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on the key issues**

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# The desire for someone to challenge Hamilton for his F1 crown

It's the time of year when optimism is building ahead of the new Formula 1 campaign. Although periods of domination now tend to last for several seasons, there is always the hope that things will get mixed up – and that we'll have a really close fight for the world title.

Many of the individual grands prix in the second half of 2019 were interesting and unpredictable. But from a championship point of view, Lewis Hamilton's early lead and incredible consistency meant there was never really any doubt about who would come out on top.

This year the hope has to be that Red Bull or Ferrari (or, even better, both) can provide a sustained challenge to Mercedes. A Hamilton v Max Verstappen v Charles Leclerc contest is what people want to see.

How likely is that? It's one of the big questions that ex-F1 racer and Sky pundit Karun Chandhok tackles this week on page 16. He also looks at the chances of anyone overhauling the Big Three, the dynamic that we could see at Renault between Daniel Ricciardo and Esteban Ocon, and picks out the people under most pressure (clue: the drivers in the leading teams not mentioned above!).

Taking on the more serious side of motorsport, we investigate what is being done about the effects of concussion (p24) and Sam Schmidt talks about his remarkable journey since his life-changing IRL crash in 2000 (p30). Alex Kalinauckas also learns about Virgin's new Formula E simulator (p36) and we look back at the time when Roger Penske's eponymous team made a faster Ferrari than Ferrari (p40).

- Thank you to all those who have sent in your support for the new Autosport National supplement, which appeared in last week's magazine. The next instalment is planned for 27 February.



*Kevin Turner*

**Kevin Turner**  
Editor

kevin.turner@autosport.com

**NEXT WEEK**  
**13 FEBRUARY**

We look at why 2020 could be Mercedes' most challenging Formula 1 season yet



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Motorsport Images/Andre

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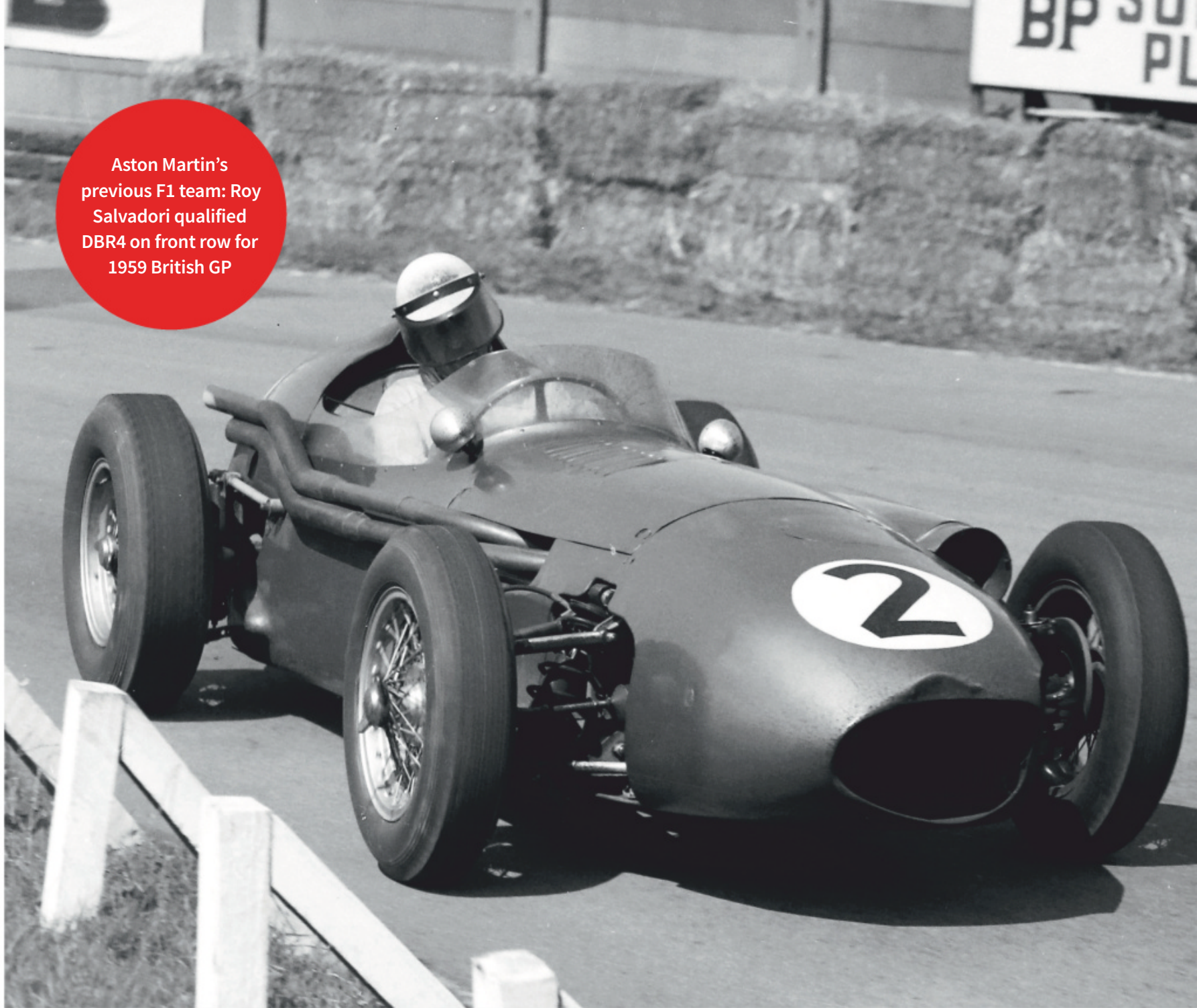
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Aston Martin's  
previous F1 team: Roy  
Salvadori qualified  
DBR4 on front row for  
1959 British GP



# RACING POINT TO BECOME ASTON MARTIN VIA STROLL

## FORMULA 1

Aston Martin will have its own Formula 1 team next year as part of a deal to rebrand the Racing Point squad.

Following a new investment partnership between the British sportscar manufacturer and Racing Point owner Lawrence Stroll – father of Racing Point driver Lance – a dramatic shift of Aston Martin's F1 focus away from its title sponsorship of Red Bull has been agreed.

Racing Point will become the official Aston Martin F1 team, and will receive sponsorship payments from the car maker – at the same level it is paying in F1 now – for a minimum period of five years. If certain conditions are met, then that deal will roll on for another similar period.

It all comes after Stroll led a consortium to buy a 16.7% stake in Aston Martin for £182million, and he plans to raise much more cash to help ease the financial pressures on the company after poor sales and higher costs led to a profits drop.

One area singled out by Aston Martin as essential to its future success in the wake of the Stroll deal was an enhanced F1 project, with it most recently having been title sponsor at Red Bull. That deal comes to an end later this year, while a separate partnership between Red Bull Technology and Aston Martin to produce the Valkyrie

hypercar will continue until the cars are delivered.

In company documents that were filed for the London Stock Exchange, Aston Martin confirmed: "Aston Martin Lagonda has entered into a legally binding termsheet under which the Racing Point F1 team will become the Aston Martin F1 works team with effect from the 2021 season. This agreement is for a 10-year initial term and Aston Martin Lagonda will receive an economic interest in the team."

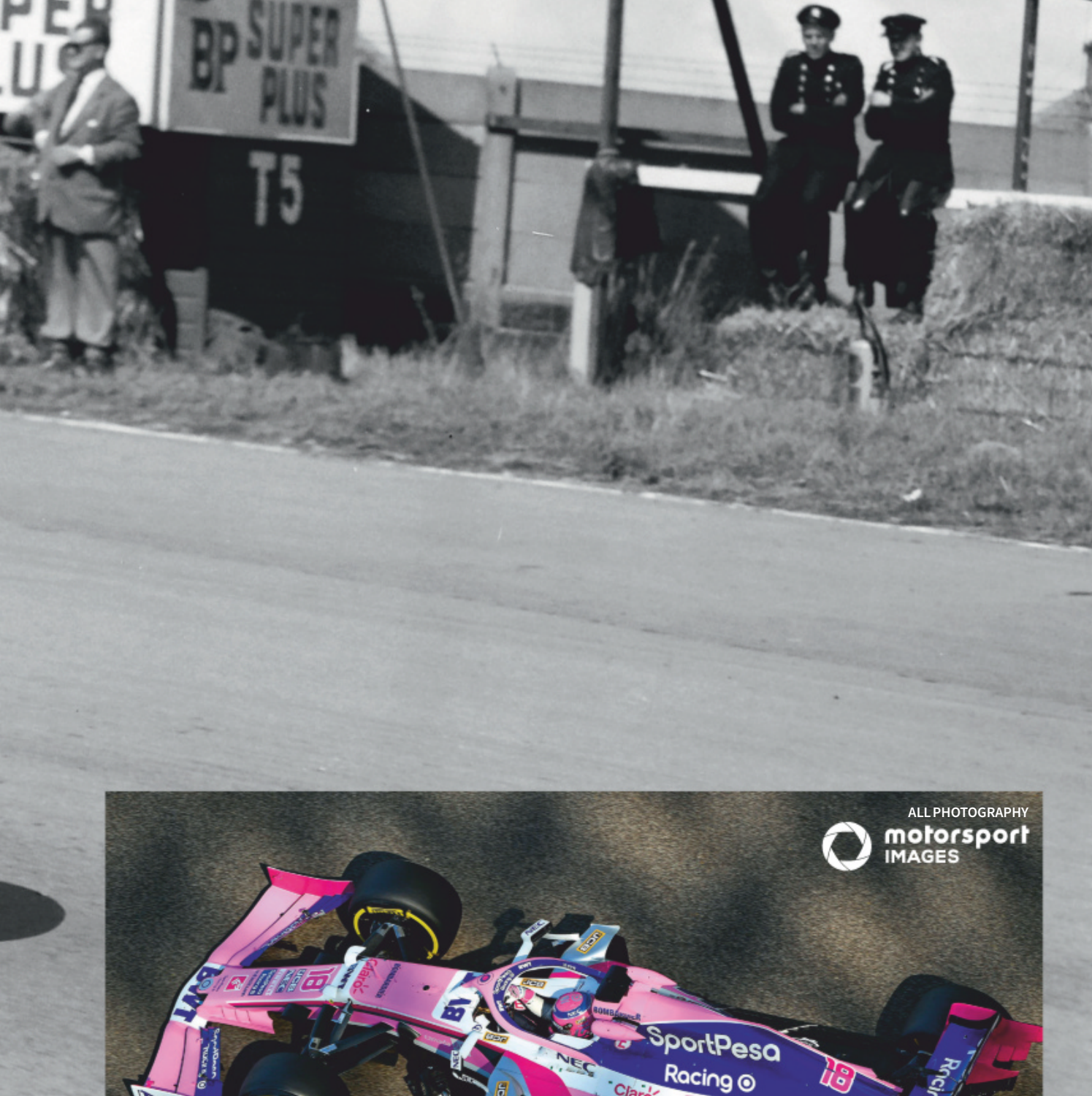
Aston Martin's involvement in taking over Racing Point's identity appears to be only financial, with the team having already committed to a long-term customer engine deal with Mercedes. But it has always been suggested that in the future the team could forge a closer technical alliance with the German car manufacturer.

The team has Sergio Perez under a long-term contract, and Stroll Jr's future there looks secure because of the involvement of his father.

Although Racing Point had a challenging 2019

**"I THINK NOW WE'RE NORMAL, SO THIS YEAR YOU'LL SEE A CAR, EVEN AT THE BEGINNING, THAT SHOULD BE WHERE WE NORMALLY ARE - BEST OF THE REST"**





Lance Stroll's future as an Aston driver is assumed to be secure

campaign, which it put down to being a legacy of the financial troubles it experienced the previous year as Force India before Stroll's takeover, the team is expecting a much stronger 2020 campaign. Team principal Otmar Szafnauer said: "I think now we're normal, so this year you'll see a car, even at the beginning of the year, that should be where we normally are, which is the best of the rest."

"That's what we've got to aim to do. It isn't going to be easy, because everybody wants to be best of the rest: McLaren, Renault, Toro Rosso, us and Sauber. Everyone's aiming for that, although some are even aiming for top three despite there still being a gap."

The Aston Martin tie-up with Racing Point interestingly comes a few years after the Silverstone-based team, under its previous Force India owners, tried to pull off a title sponsorship deal but failed.

Then-team owner Vijay Mallya revealed last week: "We had conversations with Aston five years ago, not to become a works team, but to have Aston become the title sponsor, and give us some technical support. I don't know what the deal is with Red Bull, but I don't think Aston has technical input. Red Bull have the genius Adrian Newey, so I don't think they need anybody else!"

**JONATHAN NOBLE**



Aston's first GP start. This is Clive Gallop in the 1922 French GP



Lawrence Stroll's investment means another name change

**PIT + PADDOCK**

## RATING THE MANY IDENTITIES OF RACING POINT



SCHLEGELMILCH

Who can argue with an F1 team named Aston Martin? It's a lot better than Midland, after all...

### EDDIE JORDAN RACING 7/10

Frontrunning Formula 3/Formula 3000 team followed regular 1980s format of name of proprietor with 'Racing' tacked on the end. Can't argue with that.

### JORDAN GP 8/10 (above)

OK, Eddie's surname doesn't sound as quick as 'Ferrari', but it's a lot speedier than 'Williams'. Perfectly decent handle for an F1 squad.

### MIDLAND 1/10

And then came... the worst of the lot. Would only have made sense if team had been based in Birmingham or subsequently become HSBC.

### SPYKER 6/10

It does have a ring about it – and gains a point for at least sounding better than Midland. Gains one more point if you pronounce it in a Dutch accent.

