev Martono, but the Indonesian held firm, while GP3 racer Julien Falchero claimed fourth.

Sixth place in the reversedgrid follow-up was enough for Drugovich – a star in German Formula 4 last year and who is graduating to Euroformula Open this season — to become champion. Singaporean Danial Frost led for much of the way, but ran wide with a few laps to go, and Martono slipped past to victory, with van Kalmthout second.

Martono led at the start of race three, but Drugovich was stronger on cold tyres and got past with an outside move on lap two. Martono spent the rest of the race fending off van Kalmthout for second, with Frost taking fourth position.

Van Kalmthout had pole for the finale, but Drugovich made a better start and was never headed. This time van Kalmthout beat Martono to second, with American Robert Megennis fourth.

Race 1 1 Rinus van Kalmthout 20 laps in 30m22.676s; 2 Presley Martono +6.498s; 3 Felipe Drugovich: 4 Julien Falchero: 5 Danial Nielsen Frost; 6 Alex Karkosik. Race 2 1 Martono 15 laps in 22m50.733s: 2 van Kalmthout +1.980s; 3 Frost; 4 Harrison Jones; 5 Dylan Young; 6 Drugovich. Race 3 1 Drugovich 20 laps in 33m09.353s: 2 Martono +11.069s; 3 van Kalmthout; 4 Frost; 5 Louis Gachot: 6 Falchero, Race 4 1 Drugovich 20 laps in 30m08.812s; 2 van Kalmthout +4.282s; 3 Martono; 4 Robert Megennis; 5 Jones: 6 Frost, Points 1 Drugovich 333: 2 Martono 254; 3 van Kalmthout 247; 4 Falchero 194: 5 Karkosik 122: 6 Frost 83.

ANDROS TROPHY

IN BRIEF

With Renault Captur exponent Jean-Baptiste Dubourg already crowned champion for the third time in a row the previous weekend at Lans en Vercors, the Super Besse finale was all about who would finish runner-up. A perfect day for Benjamin Riviere (Peugeot 3008) swung the verdict his way from Audi rival Nathanael Berthon. Olivier Pernaut beat Mazda team-mate Didier Thoral to second in the final.

UAE FORMULA 4

Two reversed-grid wins at Yas Marina have thrust David Schumacher into title contention. Points leader Charles Weerts won the opener, but a collision with Schumacher in race three forced Weerts out and resulted in a penalty for Schumacher, dropping him from second to fifth. Brazilian Caio Collet won the other race.

SOUTH EAST ASIAN F4

Malaysian Mitchell Cheah took the prize as top scorer at Sepang. Cheah won once, with other victories for Daniel Cao, Kane Shepherd (two), Ugo de Wilde and Eshan Pieris.



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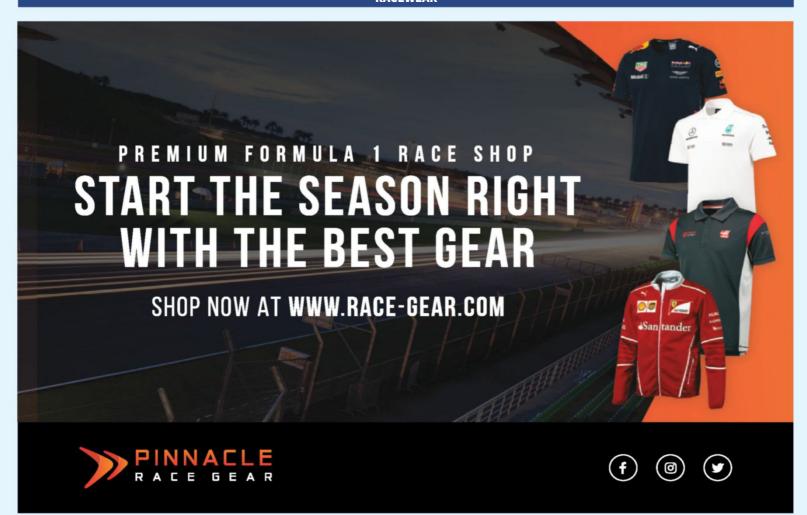


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BRITISH G1

Turner leads Beechdean comeback

DARREN TURNER WILL BECOME THE fourth works Aston Martin World Endurance Championship driver competing for British GT3 glory in 2018.

Le Mans GTE Pro winner Turner will co-drive a sole Beechdean AMR Vantage GT3 with team boss, 2013 and 2015 British GT champion Andrew Howard.

The team had been a fixture in British GT since 2006, but left the championship last season to concentrate on its European Le Mans Series effort.

Turner has only contested one British GT event in his career — Silverstone in 2010 — sharing a DBRS9 with Howard.

"I'm really excited to be doing British GT this year as it's a completely new programme for me," said Turner. "Andrew wanted to go back and have a shot at a third title as he loves the championship, and we've driven together in the ELMS so it made sense to share with him.

"Although I've not been in the championship I've been aware of it



and the level of competition there — particularly in the past four or five years — has increased hugely. The teams are all properly professional outfits and the list of professional drivers this year is huge. It'll be a real challenge."