### FORCE INDIA 4/10 (below)

The 'Force' bit is always handy for a race team, albeit used before in F1. But attaching 'India' to a team based at Silverstone was a bit fanciful.

### RACING POINT 2/10

We're hoping someone wasn't paid an awful lot of money to come up with this ID in the new Stroll era. But they probably were.

### ASTON MARTIN 9/10

One of the most evocative names of the sport, sullied only by the occasional poor Le Mans leviathan. The score becomes a full 10 out of 10 if you're a James Bond fan.



STALEY





## Alonso targets F1 comeback

### FORMULA 1

Two-time world champion Fernando Alonso is eyeing a return to the Formula 1 grid in 2021, and reckons his age — he will be 39 years old — will be no barrier.

Alonso, who last raced in F1 with McLaren in 2018, wants a comeback to coincide with the introduction of the major rule changes that aim to close the gaps between the cars and spread success throughout the field.

If he can find a seat on the 2021 grid, Alonso would be re-entering F1 after two full seasons away, during which time he has claimed the World Endurance Championship title and a second Le Mans 24 Hours win, scored a Daytona 24 Hours victory, failed to qualify for his second shot at the Indy 500 and completed the Dakar Rally.

As part of an exclusive interview with *F1 Racing* magazine, Alonso was asked if his age may put off potential F1 suitors. “I don’t think age will be a problem,” he said. “These cars, with no fuel stops, are not so demanding. You drive seven or eight seconds [a lap] slower on a Sunday than you do on a Saturday. Also, with the new

18-inch wheels [that F1 is introducing as part of the 2021 rules package], it will change the handling of the car and everyone will need to reset the way they drive.”

Comparing his own potential F1 comeback with Michael Schumacher’s return with Mercedes in 2010, when the seven-time world champion was 41 years old, Alonso said: “Michael came back to F1 in an era of Pirelli [2010 was Bridgestone’s final season] when the tyres were very sensitive. We had developed skills to take care of the tyres and not overheat them and he was struggling more because of that. In 2021 this won’t be a problem for me.”

Alonso has also been gearing up for a return to the Indy 500, a race he first tackled in 2017, but recent stories suggest that Honda — which supplies the Andretti Autosport team with which the Spaniard was thought to be close to driving — has vetoed a supply of powerplants for a driver who was highly critical of the company during his McLaren-Honda years. He will therefore have to pursue options with Chevrolet-powered teams.

Beyond that, he describes F1 as “unfinished business” after winning the last of his two world titles as long ago as 2006. “In the museum [Alonso’s own exhibit space at his Oviedo kart track] there are cabinets with a lot of trophies, but nothing recently and that seems a bit weird,” he said. “The only problem with new rules is some teams could interpret them differently to others. You can join a team that is winning now, but if they make a mistake with the regs, will people say I made a bad decision again?”

ALEX KALINAUCKAS AND JAMES ROBERTS



## HAMILTON AND MERC BOTH SAY THEY’RE STAYING

### FORMULA 1

Lewis Hamilton and Mercedes have dismissed rumours over contract talks and the car maker’s future in Formula 1.

A number of reports since the start of the year have suggested Mercedes’ driver line-up and future may not be secure. Stories in recent days have claimed that talks between Hamilton and Mercedes over a new contract had stalled over pay, with the inference being that it could prompt him to consider a Ferrari switch for 2021.

Posting on Instagram, Hamilton rubbished talk of a clash over contracts, and said discussions had not even started with Mercedes boss Toto Wolff. “FYI Toto and I have not even spoken about contract yet,” he said. “Nothing is being negotiated currently, papers making up stories.”

Those reports come amid ongoing rumours about Mercedes’ own long-term future in F1, which is not guaranteed until it signs a new Concorde Agreement. A report in *Autocar* said a Mercedes withdrawal from F1 would be discussed at the next board meeting of parent company Daimler.

Asked by Reuters at a German Auto Industry annual reception in Berlin if Mercedes was preparing a pullout, Daimler chief executive Ola Kaellenius said: “Not true.”

Mercedes has been evaluating its future in F1 ahead of the 2021 rules overhaul and cost cap, but team boss Toto Wolff said at the end of 2019 that it was likely that Mercedes would commit, albeit that nothing was definite until contracts were signed.

JONATHAN NOBLE







# John Andretti

## 1963-2020

### OBITUARY

Aldo Andretti, twin brother to Mario but a man whose own racing career was cut short by a brutal sprint-car crash, was proud of his sibling but was also able to enjoy a career vicariously through son John Andretti, whose racing talent proved so malleable in that old-school, so-cool Andretti-like way, and who died last week aged 56.

John Andretti's ability meant that he could win USAC sprint-car races on dirt, yet also reach the semi-finals in an NHRA Top Fuel event. It allowed him in 1994 to become the first driver in history to run the Indianapolis 500 and Coca-Cola 600 NASCAR race in the same day. And he proved he could win in IMSA sportscars and also Indycars.

Andretti's first high-profile triumph came in the IMSA sportscar race at Watkins Glen in 1986 sharing a March-BMW M12 with Davy Jones, and he made his CART Indycar debut at Road America late in the 1987 season with a Curb Racing March. That resulted in a sixth place and, over the next four races, Andretti would score three more top-10 finishes. The team's switch to the Lola-Cosworth combination for 1988 proved ill-fated, and Andretti's part-time gig pedalling Vince Granatelli's Lola-Buick the following year was hardly a step up in terms of results.

Things were going well in sportscars though. Andretti shared a works Porsche 962 with uncle Mario and cousin Michael to sixth place at Le Mans in 1988, then clinched victory in the

1989 Daytona 24 Hours along with Derek Bell and Bob Wollek, driving the Busby Racing-run Miller High Life Porsche 962. In a season largely dominated by the Electramotive Nissans and Jaguars, Andretti and Wollek won again in the ageing Porsche at Palm Beach, and went on to finish fifth in the IMSA championship.

Andretti's stock was now high enough with Porsche that when the marque expanded its Indycar team to two cars for its third season in US open-wheel racing, Andretti got the call to partner Teo Fabi in 1990. Porsche's abandonment of the project at year's end saw Andretti move to Jim Hall/VDS Racing and he promptly won the opening round of the 1991 CART season, the inaugural race at Surfers Paradise in Australia.

A couple of months later, he scored his best result in the Indy 500, a fifth place, and a week after that at Milwaukee he lost to Michael but beat Mario to complete an all-Andretti sweep of the podium. John went on to finish eighth in the points race — a position he repeated the following year thanks to a cluster of top-five results.

Yet Andretti spent the mid-1990s to the early-2000s focused on NASCAR competition, scoring wins in the 1997 Pepsi 400 at Daytona and the 1999 Goody's 500 at Martinsville.

In 2007 he returned to the Indy 500 with Panther Racing and his talent seemed undimmed, as further outings with Roth Racing, Dreyer & Reinbold Racing and Andretti Autosport would prove. His final Indy start came in 2011.

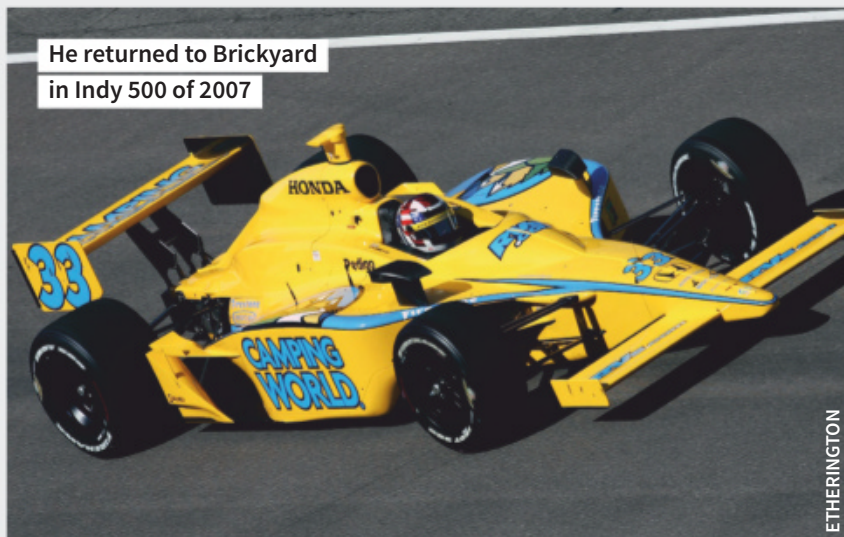
Aside from his racing exploits, John Andretti was a delightful, understated, sincere and seemingly ego-free human being with a ready smile, who was involved in a lot of charitable work, but played down his own three-year battle with colon cancer. He is survived by wife Nancy, racing son Jarett, and daughters Olivia and Amelia.

**DAVID MALSHER-LOPEZ**

Andretti won 1989 Daytona 24 Hours in Porsche 962



He returned to Brickyard in Indy 500 of 2007







## ORECA ditches hypercar plan for 'Daytona' rules

### WEC

French motorsport giant ORECA is putting its full weight behind the new LMDh prototype rules announced late last month and at the same time is ending its LM Hypercar project.

ORECA boss Hugues de Chaunac described the LMDh announcement by the Automobile Club de l'Ouest and IMSA ahead of the Daytona 24 Hours as "historic". He explained that he believes the new class, which will allow cars from the IMSA SportsCar Championship to compete in the World Endurance Championship, "ticks all the boxes" for major manufacturers.

"We are going to focus completely on the global platform, which means we will not work on a hypercar project because we cannot do everything," he said. "The future LMP2 will be part of the same project, so it is huge for ORECA. You have to remember we are a young racing car constructor."

De Chaunac stated last year that his organisation was working on an LM Hypercar built to the prototype segment of the rules and that it was in discussions with a number of manufacturers. ORECA technical director David Floury revealed that a "pre-study" and "some conceptual and aero work" had been undertaken during 2019.

The statement of intent from ORECA on LMDh appears to suggest that it will not have an involvement in Peugeot's WEC entry in 2022. The news that it would not be renewing its deal with Toyota to supply mechanics and engineering services at the end of

this year's WEC campaign had sparked speculation that it would take a role in the French manufacturer's programme.

Peugeot has yet to announce technical details of its WEC contender, but it has stated that it will be developed in-house at PSA Motorsport headquarters in Versailles-Satory. That would suggest that it would not be an LMP2-based LMDh machine.

PSA Motorsport boss Jean-Marc Finot said: "All the design will be done at our facility under our technical director Olivier Janssonie. The constructor will be Peugeot Sport."

### CADILLAC TEAM EYES LE MANS

Hopes that Cadillac could take advantage of the LMDh platform and expand its programme beyond North America's IMSA SportsCar series have been boosted by a statement of intent from Daytona-winning entrant Wayne Taylor. The former partner in the British-based 3GR group that masterminded the marque's 2001 and 2002 LMP campaigns has described taking Cadillac back to the Le Mans 24 Hours as "unfinished business".

But Taylor warned that the costs of competing at Le Mans, especially if it was part of a full campaign on the WEC, would likely be prohibitive for a non-factory team like his.

"I am a bit wary because all the talk is about manufacturers — is there a place for a team like ours?" he explained. "It's hard enough to find \$6million for an IMSA programme, so it's difficult to imagine finding \$15-20million to do the WEC."

**GARY WATKINS**

## Jackson joins Plato for return

### BTCC

British Touring Car Championship star Mat Jackson will return to the series after a two-year absence this season with the Power Maxed Racing Vauxhall Astra team alongside double champion Jason Plato.

Jackson, a 31-time BTCC race winner, has not contested the championship since a contractual dispute between factory Honda squad Team Dynamics and Motorbase Performance left him on the sidelines at the beginning of 2018.

"I have unfinished business in the BTCC and it was critical for me to return with a top team, capable of mounting a consistent title challenge," said Jackson (below), who partnered Plato in the RML Chevrolet line-up in 2009.

Between them, Plato and Jackson have a record of 128 BTCC victories, which will be more than any other line-up on the grid. Plato, who is on 97 wins, finished seventh in the 2019 title chase and took his first race win for more than two seasons in the Brands Hatch finale. "I genuinely love my team at PMR," said Plato. "They work unbelievably hard to provide me with the very best car, but also have a lot of fun doing it; it's a great place to be."

Meanwhile, Motorbase has secured 2019 Independents Trophy winner Rory Butcher to drive one of its Ford Focuses. The Scot, brother-in-law of three-time champion Gordon Shedden, drove for AmD Tuning in a Honda last year and was placed fifth overall with three wins, and is now rejoining the team that gave him a BTCC break in 2017.

"There are some very exciting plans for the 2020 season and to be in on the ground floor of those developments really motivates me," said Butcher. "I have tasted glory in the Independents Trophy, but I want more wins, and the overall championship is my aim."

**MATT JAMES**





# Aitken in F1 team switch

## FORMULA 1

Formula 2 race winner Jack Aitken has parted ways with the Renault Formula 1 programme to join Williams as its official reserve driver, and will get a run in a Formula 1 free practice session this year.

Just one day after Aitken announced that he had stepped down from his reserve and test role with Renault, the British driver revealed that he had taken on a similar position at Williams. As part of the deal, Aitken will attend all grands prix with Williams to work with the engineers, take part in one FP1 session, and will also conduct a full simulator programme.

“It is a great honour to join Williams as their reserve driver for the 2020 season,” said Aitken. “Williams is a team with strong heritage, and continued longevity, and I’m looking forward to directly contributing to their development through my simulator and testing work.”

Deputy team principal Claire Williams added: “It is obvious from what Jack has achieved so far he is a young driver with a great career ahead of him and we believe he has the right credentials to reach the top in the sport. Jack has proved his ability in FIA Formula 2 and GP3 and we look forward to seeing what he can achieve as the team’s



official reserve driver.”