Turner is the fourth AMR factory driver to join the British GT ranks, following Nicki Thiim and Marco Sorensen (driving separate TF Sport Darren Turner (right) will join Jonny Adam (left), Nicki Thiim and Marco Sorenson in British GT this year entries) and his WEC team-mate Jonny Adam (Optimum Motorsport).

The WEC's move to its superseason format, spread across 2018-19, has enabled many drivers to commit to a broader spread of programmes.

"There's definitely a lot of pride at stake in British GT up against the other AMR boys," added Turner. "Nicki and Marco haven't done too much in the UK, but TF is a brilliant team. Jonny is perhaps the most experienced driver ever in the Vantage GT3, but on my side Andrew is a hugely talented and experienced amateur driver and I know my way around the GT3 too. I reckon we'll be in with a shout."

Howard added: "British GT is too competitive to do just for fun, so we're out for the title. We've probably got the oldest car and driver pairing on the grid this year, but we've definitely got the hunger to take the fight to the young whippersnappers."

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HISTORICS

'Whizzo' Williams retires

BARRIE 'WHIZZO' WILLIAMS HAS ANNOUNCED his retirement from motor racing after an illustrious career spanning 60 years.

Williams, who will be 80 in November, may be hanging up his helmet but he will remain involved in the sport through his roles with a number of clubs and organisations.

"I've had a bloody good time racing," he said. "It's all I've ever really done and I've got huge memories. But I've got to be sensible. I still want to put something back into the sport that has given me so much."

His career in cars started at Prescott in the summer of 1957, after karting for several years. His first circuit race was at Rufforth on Easter Sunday '60 in a Morris Minor. Williams competed in races, rallies, sprints and hillclimbs, and scored a major success when he won the '64 Welsh Rally in his Mini Cooper. It was his first experience of forest rallying.

He raced saloon cars through the 1970s and won many fans with his extrovert style, in and out of the car, and sublime car control. He was a works driver for Colt [Mitsubishi] in the BTCC and won a series of one-make-saloon titles in the '80s.

In 1986 Williams made his debut in historic racing and over the past 25 years he has competed extensively in historics.

He raced ERAs, Jaguar C-types, BRMs and much more, and was a regular winner at the Goodwood Revival. "I raced every year for nearly 60 years and it was a way of life, but now it is time to stop," he said.





BRITISH GT

Parfitt reunites with Ratcliffe in a Bentley

DOUBLE BRITISH GT CHAMPION Rick Parfitt Jr will be reunited with his 2013 GT4 title-winning team-mate Ryan Ratcliffe in the #1 Bentley this season.

Parfitt won last year's GT3 title alongside Seb Morris in the Team Parker Racing-run car, and Ratcliffe comes in after it had been announced that Morris and Parfitt were parting ways.

Ratcliffe lifted the British GT4 crown alongside Parfitt in an Optimum Motorsport-run Ginetta G55 five years ago (left).

"Teaming with Ryan was a

no-brainer for this year as he's like my surrogate brother – we raced against each other in Ginetta GT5s and won GT4 together, so this is the next step," said Parfitt.

He described the reunion as the start of his new "two-year plan to win again" in British GT. With a multitude of factory drivers being confirmed in GT3, Parfitt and Ratcliffe stand as the only Bronze-Silver-graded pairing so far. Most are Gold-Platinum or Gold-Bronze.

"I never go into a season entertaining the thought of

winning the title," added Parfitt.
"I go into each year just wanting to do the best I can.

"With so many high-rated drivers coming in, it's likely to get feisty up at the front, which could play to our advantage if we're boxing clever."

The duo is likely to race the same Bentley as last year, since Parfitt has said that a switch to the new Continental GT3 – being used by factory teams this year – is unlikely. Customer teams will not get the new car until June at the earliest.

PORSCHE CARRERA CUP GB

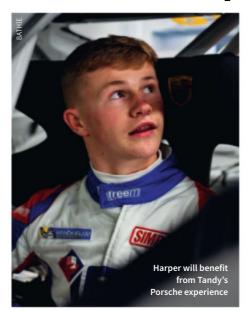
Harper chooses JTR for Carrera Cup

PORSCHE GB JUNIOR DRIVER DAN Harper has joined the JTR team for the Carrera Cup this year.

The 17-year old Ginetta Junior graduate was selected last year as the driver to receive £85,000 towards his budget for two years in the series, along with full support from Porsche. Harper cited the fact that Porsche factory driver Nick Tandy is the JTR team boss as the deciding factor.

Tandy said: "We took interest in Dan straight away because Porsche has selected him as the young driver with the most potential. In a way they've done the hard work for us in identifying someone with such talent. It's a great opportunity for JTR to progress from last year by getting someone of Dan's potential on board."

Three of the five Junior finalists will be on the grid this year; besides Harper and George Gamble, Esmee Hawkey has agreed a deal with the returning GT Marques squad.