Aitken had graduated from the Renault Sport Academy ahead of the 2019 season into his test and development role. He won the Formula Renault Eurocup in 2015, triggering his affiliation with the French marque, and went on to finish runner-up in GP3 in 2017 to George Russell.

In 2018 he finished 11th in the F2 standings while his ART Grand Prix team-mate Russell won the title, but a switch for Aitken to Campos Racing for last season yielded three wins and fifth

in the championship. He is expected to remain with Campos in F2, although his 2020 race plans are yet to be announced.

Aitken joins a large team of drivers at Williams. Aside from race drivers Nicholas Latifi and Russell, the squad has taken on another F2 racer in Roy Nissany as its official test driver. It has also added ex-Red Bull Junior and DAMS F2 recruit Dan Ticktum to its pool, while W Series champion Jamie Chadwick remains in a role with the squad.

**JONATHAN NOBLE**

## Red Bull backs trio as Nannini steps up

### FORMULA 3

The Red Bull Junior programme will again have three drivers in the FIA Formula 3 Championship this season, as one of the top Formula 4 drivers of 2019 steps up a level.

While Yuki Tsunoda is moving up to race in Formula 2, New Zealander Liam Lawson will remain on the F3 grid, but switches from MP Motorsport to Hitech Grand Prix. British team Hitech, which had already

confirmed Renault F1 protege Max Fewtrell, will also field Red Bull’s reigning Italian F4 champion Dennis Hauger (left), the Norwegian who almost made it a double of F4 titles last year but lost the German in a final-round showdown.

The other Red Bull Junior in FIA F3, Jack Doohan, was already in place with a berth at the HWA Racelab squad.

Another recruit to the FIA F3 grid is Matteo Nannini, the nephew of 1989 Japanese

Grand Prix winner Alessandro. Nannini, who is only 16 years old, won the UAE F4 title at the beginning of 2019 before switching to the Formula Regional European series, and made an eye-opening end-of-season Formula Renault Eurocup debut.

Nannini has joined Swiss team Jenzer Motorsport for FIA F3, where he will run alongside Australian Euroformula Open graduate Calan Williams and one other driver.



ITALIAN F4

**AUTOSPORT PLUS**

# Smart insight published daily





## Formula E reveals its Gen2 EVO styling

### FORMULAE

Formula E has pulled the digital covers off its Gen2 EVO machine, which will be introduced for the 2020-21 season as the series takes on world championship status.

Although the car is set for a physical unveiling at the Geneva Motor Show on 3 March, the first full images of the cosmetic overhaul were released online on Tuesday.

Most notably, out go the wheelarches and in come a new front wing and a curved rear wing, while a dorsal fin has been added to the rear bodywork. These changes follow an

extension to the Gen2 car's lifecycle, which has increased from three to four seasons.

Formula E founder and chairman Alejandro Agag said: "The Gen2 already stands out as one of the most striking race cars to hit the track and, just as the name implies, the Gen2 EVO is another evolution of the distinctive design. As we did with the first-generation car, the Gen2 EVO has been given reprofiled bodywork to make it look more sleek and agile."

After criticism of increased levels of car-to-car contact since the introduction of the Gen2, it is hoped that the new body kit

will break more easily so that drivers are punished with a loss of performance.

FIA president Jean Todt added: "I am pleased that as [FE] transitions to world championship status, we see a further evolution of the Gen2 car – the Gen2 EVO – with an exciting new look. It is this progressive approach that has contributed to the expansion of the grid and increasing competitiveness of the championship, which continues to go from strength to strength and which is paving the way for the future of sustainable urban mobility."

**MATT KEW**

## F4 champ Maloney steps up with Carlin

### EUROFORMULA OPEN

Reigning British Formula 4 champion Zane Maloney is stepping up to the international scene this season, and will race in Euroformula Open.

The Barbados talent remains with his F4 team Carlin for the move, which comes despite testing with Formula Renault Eurocup newcomer R-ace GP.

Team boss Trevor Carlin

said: "He is an incredibly talented driver as his Formula 4 results prove, and a hard worker within the Carlin team."

Maloney (right) is the second recruit to Carlin's line-up for Euroformula, following Israeli Ido Cohen, who contested two rounds with the team last year in addition to his programme in Italian and German F4.

Other positive news for the EFO series, which will

adopt the new Dallara 320 chassis, over the winter has been the recruitment of former F3 European Championship team Van Amersfoort Racing. The Dutch squad has switched from Formula Regional and has pledged to run at least two cars this season.

EFO loyalist Fortec Motorsport has switched from HWA engines to Spiess powerplants.

**MARCUS SIMMONS**







**DTM** Audi was out in force at the Zell am See ice race in Austria last weekend, including with an RS5 DTM driven by 2019 champion Rene Rast and marque veteran Benoit Treluyer. Audi also confirmed last week that it will retain its existing DTM driver line-up: Rast is joined by Jamie Green at Team Rosberg; Robin Frijns and Nico Muller are at Abt Sportsline; and Mike Rockenfeller and Loic Duval represent Team Phoenix. **Photograph by Audi**

## IN THE HEADLINES

### CHINA IN F1 GROUP'S HANDS

The F1 Strategy Group was due to discuss the fate of the Chinese Grand Prix (yesterday), while the country's Formula E round has already been postponed in the wake of the coronavirus outbreak. The Sanya FE round was due to take place on 21 March, and could be cancelled altogether if the situation does not improve. The Chinese GP is due to take place at Shanghai on 19 April.

### BARRICHELLO TO ARGENTINA

F1 veteran Rubens Barrichello has added a programme with Toyota in Argentina's Super TC2000 series to his regular Brazilian V8 Stock Car duties. Barrichello joins four-time champion Matias Rossi, Mariano Altuna and Julian Santero in the Corolla squad. The Full Time Sports team he races with in Brazil has switched to the Toyota Corolla bodyshape, and Barrichello will be joined there by Nelson Piquet Jr, Rossi (also doing both series) and Rafael Suzuki.

### BUSHELL'S HEART SCARE

British Touring Car Championship racer Mike Bushell spent two days in intensive care in France after falling ill on a skiing holiday. Bushell, who suffers from myocarditis, is due to race a Team Hard Volkswagen CC and is racing to be fit for the season.

### LOEB PULLS OUT OF WTCC

The World Touring Car Cup has taken another hit with the withdrawal for 2020 of Sebastien Loeb Racing. This comes after the exit of Volkswagen, whose Golf GTI the team ran. The pullout leaves Rob Huff and Johan Kristoffersson on the driver market.

### AMERICAN FOR RED BULL

Red Bull has brought American Jak Crawford into its Junior programme to race in Italian and German Formula 4 with Van Amersfoort Racing. Crawford was runner-up in the Mexican-based NACAM F4 series in 2018-19, yet is still only 14!

# John Hine 1933-2020

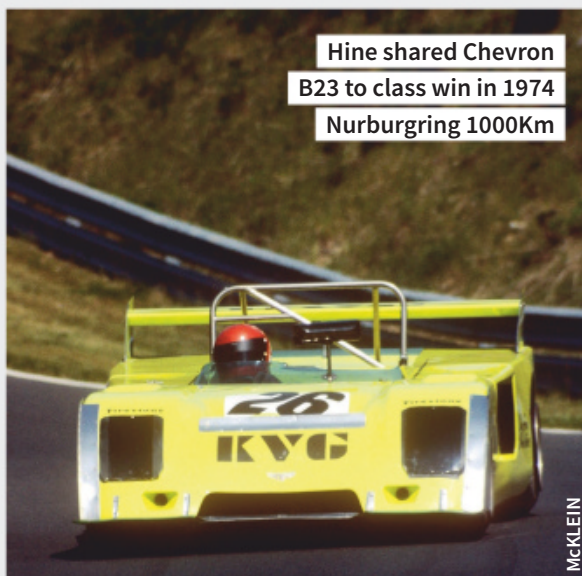
## OBITUARY

The racing career of John Hine, who died last week, aged 86, spanned three decades. Renowned as a quick and reliable sportscar driver, the South Londoner had cut his teeth in single-seaters in the late 1950s. He also raced saloons in the 1970s.

As EL Hine, he started in Formula Junior, bagging sixth at Monaco in the 'flexy' Lola Mk3 in 1961 and third in the GP des Frontieres at Chimay in the considerably more competent Mk5A in 1963.

Hine raced jazzman Chris Barber's Lotus Elan and 47 with aplomb, before landing a factory Chevron drive. A class-winning ninth in a B8-BMW with Swede Reine Wisell in the 1969 Brands Hatch 6 Hours presaged the best phase of his activity.

His affinity with Chevrons saw him win his class, fifth overall, in the 1970 Kyalami 9 Hours with Brian Redman in the works B16S. Adding to his reputation, Hine and expat Dave Charlton won the 1971 Springbok Series race at Welkom in a B19.



Hine finished third in the 1972 Spa 1000Km with John Bridges (Red Rose Racing B21) and in the 1972 and 1973 Kyalami marathons with Charlton (B19) and Ian Grob (B23) respectively. He also won the 1975 European 2-litre championship's opening heat at Brands in a KVG B36.

His Le Mans 24 Hours runs with Marcos (1962), Mo Skailes's Chevron B16 (1970) and Ferrari 365 GTB/C (1972) were thwarted, but Hine claimed ninth in the 1974 Spa 24 Hours in a Triumph Dolomite Sprint and saddled one in the British championship.

**MARCUS PYE**

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# Why the chance of eclipsing Schumacher matters

*As in all sport, motorsport is about much more than winning – it's the human stories behind the statistics that make it so compelling and decide who achieves greatness*

ALEX KALINAUCKAS

**A**cross all of sport, the best champions lose. Some endure defeat from the start, working constantly to improve and finally seal the deal right at the end of their careers, walking off into a golden sunset. Others win immediately, but fall at what should be their greatest, last moment. And some find success and failure intertwined throughout their endeavours.

Usain Bolt lost his final race. Tom Brady finally looks like he can't prevail if the odds are stacked against him. And, back in 2006, Michael Schumacher missed out on an eighth Formula 1 world title just after he'd finally announced his Ferrari exit.

But the way Schumacher handled that defeat in Brazil stood out. In the season finale, when he needed a miracle to overcome Renault's Fernando Alonso after his Japanese Grand Prix engine failure, a puncture sustained in a clash with Giancarlo Fisichella dropped him out of contention early on. But still Schumacher roared back. As team-mate Felipe Massa stormed to an emotional home win and Alonso secured a well-deserved second world title, Schumacher showed his class, with pass after pass to recover to fourth.

His return with Mercedes was defeat of a different kind. F1 had moved on without its statistically greatest champion. The cars

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**“Hamilton's is a story we may never see again – his star status means he *is* F1 to many people”**

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were different, the tyres – especially – weren't the same. But just by coming back, even if he didn't win, Schumacher showed something about being a champion.

Success in sport should of course be respected. But constant winning does get tiresome for many. It's not for nothing that F1's rules were regularly changed during the Ferrari/Schumacher domination at the start of the 2000s. And it's the same reason why Brady's New England Patriots are portrayed as villains of the NFL. Glorious defeat is a better story than metronomic victories.

That's why it's interesting to hear Toto Wolff, the boss of F1's current dominant team, explain how Mercedes learns most from its losses. But defeat is not just useful for competitors, it's when those of us on the outside learn the most about champions, those who are yet to reach greatness and those who will never get there.

Consider Lewis Hamilton heading into the 2020 F1 season. He's already won six world titles with two different teams – by any measure, he's had a truly great career. But, right now, he stands on the precipice of claiming *the* greatest F1 career: overhauling Schumacher's record of seven world titles.

But he might not get there. The 2020 season could end Mercedes' time as modern F1's best team. Ferrari should have been stronger in 2019, and Red Bull now appears resurgent.

As my illustrious predecessor Edd Straw once explained, it would be naive not to acknowledge that injury, or even death, could end Hamilton's career, although of course no one would ever want it to happen. It's also not inconceivable that Max Verstappen and Charles Leclerc could defeat Hamilton on their own terms.

Say that Hamilton is beaten, though, and he then moves to Ferrari for 2021. It's entirely possible that such a switch – still totally hypothetical at this stage – backfires and means he won't have his own glorious final triumph. He'd still be a prodigious six-time world champion, just not the seven or eight-time champion he might have been had things played out differently.

That's not to say any of that will happen. In all likelihood it won't and Hamilton will waltz to a fourth successive title at the end of this year. Then, unless the 2021 rules reset dramatically shakes up F1's competitive order, he'd be favourite to go on and do it all again, sealing an eighth championship and eclipsing Schumacher's title record, which once looked like it might just survive the test of time.

Sporting failures are captivating because they show us that those who appear perfect are human after all.

Even before he pulled up injured in his final relay race, Bolt had already lost his final 100m race, won by his long-time rival, the disgraced Justin Gatlin. Two great and imperfect human stories – the kind that make all sport, motorsport especially, so compelling.

Hamilton's is a story that we may never see again. He is the first, and so far only, black F1 driver. He comes from a council estate in Stevenage and has used his talents to rise to the top of a sport basically reserved for the wealthy elite. His star status in other spheres makes him better known than any of his peers. Like it or not, at the very minimum, any true motorsport fan should respect him and his achievements – he *is* F1 to many people.

The barriers to entry into motorsport are higher than ever before. Karting costs are rising, and many young drivers are abandoning their F1 dreams just to make a living as a professional in other areas of the sport.

Hamilton's is a fantastic story. However it ends – in glorious failure or walk-off triumph – it will be a tale that matters. 🍀





# Points of order

*The FIA awards superlicence points according to how it values the feeder series to F1, so it was baffling when the body reduced Formula Renault Eurocup's allocation*

MARCUS SIMMONS

**T**he FIA's Formula 1 superlicence points system was thrown into the spotlight again last week by the W Series' announcement that, having been selected by the sport's governing body as worthy of qualifying for inclusion in the superlicence structure for its second season in 2020, its champion would be awarded 15 points of the 40 required to compete in F1. A flurry of stories immediately appeared in media outlets everywhere, all of whom have been impressed by the women-only series since it made its remarkably successful debut in 2019. But the funny thing is the 15 points had already been referenced in stories, which is no surprise because the FIA published its full 2020 table of qualifying series way back on 10 December.

Everyone had lapped up a story that was, effectively, old news. And while it's difficult to understand why W Series chose just such a time to dust this off and give it a fanfare, it says a lot for the championship's fantastic PR team that it was able to feed a story to media who'd overlooked what had been under their noses for several weeks.

And it jolted me back into a little spell of indignation that I'd initially felt in December, but soon passed amid the wave of pre-Christmas deadlines and workload anyone in the media has to bear. And perhaps therein lies the reasoning behind W Series' scheduling of its announcement: everyone is too busy in mid-

**“In mathematical terms, FRegional is regarded as 67% more important than FRenault”**

December, but by late January everyone is desperate for news...

My problem is not that W Series is eligible, but that the Formula Renault Eurocup has been downgraded from awarding 18 points towards an F1 superlicence in 2019 to just 15 – the same level as W Series – for 2020. No disrespect intended towards W Series, but this is just not acceptable treatment for the Eurocup, which has a continuous history since the early 1990s, and has long been accepted as the best source of young talent below FIA Formula 3 level. At the same time, the FIA-approved, new-for-2019 Formula Regional European Championship – which uses exactly the same Tatuus chassis as Renault Eurocup and W Series – has kept its status of offering 25 points for the champion. To put it in mathematical terms, FRegional – into which Ferrari places young drivers – is regarded as 67% more important than FRenault in

terms of superlicence points, despite an average grid of 13 cars in 2019, compared to 20 for Renault.

Furthermore, you can run in the Asian F3 championship – again using the same Tatuus chassis and Alfa engine as FRegional – over the winter and score 18 points for winning the title. Then go and do Regional, add the 25 points for winning that, and you have 43 points to immediately earn yourself a place on the F1 grid – even if you've never even competed at FIA F3 Championship level. It's all a bit odd, especially when Red Bull Junior Juri Vips – one of the most explosive talents below F1 – reckons he's only halfway to the points required after competing for two years at F3 level, and never in a top team.

Amid all this, Renault's downgrading by the FIA is a puzzle. We tried to get hold of the FIA for a comment on this, without success at the time of going to press, but Renault Sport commercial chief Benoit Nogier was able to talk. Firstly, he reckons 14 drivers are already signed up for 2020, and also his series will benefit from the addition of F2/F3 titan ART Grand Prix. But how many superlicence points can they fight for? “We asked straight after the announcement directly to the FIA for an explanation,” he told me. “We did a good first year [since the revamp with the new Tatuus Regional F3 car], we had 20 cars, we always wanted to respect FIA regulations.

“We received a request from the FIA [in reply] for many details – number of cars, which events you go to, do the cars respect FIA regulations, do we respect the latest safety regulations of circuits, what is the history of the Eurocup, has it showed in the past it can produce drivers for the higher levels of the pyramid?”

Some of those questions are not too difficult to answer. The Eurocup's headline race is in support to the Monaco Grand Prix, in which, for this year, 14 of the 20 drivers will be Eurocup graduates. Between them, they have taken 36 race wins in the Eurocup, among a total of 128 race victories taken across Eurocup, plus Renault's previous regional and national championships at this level. If that isn't sufficient, FIA president Jean Todt could ask his son Nicolas, who manages Renault F1 protege Caio Collet, the Brazilian who won the 2019 Eurocup rookie title and returns to bid for the overall crown in 2020.

Nogier, unsurprisingly, is hopeful of what he describes as a ‘re-evaluation’. “That's my hope,” he affirms. “We ask only to get to the same level as we had in 2019. We want to understand how it works, to improve ourselves. I respect all the FIA sporting and technical regulations, I go only on F1 circuits of the highest levels of safety. For example, F1 is back at Zandvoort this year, and we will be back at Zandvoort with Eurocup. I'm not the guy who decides, but I know the value of the championship.”

Unfortunately, that knowledge isn't shared by everyone. ❧



# YOUR SAY

*My recollection was that Brabham retired quite early in the race, but the car sounded awesome while it lasted*

**STEVE BERNING**

## **Awesome Honda sound stays in the memory**

Brian Harvey's article was fascinating ('The first time Honda conquered Europe', 30 January). I now know that, without realising it at the time, I saw the debut of the Formula 2 Brabham-Honda.

On 18 September 1965 I attended the Gold Cup meeting at Oulton Park. I can remember Jim Clark spinning off at Cascades when in the lead, and John Surtees's drive through the field to win after qualifying 10th.

But my main memory is the sound of Jack Brabham's Honda engine in the back of his BT16. I have seen the 1.0-litre F2 series since referred to as "screamers". My recollection was that he retired quite early in the race, but it sounded awesome while it lasted.

**Steve Berning**  
Shepperton

## **Wheels of steel**

I noted that after Ott Tanak's little whoopsy in the Monte Carlo, one of the few bits of signage on the car remaining visible was, rather appropriately, 'Hyundai Steel'.

**Graeme Innes-Johnstone**  
Elland, West Yorks

## **Turn away from the dark side**

It seems to me that claiming F1 has a dark side (Autosport PLUS) is more a reflection on the values of the writer than a valid comment on the sport. There is no doubt F1 is eccentric, burning money to race around the world. For the people who attend and participate, it's wildly exciting and glamorous! If one thinks it dark, it just means it's not for you!

**Johnnie Crean**  
Kamuela, Hawaii, USA

**PICTURE OF THE WEEK**


Daniel Abt employs his Audi e-tron FE06 as tow car (that's freestyle ski ace Benedikt Mayr at the end of the rope) in the winter sport known as *skijoring*



## **HAVE YOUR SAY, GET IN TOUCH**


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F1  
2020

# THE BIG QUESTIONS OF 2020

*Can Ferrari topple Mercedes, or will Red Bull steal a march on them both? Can the midfield close the gap? The Sky pundit gives his verdict*

KARUN CHANDHOK

PHOTOGRAPHY



**motorsport**  
IMAGES







DUNBAR

## CAN FERRARI FINALLY BEAT MERCEDES?

In 2017 Sebastian Vettel *could* have stolen the title from Lewis Hamilton. In 2018 Vettel *should* have won the title. In 2019 they could have been a lot closer in the points table than they ultimately were. On the whole, it's fair to say that over the past three seasons the red camp hasn't fulfilled its potential to the extent that the team in silver has. That's not my opinion — that's just fact.

The team has the money, the people, the facilities and the drivers to fight against Mercedes and therefore the answer to the question is always: yes, it can. But will it? Recent history shows that this is a different matter.

Despite all the rumours and accusations in the paddock, the Ferrari power advantage in qualifying seemed to remain a mystery to the other engine suppliers. Last season

the Mercedes was probably the faster race car at 70% of the tracks, and the only way a slower car is going to win the title is by executing an error-free season with stellar performances and strategic brilliance. The problem for Ferrari is that Hamilton makes very few errors, is an excellent qualifier and Mercedes doesn't often get it wrong strategically.



HONE

The other issue last year was that the Ferrari seemed harder on its tyres than the Mercedes, probably as a result of having a bit less downforce. This meant that, even if Vettel and Charles Leclerc could qualify well, they couldn't necessarily beat the MerCs on Sunday, as races like the Mexican Grand Prix showed.

Leclerc will be better in his second season at the team. From June's French GP onwards he was brilliant, so expect more of the same. Towards the end of the season Vettel showed in races such as Singapore, Russia and Japan that once the updated car was to his liking, he was able to unleash his inherent speed.

One thing to consider is that with stable rules for 2020 and a big change coming for 2021, the answer of who comes out on top may well rely on which of the teams has committed more resources to the short term rather than holding back a bit with an eye on the future.



## WILL LEWIS HAMILTON SURPASS MICHAEL SCHUMACHER'S WINS RECORD?

Based on recent form, you'd be brave to bet against Lewis Hamilton getting the eight wins to take the record this season, especially with an extra race. All of the teams are treating this season as a bit of a stopgap to the big rules shake-up in 2021, so we can't really expect a big change in the order.

Having said that, we don't really need a massive shift to suddenly have six drivers in contention every weekend. On his day Valtteri Bottas is able to beat Hamilton on pace. Charles Leclerc should have ended the year only 18 points behind without all the mistakes made by him and the team, and Max Verstappen and Red Bull were strong enough to be a genuine threat at quite a few races in 2019 from the Canadian GP in June.

I do get bored by all the

comments from people saying, 'You're all biased towards Lewis', but the reality is the guy has been sensational from the first race he did back in 2007. He's won 50% of the championships he's taken part in and probably should have won two more (2007 and 2016), so you can't help but admire and appreciate greatness.

Despite all those years living out of a suitcase (albeit an expensive designer one), the reigning world champion has lost none of his motivation. Sure, he may not enjoy testing or occasionally sound bored in a Friday practice session, but he delivers when it matters in qualifying and the race. His work ethic with the engineers has been praised by everyone at Mercedes and credit must be given to Toto Wolff, as well as Hamilton's manager Marc Hynes, for managing him in a way that brings out the best in him.



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## WHICH DRIVERS ARE UNDER THE MOST PRESSURE?

I think it's a big year for Sebastian Vettel, Valtteri Bottas and Alex Albon. Ferrari has signed Charles Leclerc until 2024, indicating that he's their long-term prospect. The feeling in the paddock is that Vettel may not go on for that long. He is a very fast racing driver and still has a lot to offer the team in terms of his experience and technical knowledge. When the car is working for him, he can be devastatingly fast, but the guy in the other car is clearly someone special.

On paper, I still think that Ferrari has the best potential driver pairing if they don't both make errors, and



ETHERINGTON



if they push each other hard but without letting the rivalry boil over.

Bottas has been handed a vote of confidence by Toto Wolff, who passed on the opportunity to replace him with Esteban Ocon. He may hate hearing this, but the apolitical Finn is a perfect number two for the team. He wins the races when Lewis Hamilton can't, he doesn't ruffle any feathers or play games, and he racks up the points well enough to secure the constructors' title for the team. But should Lewis decide to leave Formula 1 in a couple of years, will the team count on Valtteri to



be their number one? He would like them to and 2020 is a chance for him to once again try to prove why.

Albon had a whirlwind 12-month period going from giving up on his F1 dream to ending up in one of the best seats on the grid, via a stint at Toro Rosso. The poor guy must have been mentally and emotionally exhausted by the end of the year, but this season it's a clean sheet and he won't be cut any slack.

The team doesn't need him to beat Max Verstappen, but it needs him to be quick enough so that when opportunities to win are presented to their number-one driver, such as at the Hungarian GP last year, the other car is close enough to stop rivals using alternative strategies to beat Verstappen. That will be the big task for Albon this year.

## WILL RED BULL-HONDA BE IN THE CHAMPIONSHIP FIGHT?

Max Verstappen has already shown that, if he has a car fast enough to challenge for the title, he's ready for it. The speed and consistency he's shown in the past 18 months have been very impressive. Like Ayrton Senna, Nigel Mansell or Lewis Hamilton, you always watch Verstappen's race knowing that something is going to happen. He's not going to just drive around –



there will always be some moments of dramatic brilliance or controversy.

Red Bull was perhaps more competitive last year than it was expecting, with three wins, and strong pace in Hungary and Mexico too. But being in the fight for wins at 25% of the races isn't going to make you a title contender and Red Bull knows that. The chassis didn't really deliver until the Austrian GP in June, when the front-wing upgrade seemed to unlock the potential of the RB15.

Honda has made very good progress and by the end of the season, as a package, it was not far from the Mercedes. The team has good resources, as well as key people such as Adrian Newey, Rob Marshall, Pierre Wache, Paul Monaghan and Jonathan Wheatley from the years of domination from 2010 to 2013. I would be surprised if the Red Bull-Honda package isn't closer to being a title contender than in 2019.



## WHAT DOES RENAULT HAVE TO DO TO GET BACK ON TRACK?

Last season was a bit of a wake-up call for Renault. The power-unit side in Viry has clearly made steps forward in terms of performance, as Renault's 2019 pace at power-sensitive venues such as Montreal, Spa and Monza showed. Reliability across the works cars and the McLaren customers was still not as good as Renault would have liked. But the bigger concern for the works team was that McLaren was able to comprehensively outscore it last year with the same power unit, despite having been miles behind in 2018.

As a factory team, finishing behind your customer is never going to go down well with the paymasters (although, let's be honest, the extraordinary Carlos Ghosn saga has probably kept them busy over the winter). Cyril Abiteboul has recognised that things need to be shaken up, and the departing Nick Chester has been replaced by Pat Fry and Dirk de Beer. Fry played a large part in McLaren's recent turnaround, while de Beer was well respected at Enstone and Ferrari before a difficult stint at Williams.

Both of these new signings have come in too late to have a real influence on the 2020 car, but it's an important move with the view towards the parallel design programme for next year. Aero and downforce is still pivotal in F1 but so is consistency when you're talking about a championship position. The team still has very good, experienced people running the trackside operation, such as Ciaran Pilbeam and Mark Slade, who are calm, sensible operators and exactly what it needs.

The expanded calendar has a wide range of tracks now and, as a major manufacturer team, Renault needs to at least aim to have both cars into Q3 every time on every type of track layout. Ironically with the tyre rules being what they are, starting between 11th and 13th was often better than being eighth or ninth, but my point is that they need to find a sweet spot in the car set-up and aero configuration that allows them to get a consistent and solid baseline. This seemed to be missing last year and you would often hear of a dozen or more front wings being taken to races in an effort to optimise the balance.