RENAULT UK CLIO CUP

Epps joins Dorlin, Rowbottom in Clios

BRITISH TOURING CAR DRIVER Mike Epps, Renault UK Clio Cup race winner James Dorlin and regular podium finisher Dan Rowbottom will all race in the Clio Cup this season.

Epps, who finished 17th in the BTCC last year driving a Team Hard Volkswagen CC, will make his Clio debut this year with new team Matrix Motorsport. "It makes sense for me to step over from the BTCC," he said. "Having looked at other opportunities, I thought the Matrix Motorsport operation, its plans for the future and the potential of the team really stood out."

Meanwhile, 2016 Michelin Clio Series champion Dorlin will remain part of the Westbourne Motorsport squad after taking two wins in his rookie season.

Elsewhere, Rowbottom has joined the front-running Team Pyro operation for this year after finishing fifth for his family DRM team last term. He has been tipped by reigning Clio champion Mike Bushell as a title contender.



GTRACING

Team BRIT to race GT4 Aston Martin

TEAM BRIT HAS BOUGHT AN ASTON Martin Vantage GT4 as the next step towards its 2020 aim of becoming the first team to compete at the Le Mans 24 Hours with a full line-up of disabled drivers.

This season the team, which raced in the Fun Cup last year, aims to tackle events in British GT, the Creventic 24 Hour Series, and Aston Martin Owners' Club GT4 Challenge.

The squad was built around ex-servicemen using racing as a rehabilitation tool, but

midway through 2017 it began taking on non-servicemen with disabilities too.

The Vantage will feature hand controls, and will be able to switch between conventional and hand controls depending on the driver.

"It's a British team, British race car and British engineering," said Team BRIT founder Dave Player. "We're really proud that we're setting the standard [with hand controls]."

The team will continue to run two cars in the Fun Cup alongside its GT commitments.

IN BRIEF



NEW PT4 CLASS ADDED TO LMP3 CUP

The LMP3 Cup has added a second class for this season, which is open to the new Ligier JSP4 (above) and Radical RXC. The new PT4 class will sit below the main LMP3 division and gives a place for the JSP4 – originally launched at Le Mans last year – to race.

KNOCKHILL TO RUN IN REVERSE FOR TCR

The Knockhill round of TCR UK will be held in the reverse direction of the track. The May 12-13 event will be the second time in the past year that the Scottish circuit has held a meeting with the track used in the opposite direction to usual; before then, the reverse layout hadn't been used since the 1990s.

EX-BTCC RACER JOINS NEW BMW SERIES

Former British Touring Car Championship racer Rick Kerry has signed up to the new-for-2018 BMW Car Club Racing Series. The '05 and '06 Kumho BMW champion has a BMW 1 Series with an E46 M3 engine, in which he will contest the new 14-race series that runs with the 750 Motor Club, Aston Martin Owners Club and Castle Combe Racing Club.

JOHN SMITH 1936-2018

Northern Ireland motorsport lost a great character on Sunday when Ballymena's John Smith died following a heart attack, aged 81. John started his engineering business in his twenties and morphed his 1172 Formula Smith Special into an Impala class single-seater, then an FF1600. The March 722 he bought new has won HSCC F2 races recently, driven by his son Darwin.

CONNEW OUT OF HIBERNATION

After more than 40 years in storage, the one-off Connew Formula 1 car will be on show in public at Race Retro on February 23-25. The 1972 car (below) was designed and built by a team of three, headed by Peter Connew, who had been a designer for Team Surtees, and started one grand prix. Finally the original team of Connew (at whose home it has been stored), Barry Boor and Roger Doran set about restoring the car and the result of more than two years' work will be shown at Race Retro.



JAGUAR SALOON AND GT

FEWER RACES FOR JAGUAR SERIES WITH THE CSCC

THE JAGUAR SALOON AND GT Championship will run a reduced calendar in 2018.

The championship featured 16 races across eight weekends last season, seven of which were organised by the Classic Sports Car Club.

This year only five meetings will run alongside the CSCC, with the Jaguar Enthusiasts' Club also dropping its additional round at Zandvoort but racing at Castle Combe instead, offering 12 races throughout the season.

JEC racing manager
Terry Dye said: "We're not
going anywhere exotic this
year and have organised
Castle Combe ourselves.
We'll also run a triple-header
with the CSCC at Donington
Park as that cuts down
on expenses and we can
cram in more races."

CSCC director David Smitheram added: "The CSCC and the JEC have always had an excellent working relationship and that hasn't changed. This is the 20th year of JEC Racing, 15 of which have been with the CSCC.

"They're doing a race with Castle Combe rather than us and then we're doing a tripleheader for them rather than offering them another round."

Dye has also revealed that he will step down from his role at the end of this season after 20 years.



FIAMASTERS HISTORICS

Reversed grids for Historic F1

A NUMBER OF RULE CHANGES INCLUDING reversed grids, development restrictions and a new category will be implemented in the FIA Masters Historic Formula 1 series this year.

The top eight for the second race of the weekend will now be reversed and packers — used on the suspension to allow a car to get closer to the ground — will be banned on ground-effect cars. Drivers over 60 years old will also compete for a separate championship.

"As the series has become more successful and more popular, we have now got a lot of young drivers coming to us," said series organiser Ron Maydon. "I think we had four BRDC Rising Stars last year, so this [new] championship means even if you are not winning outright, you could still get a championship."

A procedure will also be brought in preventing drivers from overtaking until after the first corner on the opening lap in an attempt to increase driver safety and prevent damage to cars.

"It's very important in my opinion to save our customers from injury and their cars getting damaged," added Maydon. "There have been very few [start accidents] and we're trying to head off a problem before it happens.

"At the Nurburgring we held a discussion and I explained what I wanted to do to the starts to make them safer. Twenty-one out of 22 drivers said they would support what I would do.

"I sent out an email to all the drivers and I wouldn't say that all of them are in favour, but what's really interesting is people like Richard Attwood said, 'What a good idea, we must keep these cars for the future.'

"The grids are getting bigger and the drivers are getting faster. We don't want any crashes. At an FIA meeting Emanuele Pirro had it explained to him and he said, 'I want to congratulate you for these new rules — this is what's needed."

ASTON MARTIN OWNERS CLUB

GT Challenge opens up to more cars

ASTON MARTIN OWNERS CLUB Racing has opened up its GT Challenge series for 2018, inviting FIA GT4 cars from other marques of similar performance, plus sports and GT machines from 1995-2007, to share with the Aston Martin GT4 and N24s that form its headline class.

The GT Challenge comprises five 50-minute pitstop races, with double-driver options.

The calendar visits Oulton Park, Brands Hatch Indy, Donington Park, Snetterton and Silverstone National.

"We believe this simple new format offers a perfect platform for Aston Martin GT4 competitors who enjoy thrilling class battles, while keeping the competitive door open to all GT car owners who wish to race on slicks without the pressure, time restraints or budget required for British GT or other semi-professional series," said Duncan Wiltshire, whose Motor Racing Legends organisation owns and operates AMOC Racing.

All events also feature AMOC's Intermarque Championship, the Pre-War Team Challenge and the Jack Fairman Cup races for 1950s sportscars.





HISTORICS Category rookie Michael Collins tightened his grip on the New Zealand Formula 5000 Tasman Revival Series crown with a perfect treble in Alistair Hey's Leda LT27-originated McRae GM1 004 at last weekend's Skope Classic festival at Ruapuna's Mike Pero Motorsport Park. Jim Richards (above left) won the Archibald's Historic Touring Car Series openers on both days in Peter Sturgeon's glorious BMW 635, but North Canterbury motorcycle repair business owner Stu Rogers drove his self-built Nissan Skyline GTR superbly to trump the Aussie veteran in the afternoon races. Photograph by Fast Company

MASTERS ENDURANCE LEGENDS

Enduro Legends to French GP

THE FLEDGING MASTERS ENDURANCE LEGENDS series, for Le Mans prototype and GT cars built between 1995 and 2012, has earned a high-profile slot on the support programme at the revived French Grand Prix (June 22-24).

The series will have two races at Paul Ricard as the French GP returns after a 10-year absence.

Masters Endurance Legends started with a pilot race at Spa last September, and gained immediate support as teams and drivers took the chance to use cars that had no other place to race in Europe.

The Paul Ricard race will add to an already announced six-date programme for 2018, with events at Imola, Brands Hatch, Silverstone, the

Nurburgring, Spa and Dijon.

"I'm proud that in its first year Masters Endurance Legends will be able to showcase its spectacular variety during the Formula 1 Grand Prix de France weekend," said Masters Historic Racing founder Ron Maydon. "The Paul Ricard circuit is perfect for these cars, as they will be able to really stretch their legs on the straight while the technical return section is a true challenge for any driver."

The inaugural race at Spa featured a 22-car grid, topped by the Peugeot 908X of Nicolas Minassian, with prototypes from ORECA, Dallara, Audi and Pescarolo. GT cars included examples from Aston Martin, Porsche, Ferrari and Dodge.

BRITCAR ENDURANCE

WOODARD RACING GETS GT4 GINETTA FOR BRITCAR

WOODARD RACING WILL return to Britcar this season with a Ginetta G55 instead of the Mini R56 that has previously been used by the team.

The car will compete in the Endurance championship, with driver Daniel Woodard remaining with the team, joined by American Freddy Niblack.

David Birrell, who raced with the team in Britcar last year, will also compete with Woodard Racing, but his exact plans have yet to be finalised.

Britcar will also introduce changes to its driver-classification system this season to ensure its Endurance and Sprint championships remain attractive to amateurs.

All competitors will be rated as Pro, Pro Am or Am by a committee that includes experienced drivers Martin Short and Warren Gilbert.

Professionals are not eligible to drive solo in 50-minute races or for more than 60% of two-hour races. The new Pro Am category means that there is no requirement to be paid to be considered a professional.