As a minimum the works team should be aiming to reclaim fourth place this year and get closer to the top three teams. While of course 2021 offers a better chance of a major reset, it could also use the stability of the 2020 rules to bridge the gap to the front of the pack as the top teams will be levelling off in terms of their development potential.



## HOW CAN McLAREN BUILD ON ITS 2019 SUCCESS AND WHAT WOULD CONSTITUTE ANOTHER GOOD SEASON FOR THE TEAM?

McLaren was the most improved team of 2019, and the whole squad has a very upbeat and buoyant atmosphere about it now. Let's remember that there were times in 2018 when Fernando Alonso was qualifying behind Lance Stroll and Sergey Sirotkin. No disrespect to either of those drivers, but it showed that the McLaren was at times the slowest car in 2018 and therefore makes the team's recovery last year all the more impressive.

With Andreas Seidl at the helm, Zak Brown doing what he does best and roping in new sponsors, James Key now fully with his feet under



SUTTON



SUTTON  
SUTTON

## HOW WILL ESTEBAN OCON STACK UP AGAINST DANIEL RICCIARDO?

I thought Daniel Ricciardo had a very good season in 2019. I didn't expect him to beat Nico Hulkenberg as convincingly as he did, but some of the races he drove, such as the British, US and Japanese GPs,

showed that he was worth every penny of those zillions that Renault is supposedly paying him.

The new challenge against Esteban Ocon will be one of the best battles of the season. The Frenchman is very talented and isn't afraid to get his elbows out in combat, even with his team-mate. Ricciardo has had his fair share of tough team-mates, including Sebastian Vettel and Max Verstappen, so he will be mentally prepared for it.

Physically, Ocon may resemble a giraffe who appears to eat nothing but leaves, but mentally he's like a tenacious and scrappy little terrier.

It would have been easy for him to be disheartened by a year away from racing but, from what everyone at Mercedes said, his work ethic and willingness to learn and get back to a race seat was impressive. This battle is going to be brilliant to watch and Renault certainly has not given itself any excuses in the cockpit...

SUTTON

the desk, a new windtunnel coming, the Mercedes power-unit deal a year away and an exciting young driver line-up, there's plenty of cause for optimism over McLaren's future.

Early on in 2019, McLaren had a poor weekend at the Chinese GP, but after that it showed a level of consistency that was much needed in a team looking to stabilise following a tumultuous few years. It had a car in Q3 on 29 out of 42 occasions (compared to 20 for Renault) and was also good at making the right strategy calls and managing the tyres.

If the team can maintain fourth place in the constructors' championship but reduce the gap to the front, that would be a very good and realistic achievement. I don't expect McLaren to close the entire chasm to the top three, but it would be interesting to see if it can bring that deficit down to the point where it is able to occasionally get a car on the third row of the grid on merit. That would be a good step forward for the team and probably keep it ahead of the

works Renault squad.

Last year was also something of a breakout season for Carlos Sainz. He seemed to relish his role as the senior driver and de facto team leader. In the first half of the season Lando Norris seemed to have the legs on him in qualifying, but on Sundays Sainz was generally ahead. He's a very intelligent driver – like his dad – and is able to understand and execute a strategy very well. He also seemed to stay out of trouble on the opening laps and generally gain places that would set him up for the rest of the race.

Norris was a breath of fresh air in the paddock and did a very good job in his rookie season. He would have learned an awful lot last year, and 2020 is his chance to build on that. Behind the happy, jokey, relaxed kid, there's a very quick racing driver. But there's no hiding from the fact that his team-mate scored 96 points to his 49, despite the Brit behind ahead on the qualifying head-to-head score. Norris will be aiming to raise his Sunday game this year.



GALLOWAY



## COULD THE CHASM BETWEEN THE FRONT AND MIDFIELD TEAMS SHRINK?

I think that the gap in 2020 could close, but it all depends on how much the midfield teams can afford to invest in the 2020 car and have the parallel programme with the 2021 package.

McLaren was the fourth fastest team last year and its qualifying average across the season was 1.5% away from

Mercedes'. The third best team – Red Bull – was 0.5% away, so the gap back to McLaren is still significant. As a reference, the ninth best team (Racing Point) was only 2.2% away from Mercedes, so the gap between fourth and ninth is much smaller than third and fourth, showing just what a clear distinction there is between the top three teams and the rest.

In theory, the hunt for gains in performance offer a diminishing return and, therefore, with stable rules, we should expect the midfield to find more than the top teams in 2020. But I then expect the gap to widen in 2021, when the bigger and better-funded operations can hit the ground running.

## WHAT CAN WE EXPECT FROM GEORGE RUSSELL AND WILLIAMS?

George Russell did a very good job in difficult circumstances last year. The car was not only late but also uncompetitive. Despite seeing his Formula 2 rivals Lando Norris and Alex Albon move up the grid, he kept his head together and did the only thing he could, which was to trounce his team-mate. The only problem is that we don't really know how good the Robert Kubica version 2.0 was and therefore it's hard to gauge Russell's ultimate pace.

Williams has made some big changes to its manufacturing processes and is confident of getting the car on the ground in time for the first test. The 2018 season was a poor



one for the team but, for a variety of reasons, the 2019 car seemed to take it further away from the pack. It was obviously lacking downforce but it also seemed to be a very draggy car, which is why arguably its best qualifying came at the Hungaroring.

Williams has the biggest mountain to climb but it can take some inspiration from McLaren's season last year. With some fundamental





## WHAT DO WE THINK OF THE EXTRA RACES IN HOLLAND AND VIETNAM?

I'm very excited for the two 'new' races, but for very different reasons. Zandvoort (below) has a lot of history and, as a track to drive around on your own, it's one of my favourites. I really loved racing there in the past and the fast, flowing corners are really going to be fun for the drivers. The atmosphere with the passionate Max Verstappen fans is going to be off the charts and, based on the past, you would actually bet on the Red Bull being very competitive on that sort of track layout.

Overtaking will be a problem at Zandvoort, I think. Racing in other

categories around there has been pretty processional, but the FIA has tried to help this by introducing a highly banked final corner and therefore a long DRS zone to aid overtaking into the first corner. Fingers crossed this works but, either way, it should be a good event.

Judging by what I've seen of the drawings and simulations, Vietnam (above) could be the opposite. There are some long straights, like we've seen in Baku, as well as some long corners, which will be a real challenge for the drivers, cars and tyres. Baku has thrown up some great races and overtaking in the past three years and hopefully we'll get the same in Vietnam.

Having the race early in the season will be interesting as the teams will still be in the phase of properly learning about their cars, which could throw up a few anomalies too.

philosophical changes to the car design and the aero, you can bring yourself back into a zone of stability and respectability.

It's a big year for the team as you can afford to be at the back for a season or two, but I imagine a public company spending more than £100million every year to finish last isn't going to be accepted by sponsors or shareholders for too long.



ISP/BSRAGENCY/MOTORSPORT IMAGES



# CONCU

## CLOSING THE KNOWLEDGE GAP

*Concussion remains an area of sporting injury in which medical research and practice are still playing catch-up, but work is ongoing to change that*

JAMES NEWBOLD

### LASTING IMPACT

Alonso missed the  
2015 Australian Grand Prix  
after pre-season  
testing shunt





# SSION

**WHEN FERNANDO ALONSO CRASHED** his McLaren MP4-30 into the Circuit de Catalunya's Turn 3 wall during pre-season testing in 2015, it sent certain media circles into a frenzy of speculation over the possible cause.

McLaren stringently denied that the impact – which registered 30g at its peak – was the result of a car failure as its new star signing Alonso, lured from Ferrari by the prospect of McLaren-Honda domination, was transported to hospital with concussion-like symptoms after briefly losing consciousness.

As the rumour mill continued unabated, then-boss of McLaren Ron Dennis gave a press briefing elaborating further on the cause of the crash, but unintentionally added fuel to the fire. Contradicting the team's previous communications, Dennis affirmed that Alonso was “not even concussed”, but was later forced to admit his mistake when Alonso was advised to miss the Melbourne season opener.

Dennis was lambasted at the time for being out of touch, but according to leading motorsport safety expert and former CART »





medical director Dr Stephen Olvey, a lack of understanding concerning the nuances of concussion is not uncommon.

“It’s still a mysterious entity,” says Olvey, a neurology specialist who created the safety team that travelled to every CART event. “We’re chipping away, but we’re still far from where it ought to be.”

In a 40-year career that combined his love of motorsport with his day job in critical-care medicine, Olvey oversaw vast improvements to trackside provision of care, on-site medical facilities and driver’s equipment. Notably, he championed the introduction of inner-ear accelerometers that measure the forces on the head in an impact, and lobbied CART to mandate use of the HANS device in 2001.

Although there will always be the potential for freak accidents, Olvey says the top tiers of single-seater racing have “reached a pretty good point” when it comes to protecting drivers from severe head injuries, thanks to higher cockpit sides, tighter-fitting headrests that limit the head’s capacity for rotation, plus stronger, lighter helmets and the halo.

Yet no such consensus exists for the prevention of concussion, or mild traumatic brain injury, particularly in a motorsport context. Indeed, a 2017 report co-authored by Olvey in the *Journal of Concussion* recognised “growing public and professional concerns” regarding this “evolving problem”.

While the implications of repeated concussions are clear to see from the NFL, with athletes at risk of developing a degenerative brain condition called chronic traumatic encephalopathy (CTE), the report acknowledged a “significant knowledge gap” regarding concussions in a motorsport environment, which is not helped by the “paucity of medical research in the field”. The historical reluctance of drivers to report concussions (see panel, right), which casts further doubt on the validity of existing published data, was also raised.

For Olvey, who retains his motorsport links as a member of the FIA Medical Commission, it’s not only non-sanctioned or poorly sanctioned events at grassroots levels where there is significant room for improvement. Many misconceptions about concussion persist, including the notion that loss of consciousness is a prerequisite and that an impact to the head must have occurred. The concussion that Dario Franchitti suffered in an aerial crash at Houston in 2013 was the result of his car spinning three times around its axis in 1.2 seconds and exerting massive force on the brain, rather than any sizeable blow.

“His head never hit anything, there was no contact with his helmet at all, but the concussion he had was a result of the rotational acceleration that he had because of the car spinning so violently,” says Olvey, whose advice compelled Franchitti to call it a day. “I think almost everybody knows now that you don’t have to have hit your head to have a concussion and it’s angular acceleration that really causes the injury. We’ve got the word out reasonably well, but it’s not out there as good as it should be.”



**“THERE’S NO DEFINITE RULE WE CAN USE THAT SAYS, ‘OK, NOW IT’S SAFE FOR YOU TO GO RACING AGAIN’”**

#### OBJECTIVE STANDARDS

Moreover, problems persist with no standardised method for the detection and treatment of concussions, nor guidelines covering when it is safe for a driver to return.

The latter situation is partly explained by the fact that no two concussions are the same. In his current role at the University of Miami Miller School of Medicine, Olvey oversees a concussion clinic for high school football players. While he estimates that 90% of the patients are released in a week to 10 days, others can take much longer, with 2-3% experiencing symptoms for over a year.

“In certain people it’s more significant than others,” Olvey explains. “If you’re going to have any kind of sports series where athletes can have a concussion and then you have to decide when it’s safe for them to go back, you have to have something to go on because you can’t treat every individual exactly the same.”

The ImPACT test devised in 2001 by Dr Mark Lovell at the University of Pittsburgh has become the de facto diagnostic tool amid the absence of alternative neurocognitive test systems,

but has never been officially ratified for motorsport. Doubts have also been cast over the reliability of the test – which compares scores in verbal and visual memory, visual-monitor processing speed and reaction time to a driver’s pre-season baseline – with a body of data demonstrating that athletes can deliberately underperform in their baseline tests to minimise the difference in their post-injury scores.

The 2016 IndyCar season opener in St Petersburg underlined the challenges physicians face in making accurate judgements. After a brush with the wall in practice, Team Penske’s Will Power rebounded to qualify on pole but was prevented from starting the race after





## DRIVER'S EXPERIENCE

Retired NASCAR driver Dale Earnhardt Jr is one of the United States' biggest sports personalities, so his admission in 2018 that he had hidden as many as 20 concussions during his career was big news. In *Racing to the Finish*, a book released that year, he details the tortuous lengths he had gone to in order to keep his symptoms under wraps, due to NASCAR's dismissive attitude to head injuries.

"You didn't get out of your race car, no matter what," Earnhardt wrote. "Broke a bone? Suck it up, man. Got your bell rung? Shake it off, take a headache powder and get ready for the next race."

As a youngster, Earnhardt regarded with awe Ricky Rudd's return from a nasty practice crash to run the 1984 Daytona 500 with his swollen eyes taped open, and had no concept of the dangers involved.

Little had changed when he began his own racing career, and following a crash at Daytona in 1998, when his helmet dented the rollcage, Earnhardt almost fainted while talking to the media afterwards, but laughed it off.

By 2002, following the death of his father the previous year, Earnhardt was all too aware of the associated dangers, but continued to race after

a heavy accident at Fontana. Having seen DEI team-mate Steve Park sidelined following a head injury at Darlington in 2001, Earnhardt preferred those around him to think he was semi-permanently hungover rather than admit to his struggles.

"It was still considered the worst thing for a driver to be perceived in the garage as damaged goods," he explained. "I didn't want to tell anyone how bad I'd felt until I started running better because I didn't want anyone to think I was messed up."