In-car cameras will be mandatory and the championship's class structure has been tweaked so that Class 3 caters for homologated GT4 cars only.

HISTORIC SPORTS CAR CLUB

FF2000 racer Finch in Classic F3 move

LONG-TIME FORMULA FORD 2000 racer Jon Finch is to have his first crack at Classic Formula 3 racing this season, at the wheel of the full-history Ralt-Toyota RT1-27 that Gaudenzio Mantova and Roberto Manzoni raced in Italy in 1976.

Finch has acquired the car in which Mantova finished third on its debut in the

national championship at Magione and fourth at Casale and Monza before he switched back to a March 753.

Andrew Hibberd had restored the car to original livery, with a fresh Swindonbuilt engine, to race himself, but is flat-out preparing other cars. URS's Ken Thorogood will run it for Finch.

"I plan to do the five UK

Classic rounds and some European races including Zandvoort," said Finch.

The versatile Finch's long racing career started in 1972, with an FF1600 Merlyn, and peaked in US FAtlantic in the early '90s.

He has also raced an FA Chevron B34 with success in Historic Sports Car Club Derek Bell Trophy events.





How long until halo joins the club?

As Formula 1 prepares to incorporate the halo, national single-seater racing may not be too far behind

By Stefan Mackley, Special Contributor

@Smackley27

"In a perfect world we

would introduce all safety

systems they have in F1"

gly. An overreaction. Destroying the DNA of racing. These are just some of the reactionary words and phrases used to describe the halo device, which from this year will be a mandatory feature on Formula 1 cars, having been brought in by the FIA on safety grounds — despite opposition from other stakeholders and the existence of alternative concepts, albeit not in such an advanced state of development maturity.

The controversial safety device is anchored to the chassis and sits around the opening of the cockpit, shielding the driver's head. Its main purpose is to prevent the outcome of accidents such as those suffered by Henry Surtees in 2009 during a Formula 2 race, and Justin Wilson in 2015 during an IndyCar event — on both occasions the driver died as a consequence of debris from another car striking them on the head.

The FIA has been researching various technologies since 2011 and, for the time being at least, has decided to go with the halo.

F1's chief feeder series, Formula 2, will also adopt the halo concept from this year before the new International Formula 3 chassis includes it for 2019. And, like many safety features, such as the Frontal Head Restraint

(FHR), fireproof overalls or even seatbelts, it will trickle down through the formulae to the bottom rungs of motorsport.

But what are the possible ramifications for club motorsport in the UK? What are the chances that in five, 10, maybe 15 years all single-seater or open-cockpit cars in Britain will feature a halo or similar protection device?

"We do have to manage the risk, of course," says the Motor Sports Association's technical director, John Ryan. "In a perfect world we would introduce all the safety systems that you would have in a World Rally Car or a Formula 1 car down to club motorsports, but the reality is that you would then destroy club motorsport — you wouldn't have a sport."

Ryan is also the vice-president of the FIA's Single Seater Commission — which is headed by ex-Ferrari team principal Stefano Domenicali — so he is thoroughly aware of forthcoming regulatory concepts as well as the detailed safety research that is being conducted by the FIA's Global Institute.

"It is a big risk-management exercise and we're constantly reviewing our regulations on how we can actually make subtle changes without affecting the sport too much financially, but actually having a positive effect on safety," he adds. "You have to always be careful with safety because sometimes you can make changes that you think in theory sound good, but which actually in practice don't really do anything."

Go to any club meeting in the UK and, after speaking to only a handful of drivers or teams, you're sure to hear that most sobering of words: 'budget'. Nearly all club drivers are casting around for every penny in order to compete not just for the year, but often on a race-by-race basis.

A severe mechanical failure or crash can put a car and driver out for most of the racing season, and their financial pressures aren't eased by ever-increasing costs to enter events and the need to buy more and more safety equipment.

Mike Turner has raced in the Sports 2000 Duratec Championship since it was relaunched in 1998, but began competing back in '69 racing in Formula Ford, before working with the March F1 and F2 teams in the early '70s alongside Ronnie Peterson, Niki Lauda and Jean-Pierre Jarier. He's seen his fair share of regulation changes over the years, many of which have been greeted with disdain or even contempt

upon first acquaintance.

"I think it's like all these things — I remember when they introduced the mandatory standard for rollhoops, people were saying it was going to make the cars ugly," he says.

"I personally think it

should go down [into club motorsport] if there's any safety advantage. In the sport you have a normal guy, who maybe has a family and has to go to go to work on a Monday. Anything that can enhance the safety — there are quite a few people from my generation who say that danger is part of it, but there's still going to be danger and it's got to be worth developing and looking at.

"It was about three years ago that Frontal Head Restraints became mandatory and there were plenty of people complaining that they now had to spend all this extra money and the FHRs are going to be uncomfortable to wear. But now you'd be hard pushed to find anyone who thinks it's a bad idea.

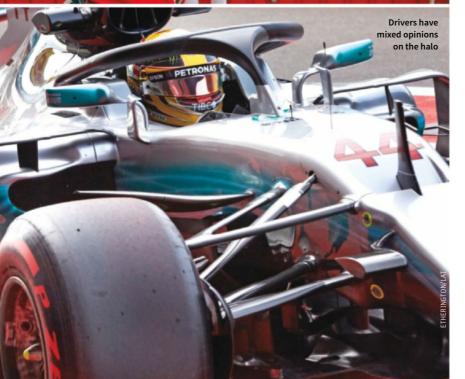
"I think in almost every instance when something new is introduced you've had a kneejerk reaction against it, and then it settles down and people accept it. You wouldn't think about racing without seatbelts or rollhoops now."

As Turner points out, the introduction of the FHR was met with opposition by F1 drivers when it was made mandatory in 2003, and likewise when it was brought to the UK.

But drivers now wouldn't think twice about using it, let alone other safety items that have settled into normal use over >>>







the years and prevented countless injuries, and even deaths. But Turner concedes there are financial concerns. F1 teams, for instance, are having to pay around €15,000 (£13,000) for a halo from the three manufacturers granted approval by the FIA to produce the technology.

That's a cost that will hardly break the bank for an F1 team, but an expense a national driver would struggle to afford. And while this price may decrease as greater uptake creates economies of scale, would it still be feasible in club motorsport?

"How much is it [the halo] going to cost? That's going to be the big question," says Turner. For most of us it's financial and we shouldn't be doing it in club racing, which is always a bit on the edge [financially]. Someone faced with a three, four, five-thousand-pound build cost to incorporate this might say they're not going to race this season until they can afford to.

"It's going to have a detrimental effect on grids and it may put some people off."

The debate of money versus safety is an uncomfortable one, but is not the only issue that has to be addressed before a new safety technology is introduced. Practicality is another. In its own studies the FIA's Global Institute has been using a wheel assembly, forcibly propelled to hit the halo at 225km/h (140mph), as the key test to establish its impact resistance.

"A lot of decisions have got to be made above our level, and what they say goes"

For its F1 application the halo has been designed to withstand a force from the front of 83kN and a lateral load of 93kN — that's a higher threshold than car rollhoops have had to pass in recent years, and the equivalent of 15 times the static load of the full mass of the car. While specifications for a halo fitted to cars in club motorsport may not be as rigorous, the device isn't a simple 'bolt-on' (though it was when tested during grand prix weekends last season, where the aim was to ascertain its effect on visibility). To achieve maximum effectiveness it has to be integrated into the design of the chassis.

"It's like a rollcage — a rollcage is only as strong as the structure you bolt it on to and the same with belts or seats," says Ryan. "You need to make sure the mountings are significant, so in the case of the halo we need to make sure that the tub, the actual survival cell, is strong enough in the areas it's mounted to in order to take the loads. It would be no good to have a structure that's strong enough to take excessive loads but the point it's based to is just going to crumble.

"So that's why it will be very difficult just to introduce the halo across all club motorsport. It will have to be a thing of evolution if it comes down the line. Cars will have to be designed specifically for their fitment. It would be difficult to retrofit to most cars, typical carbon-type tubs that we have at the moment."

F1 teams are finding out just how difficult it is to incorporate the halo into their design for this year's cars while maintaining the principle of keeping the weight low — the minimum weight of the car has already been increased to account for the halo.

Italian firm Tatuus has been building single-seater chassis since it was founded in 1980, and it currently produces the monocoques for the BRDC British Formula 3 Championship, as well as Formula Renault 2.0, several Formula 4 series, and the Toyota Racing Series in New Zealand. While no date has been given for when the series will be required to use the halo, Tatuus has already begun to look at the challenge of incorporating it in its chassis.

"The situation with series like British F3, Formula Renault, Formula 4, is how we can upgrade the existing car with the



There are no plans to introduce the halo into British F3 – yet halo," says Tatuus managing director Gianfranco De Bellis. "We are studying with the FIA, they asked us to look at what we can do. It's not an easy job because the halo is a big impact on the chassis, the load that you need to put on the chassis.

"The problem for the junior category, for example Formula 4, is that normally the first period of the new car should expire at the end of 2019, and they would look to introduce a new car in 2020. Maybe they could postpone this date a little bit, but now we have the opportunity to upgrade the existing car with the halo but it's not easy, it's a very big job.

"Only the FIA can give the answer [about when it will be introduced on a British F3 car]. I think the existing car can go to the expiry period in the same condition without the halo because Formula Renault, Formula 4, Formula Toyota, GP3... they are running without the halo. It's not possible to take the halo and fix it to the actual chassis. We need to make a completely new chassis in order that we are sure that it can accept the halo."

De Bellis also confirmed that the cost of the halo itself isn't the issue, but that building it within the chassis is, and that potentially is the biggest stumbling block for it to be introduced across the board in the UK.