After missing two races in 2012, the result of two concussions in six weeks, Earnhardt then sat out the

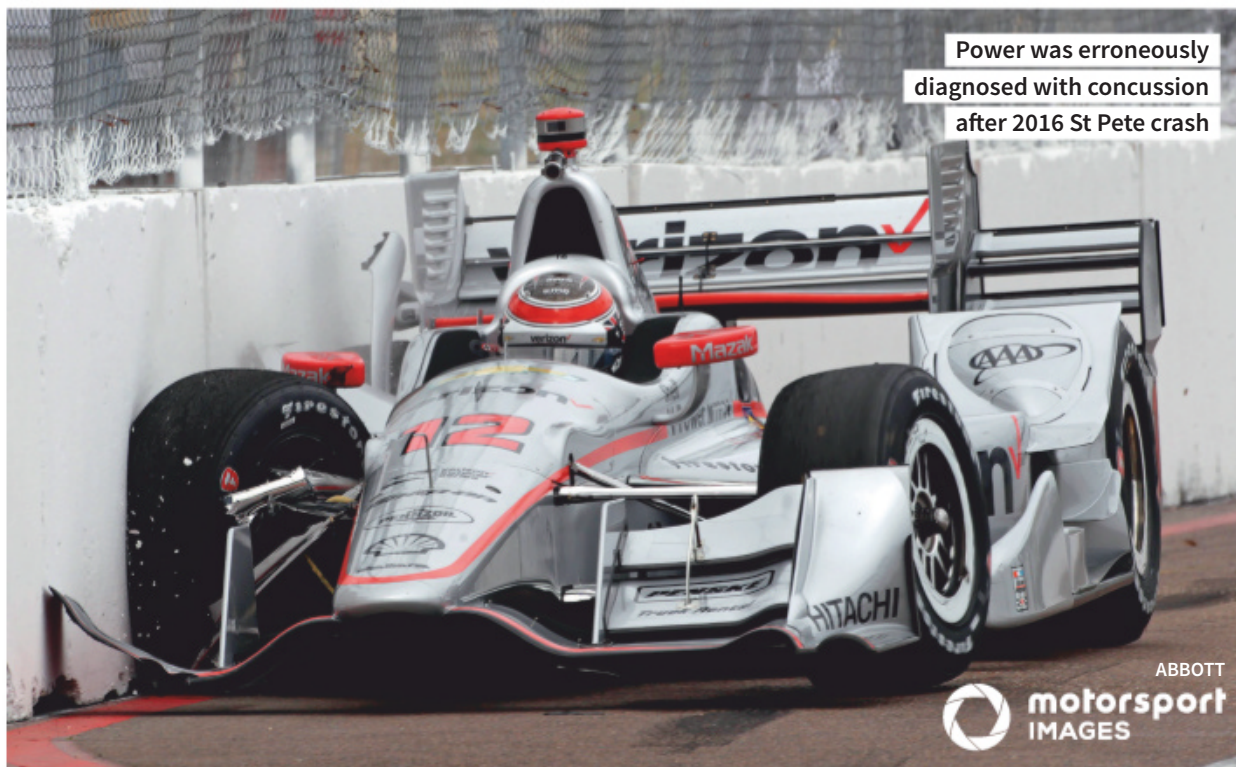


MOTORSPORT IMAGES/HARRELSON

second half of 2016 and retired following the 2017 season. He now concedes that drivers can be their own worst enemy and wants people to learn from his experience.

"The real responsibility

will always be on the individual to recognise that they are injured, to know that they need help," he wrote. "While I might be healed, I'm not entirely fixed. I don't know that I ever will be completely."



ABBOTT

MOTORSPORT IMAGES

showing concussion-like symptoms. But these were later attributed to an inner-ear infection, rather than a concussion, after Olvey conducted further tests using a prototype of the I-PAS system, which was formally incorporated into IndyCar's concussion protocol in 2018.

The device, developed by Neuro Kinetics Inc (NKI), uses eye-tracking technology and measurement of reaction times to determine with greater accuracy if an injury has occurred and when it has returned to the baseline. But uptake for the I-PAS system, or 'goggle test', has been slow. The I-PAS is now owned by Neuroalign Technologies, which is targeting widescale use beyond the US. But until more test results arise, Olvey admits that "for a lot of people the jury is still out on whether it's as valuable as we think it may be".

Motorsport UK became one of the first national governing

bodies to publish guidelines on the return-to-race decision in 2016. It stipulated that following a concussion, the competitor must take no further part in the event and surrender their licence to the clerk of the course, and may only have it returned after being formally cleared by a doctor. Others have followed suit, including Australian motorsport authority CAMS in 2018, using the slogan 'if in doubt, sit them out'.

But Olvey says there is "still a lot of conjecture" on when it's safe for drivers to return. "It's sort of up in the air," he says. "It would be a huge step ahead for all sport where concussion is an issue to know exactly when it's OK to allow an athlete to go back and compete again and not risk having another concussion. But there's not a definite rule that we can use or a test that we can use that says, 'OK, now it's safe for you to go racing again.'" >>



# 20-23/FEB/2020

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IndyCar's Dr Terry Trammell demonstrates I-PAS device now used by the series

### OPTIMISM FOR THE FUTURE

Acquiring more data is imperative to gaining a greater insight, so Olvey welcomes the ongoing RESCUE-RACER project, launched by the FIA and funded by the FIA Foundation. The co-authors of the 2017 report, Dr Naomi Deakin and Prof Peter Hutchinson at Cambridge University, coordinate the project on behalf of the FIA.

The study, using data from I-PAS, as well as new computerised assessments, saliva samples and an advanced MRI scan, aims to build decision-making protocols for trackside evaluation following incidents and to establish guidelines to assist medical professionals with determining when drivers are safe to return to competition. It will also involve corroborating existing concussion testing methods.

"There's lots of reasons why the tools that we've been using might not have been best for our specific population," says Deakin, referencing the ImpACT test. "I think this study will answer those questions fairly quickly and will be able to evaluate the tools that we've been using and be able to point us in the direction of the new ones that we've been trialling."

RESCUE-RACER involves a baseline study of 50 UK-based racing drivers of different ages and disciplines, followed up with a global study of at least 20 drivers as they regain fitness after a concussion. Deakin says the response from drivers has been "absolutely phenomenal", and she was "overwhelmed" by the support received from the British Touring Car Championship paddock after putting out a call for volunteers at the end of the 2018 season.

"They spontaneously and unanimously voted to come to Cambridge to participate," she says. "You expect a couple of people to be keen, but for drivers so scattered across the country to make that commitment and then follow through has been absolutely fantastic. They've really engaged with it."

Deakin is wary of predicting the outcome of RESCUE-RACER, but reasons that because it's "the only prospective study looking at people and following them forward that's ever been done in motorsport", the industry could be on the cusp of "a whole

## DR NAOMI DEAKIN

The "workhorse" of the RESCUE-RACER study, Dr Naomi Deakin, is a clinical research associate in the Department of Neurosurgery at the University of Cambridge. She became the third winner of the FIA's Watkins Scholarship in 2018, and the first medical professional to secure the prize.

The daughter of a mechanic – "I wasn't allowed to drive until I was able to take a car apart and put it back together again" – Deakin grew up a motorsport fan. She jokes that because she was born in a car, it was inevitable. But it wasn't until a chance meeting with Prof Peter Hutchinson, chief medical officer for the British Grand Prix, that she realised she could combine her hobby with her career.

While completing her clinical training, Deakin conducted research at Silverstone into how people were injured and where they were sent afterwards. She observed that while the quality of care provided at circuits "was really high", clinicians were too preoccupied managing patients in front of them to work on motorsport-specific procedures.

"Nobody was actually fully rooted in this, dedicated to



making it the best it could be," says Deakin. That proved a powerful motivation to win the Watkins Scholarship, which laid the foundations for her involvement in RESCUE-RACER.

"Even if it was only for a year and I wasn't able to do any more than that, I'd be able to be fully embedded," she says, "and completely committed to making the absolute best of what we had and trying to improve that in the future."

If RESCUE-RACER achieves even half the desired effect, it will be a significant step in the right direction.

new era for conducting research, so that is game-changing".

Olvey points out that "there's always going to be more and more to learn", and that the study will likely open the door to further studies, rather than offering definitive answers. "I don't think it's going to be the final answer," he says. "But it's purpose is to head us in the right direction and give us a lot more information on the best ways to test for [concussion], diagnose it and then return to competition."

And as Deakin puts it, "that doesn't mean you haven't made any progress through the study itself", especially as the data collected could have a wider benefit than just in motorsport. "It could really start to inform how we manage road traffic accident concussions and how we translate this new knowledge from motorsport into the public domain," she says.

Addressing the knowledge gap will be an ongoing process but, as RESCUE-RACER advances new understanding in competitors and physicians alike, there is reason for optimism that misinformation over concussions will soon be a thing of the past. ✨

*The RESCUE-RACER team is happy to see and advise motorsport competitors with concussion. To find out more about its work, or to volunteer for testing, visit [rescuerracer.org](http://rescuerracer.org) and Twitter [@RESCUE\\_RACER](https://twitter.com/RESCUE_RACER)*



Andrew Jordan's 2014 crash triggered post-crash licence-surrender rule change in UK



# THE INSPIRING MAN BEHIND MCLAREN'S INDYCAR EFFORT

*In the 20 years since an IndyCar testing crash left him paralysed, Sam Schmidt has built a team that has become a force to be reckoned with — while also making life better for those with disabilities*

JOHANNA HUSBAND





**W**ith his big personality and even bigger sideburns, it's unsurprising that Sam Schmidt earned himself the nickname 'Elvis'. His character has served him well – 20 years since the accident that left him paralysed from the neck down, the Arrow SPM team of which he is figurehead is collaborating with famed Formula 1 squad McLaren under the new guise of Arrow McLaren SP for an attack on the IndyCar Series.

On 26 September 1999, Nebraska-born Schmidt took his first career win in the Indy Racing League at Las Vegas Motor Speedway, near his adopted home, and savoured every moment. Just over three months later, on 6 January 2000, Schmidt was pre-season testing at the Disney World oval in Orlando. He lost control of his Treadway Racing G-Force, and suffered a high-speed, rearward impact with the retaining wall, shattering his C3/C4 neck vertebrae. Resuscitated by the safety crews on site, he was airlifted to hospital where his family was given devastating news – Schmidt was paralysed and would, at best, be in a nursing home on a ventilator for the rest of his life.

"It's fortunate I was out of it those first few weeks in the ICU," says Schmidt. "They weren't very positive about the future in Orlando where it happened, so my family dug in and did the research. We came across Dr John McDonald in St Louis and got me transferred there. The team there was a lot more positive, with a desire to solve the problem rather than just live with it. Attitude is everything at that initial stage and can make such a huge impact on the end result."

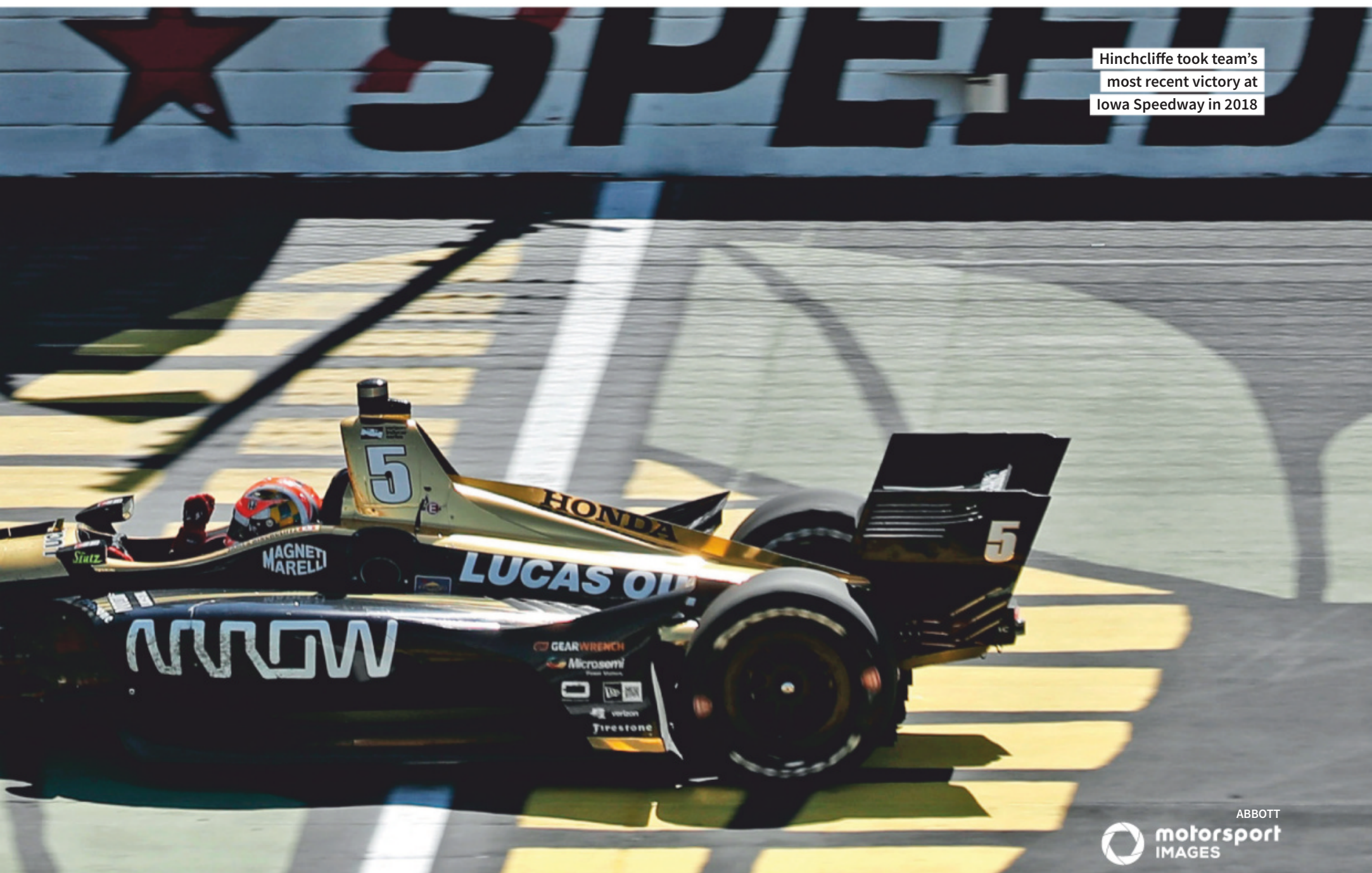
As he began coming to terms with the road ahead, Schmidt didn't have far to look for the support, positive attitude and motivation he needed, with his strong family bond and faith key factors in his rehabilitation process.