He says: "For us it's very difficult because every year the level of safety is higher," he says, "and of course you introduce some extra cost on the car. But at the same time they ask you to produce a car that's less expensive and a car that is easy to manage. So it's very difficult to make these two combinations, but we are trying to do our best job. The main cost in the halo is not the halo, the tube, it's the chassis that must support the load of crash test of the halo."

For a single-make series, introducing the halo isn't necessarily a problem once the final design has been approved, because it will be the same on every car. But the problem of creating a one-make-fits-all halo for cars from different eras and constructors potentially is. Take Formula Ford 1600, for example.

The popular Kent-powered vehicles have been in competition since 1967, built by dozens of different marques from Ray to

Spectrum, Van Diemen to Swift. So how would trying to get a halo on all of them work?

"We have got cars from two, five, eight and 15 years ago, multiple years of car," says James Oldfield, Formula Ford team owner and an engineer with Arden in Formula 4. "Will it have to be fitted to those cars, or just to new ones built from the date that the halo is introduced? If every car has to be fitted with the device — I'm talking Formula Ford here — you're on a different route from where its heritage has always been.

"For one-make series such as British F4, if it's going to be a new chassis, easy — it's just one design, the same for all cars. Likewise in British F3. But in Formula Ford you've got all makes of cars running completely different chassis designs. It's going to be very difficult to implement in Formula Ford."

While implementation in modern Formula Ford machinery may be a a realistic option, the prospect of it appearing on historic cars appears to be slim.

Apart from the fact that the halo can't be retrospectively fitted to a car and still guarantee resilience, the safety regulations in historic racing are often sympathetic to their era. Historic aficionados can therefore reasonably expect not to see halo-type systems. But the future path of F1 now looks set to include cockpit shielding, whether people like them or not.

For now, it's the halo, but other concepts such as a perspex windscreen or canopy — which have been tested and are still being developed — could be the better long-term solution and could well appease those who have criticised the halo based on its aesthetic qualities rather than its purpose.

Without question the halo is effective — that's already been proven by the FIA's tests and research — and it is likely to eventually come down to other FIA-sanctioned formulae, such as British F4. But what isn't so clear is how far down it will come and where national motorsport will draw the line.

As Oldfield says: "Motorsport should be as safe as can be. A lot of decisions have got to be made above our level, and what they say goes."

WHAT'S ON





BACK IN 1993, THE BBC BROADCAST a seven-part series entitled *The Team:* A Season With McLaren. It offered an insightful behind-the-scenes look at the Formula 1 squad during a dramatic campaign made all the more remarkable by the relative information-desert of the era compared with the access-all-areas reach of a social media world.

A quarter of a century on, *Grand Prix Driver* is very much its successor, both spiritually and with its subject matter; albeit the off-form McLaren of the past few years rather than the powerhouse it was in the 1990s. But this does set the bar high for this four-episode Amazon Prime Video offering, which is available from today (Thursday).

Focusing on 2017's pre-season, this documentary confronts the struggles of McLaren and Honda head-on. In the first few moments, McLaren racing director Eric Boullier explains it can take just six months to kill an F1 team, while in the

episode focusing on car build, chief operating officer Simon Roberts lists several key areas in which McLaren is behind with the MCL32. He describes a combination of three of these as "a massive miss right across the organisation". Any fears that this will be a purely positive spin on a difficult year are immediately dispelled.

Focus on pre-season testing leaves the viewer wanting more "It's mildly out of control around the factory," Roberts says later. "I've never seen it quite as bad as this. Things are not on plan, things are late, people are doing the best they can. Technically we haven't got enough time to get the job done, there's just so much stuff in the system and you think, 'Oh my god'. So, we're never sure



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HOT ON THE WEB THIS WEEK



SHUNT BRINGS BATHURST TO A HALT

Search for Major crash ends 2018 Liqui-Moly **Bathurst 12 Hour**

This wince-inducing coming-together between the Audi of Ash Walsh and John Martin's Mercedes, with just 20 minutes to go before the end of the Bathurst 12 Hour, triggered the 16th safety car period and ultimately the race's suspension.



what the outcome's going to be, but we'll keep going. When that car goes out, you've got to know it's right."

The documentary doesn't shy away from the key plot points. The final episode focuses on pre-season testing and offers some remarkable insight into the Honda engine troubles that ruined the test. Fernando Alonso, an episode earlier hoping the new McLaren will be a "fantastic car", is caught over the radio saying "this is really a shit engine". The resulting fear that he'd walk before the start of the season is also reflected, setting the stage for what everyone watching knows will be a terrible campaign in which the only highlight was the McLaren-Honda divorce.

Just as with the 1993 documentary, the access to key players – those at the top of the company, the middle management and the rank and file - offers a fantastic insight into goings-on at McLaren. It's rare for the public to see these people

in what might be termed their natural habitat, and when it becomes clear that the McLaren-Honda package is not a good one, there are some frank words.

This is all put together well, with sweeping drone shots combining with intimate handheld cameras, and trackside and in-car footage from Barcelona giving a genuine access-all-areas feel. Add to the mix an often gently urgent soundtrack, with voiceover from Michael Douglas, and it's slickly produced.