"I have a very close-knit family who just packed up, moved to St Louis for my rehab and were there every step of the way," he says. "I know people that try to cope without that support, but I don't know how they can. I also had a great role model in my father, who'd been through a racing accident 25 years earlier. They said he'd never walk or talk again, but he surpassed expectations after a two-year rehabilitation. He never regained the use of his arm, but didn't let it slow him down. That's a pretty amazing in-house example to have."

"So I'm lying there on a ventilator, looking over at my dad and thinking, 'Well, crap, I can't give up. He didn't give up and I gotta outdo him!' Coupled with the fact that I had two very young children and I wanted to see them grow up, there was a lot of motivation. I can't say there weren't times of depression or 'why me?', but they were easily overcome when you saw all the positives."

The qualities that once drove him on track as a racer now propelled Schmidt through his intensive rehabilitation, seeing him off the ventilator after five months and determined to regain as much mobility as possible, with support from the motorsport community fuelling his motivation. "We all fight hard against each other on track," he adds. "But off the track, if there's something that goes wrong, everybody rallies together and tries to help. It's kind of a unique environment."

When progress began to plateau, he found the need for a new challenge, channelling that same drive into continuing doing what he loved – racing. The first event he attended following his accident was the United States Grand Prix at Indianapolis, where he met Sir Frank Williams. The tetraplegic Williams boss jokingly tried to discourage him from team ownership, but the seed was already growing and, just a year after his accident, Sam Schmidt Motorsports was formed. >>





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Schmidt (right) gained inspiration from his own father's recovery...

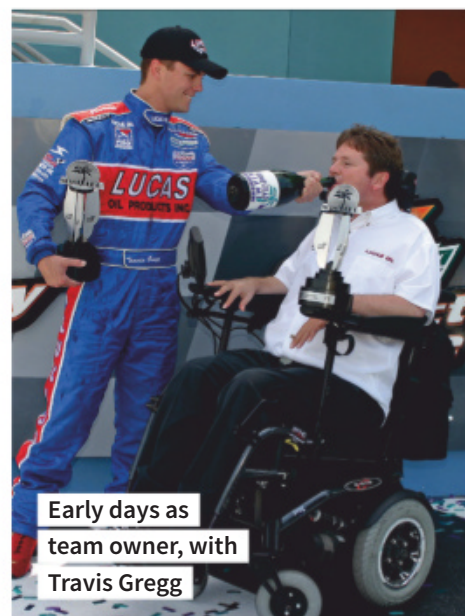
**“IT’S GOING TO TAKE TWO TO THREE HOURS TO GET UP EVERY DAY. YOU HAVE TO EVALUATE WHAT MOTIVATES YOU”**

“You settle in and realise it’s going to take you two to three hours to get up every morning for the rest of your life,” relates Schmidt. “Then you really have to evaluate what motivates you to do that every day; what are you passionate about? For me that was always motorsports and competition. I couldn’t drive, so I might as well be a team owner. I was a bit naive in what energy and resources it takes to do it, but I was fortunate that we did 12 years in Indy Lights and had so much success there before moving into IndyCar.

“I want to win now just as bad as I did when I was a driver. Sometimes it’s frustrating, because you watch all the feedback and you want to show the drivers a few things that you know and help them learn from your mistakes. But I can’t move my hands to do it. But yeah, when it came time to figure out what I was going to do with the rest of my life, outside of my family, this was what made it worthwhile.”

Beyond the desire to win championships and Indy 500s, the other thing that makes life worthwhile for Schmidt is bringing the support, motivation and resources he had during his own rehab to those who couldn’t previously access them. Through the Conquer Paralysis Now Foundation and, more recently, the DRIVEN NeuroRecovery Centre in Las Vegas, he’s become an advocate and ambassador to countless paralysis patients.

“We found intensive rehabilitation, that not only focuses on the physical side, but the mental impact, nutrition and peer group stuff really changes lives,” Schmidt enthuses. “It creates good outcomes, allowing people to get back to work and be a productive member of society. You can find a silver lining in the reason why my



Early days as team owner, with Travis Gregg

MOTORSPORT IMAGES/STRECK





accident occurred when you look at what we're doing.

"It's all about perspective. I worked my ass off five to six hours a day trying to regain movement, and it took me about 10 years to realise that wasn't meant to be. But now I can roll into a hospital and the guy who's moaning about losing the use of his legs or whatever, I can look him in the eye and say, 'What are you complaining about? Get off your ass and get back to work.' I get a 'what the hell?' look at first, then it's like, 'Well yeah he's right, it could be worse.' I was honoured to spend time around Christopher Reeve, who had a C1 injury, couldn't even hold his head up, was on a ventilator and always had to be surrounded by five or six people. That made me think, 'What am I complaining about?' I can breathe on my own. So yeah, it can always be worse."

A key factor in both Schmidt's own endeavours, and his desire to improve life for others, is technology. Something as simple as using voice-command devices to control lights, doors and TV is life-changing for someone unable to use their arms: "We keep pushing that limit for independent homes and living, and giving people the chance to find their passion, find their reason to get up in the morning."

Technology has played a massive part in one of Schmidt's greatest achievements: becoming the first quadriplegic to acquire a driving licence using specially designed technology. In 2013, while growing increasingly frustrated at the lack of progress in spinal-cord research, he was contacted by a doctor in Denver with an intriguing offer.

"It's really a function of what goes around comes around, because through the Foundation and our efforts for outreach, I'd visited Craig Hospital in Denver several times," he says. "In 2013, Arrow Electronics, which is based in Denver, was looking for a way to show what they could do as a company, and they created the Semi-Autonomous Mobility Initiative, or SAM project. One of their people called a neurosurgeon at Craig hospital and asked if they knew any patients that can't use their arms or legs that would like to drive again. And the doctor's like, 'Yeah, I've got the perfect guy! He used to race and was paralysed, and I'm sure he'd be all over it.' So, one thing led to another and I was driving seven months later. Crazy! The first time it was scary to drive even >>

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40mph, but as with racing you keep evolving and developing new things to put on it, making it better until now I feel totally comfortable and have been up to 192mph.”

Schmidt’s far from done yet – he’s keen to get the sensor-driven system over 200mph, not so subtly suggesting to McLaren Racing CEO Zak Brown that a 720 could get the job done nicely. It’s perhaps not surprising that the racing mentality is still strongly embedded in his soul, and he’s even taken on a challenge he now admits was insane.

“I think the most liberating, challenging, scary and crazy thing we’ve done was going up Pikes Peak,” he says. “Normally in a road car it takes about 45 minutes and we did it in 15. You know, it’s a 14,000ft mountain, 156 turns, 13 miles, without guard rails, 3000ft drops. We were putting our lives in the hands of Arrow Engineers... I got to the top and thought, ‘Holy crap, that was really stupid!’ But it was a true testament of faith and technology for sure. They asked me to come back and compete the next year, and I’m like, ‘Nah, I don’t think so’. Once was definitely enough! Exciting, exhilarating, unbelievable to live it, but I’ve checked that box and am not doing it again.”

That’s not to say Schmidt doesn’t have other seemingly crazy or impossible goals, including learning to fly, taking the SAM car up Goodwood hillclimb and even a parachute jump, when his wife’s not looking! And you’d be foolish to bet against him achieving them.

For now, the 55-year-old is focused on two things: the Arrow McLaren SP team and the Foundation. They are intertwined. The team Schmidt ran as Sam Schmidt Motorsports became Schmidt Peterson Motorsports in 2013 when Canadian ex-racer Ric Peterson came on board as co-owner. After IndyCar wins for the team with Simon Pagenaud and James Hinchcliffe, Arrow Electronics became title backer in 2019 of what was now Arrow SPM.

“When Arrow came along with the SAM project, it reinforced to me that if you put the right people in the room with the right resources, you can accomplish anything you put your mind to,” says Schmidt.

He’s enthusiastic about the McLaren partnership too: “I think it’s great that we’re at this point, with their support and building up the

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**“I GOT TO THE TOP AND THOUGHT, ‘HOLY CRAP, THAT WAS REALLY STUPID!’ ONCE WAS ENOUGH!”**

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Schmidt trusted in Arrow technology for drive up Pikes Peak

commercial side. We need to be more competitive, and when you look at Penske, Ganassi and Andretti, the most successful teams in IndyCar, the big difference is they run multiple series. Some run NASCAR, some Formula E, some even run V8 Supercars in Australia. That’s a lot of people, engineers and resources to draw on.

“I don’t really have an interest in running other series. I’d like to be involved, but it’s not physically realistic to do so. So, you’ve got to find a different way, and the best way is to align yourself with a Formula 1 team that has the software, the personnel, the engineering talent, to assist where we feel like we’re short. The last few months have really been a deep dive into what we’re missing and what they can help us with.

“Certainly, there are financial benefits and partnerships on the commercial side, but that’s not the primary reason we did it. It was to be more competitive. They want to win, and we want to win. They’re making great advancements on the F1 side and we want to bring the depth of knowledge here, to improve and become a regular winning competitor, challenging for Indy 500 wins and championships.”

It’s going to be a tough task at first, with Hinchcliffe and Marcus Ericsson making way in the driver line-up for Pato O’Ward (just eight IndyCar starts under his belt) and 2019 Indy Lights champion Oliver Askew (none at all). “The reality is we have two young drivers this season, and although we think they’re very talented they’re still rookies, so we have managed expectations for this year,” says Schmidt. “But long term we really feel we’ll be competing with those top guys week in week out.”

Even if it’s a tough start getting those youngsters up to speed, don’t bet on ‘Elvis’ and his boys staying ‘way down’ for long. 🍀



O’Ward tests for Arrow McLaren SP at Sebring...



...while Askew (r) and McLaren’s Gil de Ferran watch



With so little time on track in real cars, simulators are essential in Formula E



# HOW TO PREPARE FOR AN EVER-CHANGING CHALLENGE

*Formula E tracks are temporary, so how do teams prepare accurately before sending their drivers out? Time to visit the new Virgin Racing simulator*

ALEX KALINAUCKAS

PHOTOGRAPHY  motorsport  
IMAGES

**“W**hen a Formula E track is made, each time walls move a little bit – they’re not absolutely identically in the same place compared to the previous year.” These are the words of Envision Virgin Racing FE racer Sam Bird, explaining the challenge teams and drivers face when they arrive at whichever street track – some in city centres, some on industrial estates, some at purpose-built facilities, some on nondescript coastal access roads (looking at you, Sanya) – the

electric championship is racing at on a given weekend.

Unlike the dedicated circuits constructed around the globe for almost every other form of motor racing, FE tracks are different every time. In this series, the calendar is constantly fluctuating, there is new city infrastructure to negotiate, surfaces change – sometimes subtly, sometimes massively. As Bird says, even if a layout map is essentially unchanged, an apex-hugging wall can be a few centimetres out compared to a previous season.



## BIRD EGGS AUTOSPORT ON

To celebrate the completion of its new simulator, Envision Virgin Racing invited media personnel to test the technology ahead of the FE 2019-20 season opener.

As Autosport has arranged to walk the Riyadh track with team technical director Chris Gorne, we'll be tackling the Diriyah course. "That's probably the hardest one, everyone else is doing Berlin," says Sam Bird's race engineer Stephen Lane, who is overseeing proceedings from the engineering room. We'll also be going first, which can only go well.

After Bird has established a benchmark of 1m10.2s, we're given a safety briefing, which boils down to "the car will go through the walls, but if that happens press the stop button before you damage the sim or break your wrists on the flailing steering wheel". No pressure...

Thankfully, Lane sends us out of the 'pits' in 110kW mode, and Bird patiently talks us through the course. The lap times are improving, although the nine-time FE race winner notes that we're "not smooth", "very stop/start", "causing oversteer" and "overstepping the car on the apex", which is actually fewer things than we thought we were doing wrong.

"OK, Alex, let's go to 250 next time," says Lane. "I swear someone said something about an intermediate step..."

The step up in power is big, but the car still feels light and compliant. It's just when it comes to planting the power that the real problem comes – it's easy to spin up the rear tyres. Every lap we're learning the course better and understanding how the car behaves, although Bird is

**"ONE 'CRASH' WOULD HAVE PUT US IN HOSPITAL"**

noticeably frustrated at us failing to make full use of the track width.

Despite three 'crashes', one of which would have put us in hospital in a real car, we're pleased with our efforts. The sim is responsive and realistic, conveying the challenge of threading a heavy, wide car through the tight confines of street tracks.

Our best time – *just* 7.6s slower than Bird's – comes on our final lap, despite going too deep into Turn 1. But we can't be disappointed as Bird reveals that at least it showed "some evidence of braking technique".



Apart from the pre-season test running at the wholly unrepresentative Circuit Ricardo Tormo at Valencia (and the private testing programmes powertrain manufacturers complete each year), FE teams will just have the one-day Marrakech rookie test to help them further understand their 2019-20 packages in addition to the 14 race days. That's not a lot of time.