The main criticism is that the scope of the documentary is narrow, covering just a few weeks of pre-season. After watching the full series, you're ready for another dozen parts telling the full story of the year. But if you're wanting more, this is probably a good thing. And while Grand Prix Driver could be more expansive, any Autosport reader will enjoy this well-put-together series.

EDD STRAW

NEXT WEEK



INTERNATIONAL **MOTORSPORT**

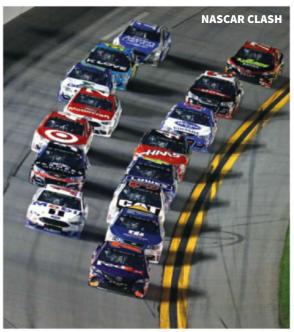
NASCAR CLASH

Daytona, Florida, USA February 11

Live Premier Sports, Sunday 1930

TOYOTA RACING SERIES

Rd 5/5 Manfeild, New Zealand February 10-11



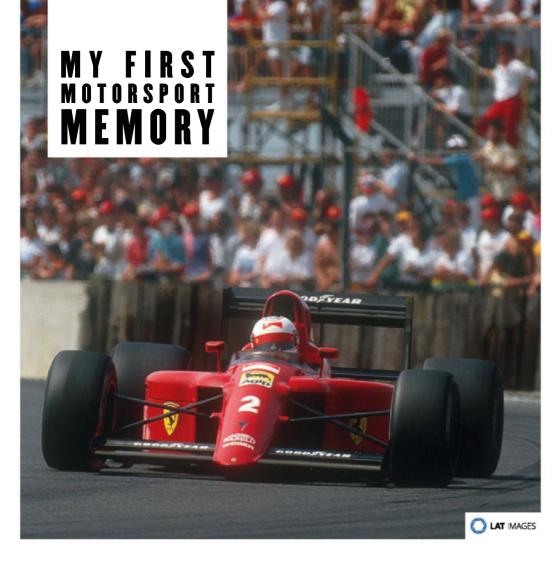




FROM THE ARCHIVE

Didier Pironi leans in to confer with Ferrari team-mate Gilles Villeneuve ahead of the 1981 British Grand Prix at Silverstone. The pair qualified fourth and eighth respectively, but neither managed to make the finish: Villeneuve spun off, and Pironi's race ended when his engine went pop.

latimages.com **y**@latimages





DAVID MALSHER

■ @DavidMalsher

F1 ACTION IN THE FLESH LIVES UP TO THE HYPE

t's the Saturday of the 1990 British Grand Prix and while driving home from a family holiday, my parents have secretly decided to divert to Silverstone to give my brother and me our first live taste of Formula 1.

A few minutes into final qualifying, we find ourselves at Bridge, which required the drivers to brake from 180mph to about 50. By 30-1 chance, the first one I glimpse is the Arrows of my hero, Michele Alboreto.

Commentator babble from public address speakers multiplies via echo, words as indecipherable as the vast crowd's chatter. It's all white noise, punctuated regularly by the cars in all their glory - barking V8s, howling V1os, screaming V12s; sun-enriched bodywork colours and crash helmets; jaw-dropping changes in velocity and direction.

Although a new experience, it feels familiar. After seven years of watching races on TV, reading Autosport and memorising books by Nigel Roebuck and Alan Henry, here is affirmation that these have done their job, putting me trackside long before my first visit. But these 200mph cars, without the media filter, are as heart-burstingly exhilarating as I've imagined.

The session ticks by way too fast for my liking, as I wait to see something epic. A nearby 'jumbotron' TV informs us that even the dramatic-looking effort we witness from Ayrton Senna in his McLaren is about a second slower than his P1 time set on Friday.

Then out comes Nigel Mansell in his exquisite Ferrari 641 – the commentary pitch rises and everyone cheers him on his warm-up lap. The next time past, flicking through 'our' chicane on his flying lap, even my untrained eye can tell the red #2 car is moving faster than anything we've yet seen. He claims pole by 0.6 seconds and the crowd roars like Concorde taking off.

Later we see Mika Salo beat Mika Hakkinen in the Formula 3 support race, and the flamespitting British Touring Car Sierra Cosworths of Robb Gravett and Andy Rouse dueling for pole. Then in Formula GM/Lotus qualifying, one car has a nasty misfire, but I notice its driver brakes very late to loosen the rear and pivot his machine on its nose, and he repeats it each time. I check the car number in the programme and thus become aware of future F1 driver Pedro Lamy.

I'm hooked on it all, so too is the family, and for the next three years my parents dig very deep to buy race day grandstand seats at Stowe corner. More happy days. **

MAUTOSPORT

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Editorial

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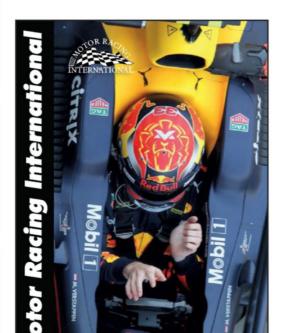
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