And so, like in most series, all the valuable insight and data the teams can gather are downloaded into sophisticated simulators, >>





which the drivers use to practise flat-out qualifying runs and energy-management race tests ahead of each event. During his first title-winning season in 2017-18, DS Techeetah's Jean-Eric Vergne reckoned he spent 65 days working in Techeetah's Paris simulator, and credits this dedication for his improvements as an FE racer.

All of FE's major manufacturers have purpose-built simulators that have been adapted or constructed with powertrain development and race set-up work in mind. It's a similar story for the independent squads. Venturi Racing has an in-house simulator at its Monaco headquarters and, while Virgin was previously reliant on trips to powertrain supplier Audi's Ingolstadt base, it has now undertaken a significant amount of investment in its Silverstone base, which includes a brand-new FE simulator. "The short-term benefits [are clear], but the bigger benefits will be longer term," says team boss Sylvain Filippi. "Having our own [set-up] means more base time in the sim, more preparation and all that stuff."

Virgin moved into its Silverstone facility – exactly opposite the main entrance roundabout for the grand prix track – back in 2017. Last year, it optimised the site around its operational needs and built the simulator. Filippi explains that Bird, who picked up valuable insight from his time as a Mercedes F1 test and reserve driver, was crucial to the simulator's development and that he visited the base regularly during the 2019-20 off-season

Independent  
Virgin team joins  
manufacturers who  
all have their own  
simulators



Frijns (l) walks Riyadh track with engineer Fermin (m)



Bird (l) talks through set-up with engineer Lane (r) at Santiago

to help calibrate the technology.

Ahead of each race, Bird and his team-mate Robin Frijns will share three days preparing in Virgin's simulator, in addition to sharing the one day they then get to use Audi's own dedicated version before travelling to the event. But a new benefit for Virgin having its own simulator is that it can now input the data gathered at every FE round back into the technology in post-event debriefs. This self-fulfilling circle is aimed at improving preparations a year ahead of time.

"The more information you put into the simulator, and you improve the model, then your simulation is just going to get better and better," says Virgin technical director Chris Gorne, who accompanied Autosport on pre-event track walks at the recent races in Riyadh and Santiago to explain how the squad is putting its new technology to use. "It all helps with the correlation of our simulator. So the drivers will come back to our simulator in the week after each race, and we can do some correlation work with the real track data – we can do some race runs again and see how close our simulator is and how good it feels in comparison to the real car."

After the virtual laps have been logged, it's time to see what that translates into at the real events. The FIA sends out track-mapping

data to all FE teams six to seven weeks before each round, which they use to conduct their simulator sessions. At 9am (usually) on the day before each FE race – by regulation no one can go for a wander around at any other time – it's time for the track walk so the teams can see how accurate their modelling has been.

In Riyadh, which opened the 2019-20 season with two races at the undulating Diriyah track, the first of which was won by Bird, it's all about the surface. As we exit the pitlane, it's immediately clear that the surface is going to play a massive part in the event – and indeed the first race's track-evolution factor is significant. It's very dusty and loose to walk on, and Gorne spots that the new asphalt is breaking up around manhole covers installed to improve track drainage following the washout of the 2018 race's practice sessions.

As we walk the 1.54-mile track in the (thankfully) gentle November sun, Gorne explains how Virgin simulates different grip levels to give its drivers the best chance, but emphasises how the most adaptable racers tend to succeed in such conditions, and in FE in general. There's plenty going on – all the teams naturally send out their drivers and engineers, but FE's TV production team is also gathering material to be used on race day at various points, there are photographers galore, and the odd journalist pretending





**“HAVING OUR OWN SET-UP  
MEANS MORE BASE TIME IN THE  
SIMULATOR AND MORE PREPARATION”**

to know what they're doing... Porsche's mob stops at the Turn 9 right, where shadows are jutting out over the apex – Gorne explains that Virgin's sim can model this too.

The elevation changes are clear underfoot, which, as Autosport finds out during a run on Virgin's new simulator (see page 37), isn't that much of a factor in the digital version. The gaps between the kerbs seem bigger too, and Gorne explains how the team uses what it observes on the track walk to make sure the cars won't bottom out when it comes to the real action – after all, that's just going to scrub off speed in what isn't an aerodynamic-dependent formula. “I don't think [the new asphalt] had enough time to cure,” Gorne reflects afterwards. “That could affect our set-up a little bit. We may have to adjust our rideheights accordingly.”

In Santiago, we get to see how the drivers approach the same pre-race discipline. Once out of the pitlane (which feeds into Turn 2), Bird leads the band – including engineers armed with tablets – back on themselves to get a full view of the start lights and then the first corner. Here, the team spots a metal stud sticking out of the surface, and Virgin sporting director Leon Price makes a note that will be fed back to race control, to try to reduce the risk of a puncture.

Bird and Frijns, as well as greeting the rivals they encounter doing the same work around the 1.42-mile O'Higgins Park track, walk and talk with their respective engineers: Stephen Lane and Bertrand Fermine. As Audi driver Lucas di Grassi stands on the exit of the attack-mode zone, visualising how close it will bring his car to the nearby wall, Frijns and his mini-squad crack on, while Bird

and Lane study a video on Lane's tablet.

As we get to the end of the lap, we get an insight into how deep Virgin's modelling for this track has gone. “There are only four basketball hoops behind the wall,” Bird notes. Apparently the simulator had five – although we later spot that there are indeed five posts, with one missing a board and metal net. Hopefully not the one Bird has been using as turn-in reference point for the rapid and blind Turn 9 left...

“It's always nice to do a track walk just to refresh your memory, especially on the circuits that we go to,” Bird says afterwards. “In Santiago you've got some slabs of concrete that are very slick, which are going to create a lot of wheelspin and quite a bit of lack of grip – whether that be understeer or oversteer, depending on the attitude of your car. And then you've got some quite abrasive stones as well. So, we're going to see a lot of changes of car attitude on that surface.”

Simulator preparation may not be new in motorsport, but for Virgin, with its comparative lack of resources compared to ever-growing manufacturer squads, it's a significant development that the team hopes will help it demonstrate that independent teams can succeed in FE. “It's much better for us because we now have first-hand information,” concludes Gorne. “When we've used our manufacturer's suppliers' simulators in the past, we've been restricted on time. Now we've got no time restriction. And we can run the thing as much as we like. We very rarely did post-event correlation sessions – now we're going to be doing them all the time. It will help us and the drivers work more as a team.”





# WHEN PENSKE BUILT THE WORLD'S FASTEST FERRARI

*Privateers don't normally run better cars than the factory, but Roger Penske's team has never been normal — as it proved to a new audience in 1971*

KEVIN TURNER

PHOTOGRAPHY



**motorsport  
IMAGES**





**D**aytona, January 1971. It's the second round of the International Championship of Makes — the World Endurance Championship in today's terminology — and Porsche starts as favourite for the 24 Hours. The German manufacturer has won all but one of the previous year's rounds, topped the season-opening Buenos Aires 1000Km earlier in the month, and John Wyer's crack Gulf JW Automotive team of two 4.9-litre 917Ks has no factory opposition, just an eclectic mix of privateer Ferraris.

But among the assorted 512Ss and new, squarer 512M models is an immaculate blue machine that's not been seen before. Roger Penske's team is well-known in American racing circles but has rarely taken on the Europeans, even though it won Daytona two years ago with a Lola T70 in a remarkable race of attrition. Its Ferrari is rather different to the others.

"When we came to Daytona, the European press were very scoffing about it because you could eat food off the floor of this thing," recalls David Hobbs, who shared the 'Penske-White' 512M with American racing star Mark Donohue. "It was just American spit and polish, and they were very dismissive of it."

That feeling changed when Donohue blew the Porsches away in practice with the meticulously prepared Ferrari, taking pole by 1.26 seconds from Pedro Rodriguez's 917, with apparently less effort.

Donohue duly led from the start too, with Rodriguez hanging on and attacking once the duo started encountering traffic as both gradually pulled away from Jo Siffert's JWA 917. The battle raged, but the Ferrari tended to have the edge, partly thanks to Penske pitwork. "The other thing that got everyone up in arms was the quick filler we had," adds Hobbs. "That was the first time they had seen it and they went ballistic and went to the organisers, and Penske said, 'Well it doesn't say anything that we can't do it'."

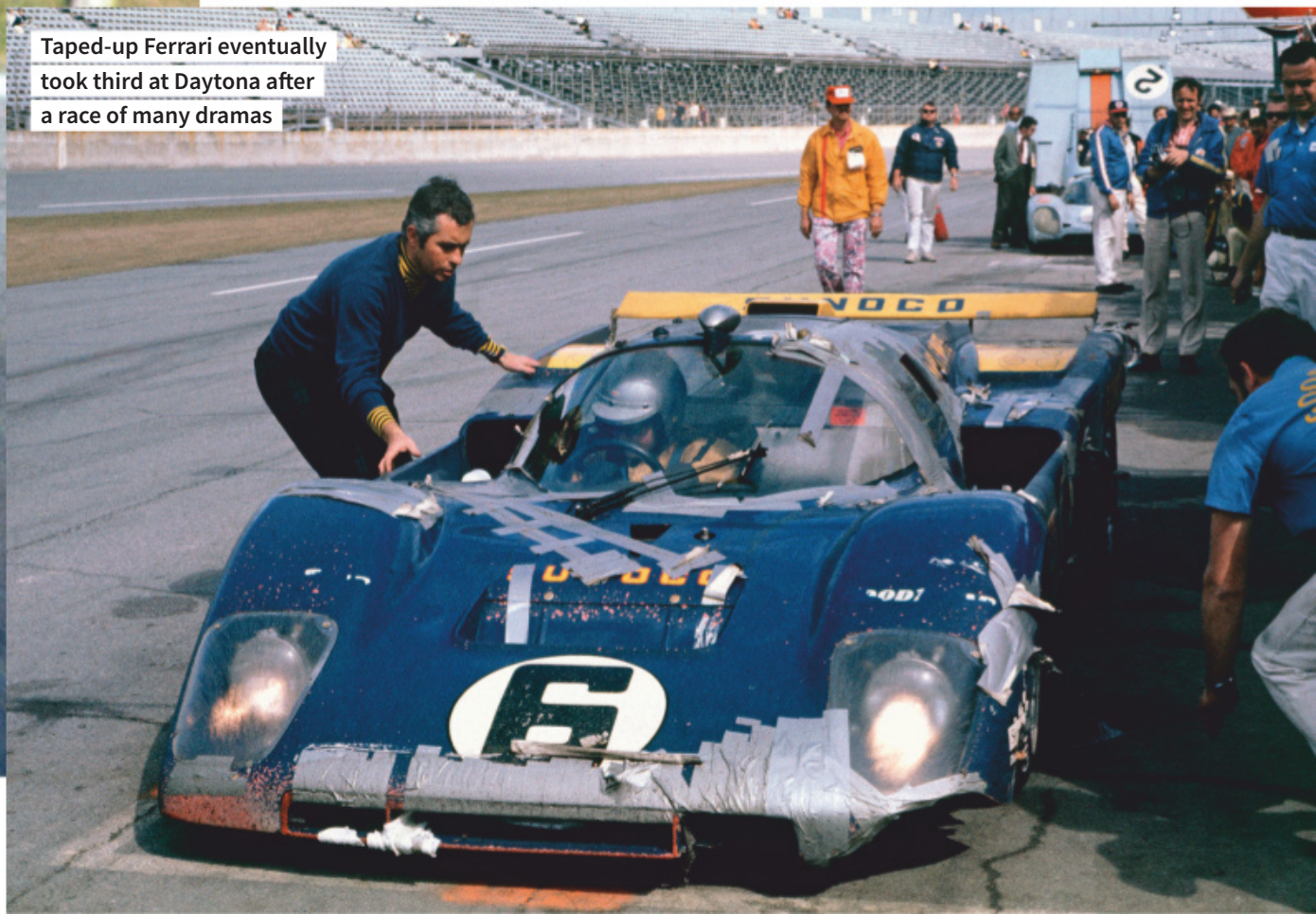
Porsche was under pressure. At least it was until the 512M hit alternator issues and lost four laps. Donohue and Hobbs charged back to third, but then Vic Elford's Martini 917 suffered a tyre failure on the banking during the night, probably due to debris, and crashed. Donohue slowed and was hit by one of the Porsche 911 backmarkers. Another hour was lost to repairs. »

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**"THE EUROPEAN PRESS WERE VERY  
SCOFFING ABOUT IT BECAUSE YOU  
COULD EAT FOOD OFF ITS FLOOR"**

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Taped-up Ferrari eventually took third at Daytona after a race of many dramas





Fuel-feed and tyre issues then hampered the recovery and Donohue/Hobbs finished third, behind the winning Rodriguez/Jackie Oliver 917 and North American Racing Team 512S of Ronnie Bucknum and Tony Adamowicz. The 512M took the flag looking a lot less immaculate than when it had started, being partially held together by copious amounts of tape, but no one was scoffing now. "One can't help wishing that Ferrari had signed over his sportscar programme to Roger Penske in the same way that Porsche did to John Wyer," reckoned Autosport.

Ferrari's 512S had failed against the Porsches in 1970 and, although the new car had outpaced the 917s on its debut at the Osterreicring before hitting trouble, the Scuderia decided to focus on its three-litre 312P for 1971, the final year that the five-litre Group 5 monsters were eligible. That left the 512s to privateers, most of whom weren't in the same ballpark as the works JWA and Martini Porsche teams.

## "OUR TEAM CREATED NEW BODY PANELS AND REMADE THE SUSPENSION, CHANGES WE FELT WOULD IMPROVE IT"

Penske was, of course, the exception. He had attempted to buy a 917 from Porsche, but failed – for reasons neither party has ever been able to satisfactorily explain. Used-car dealer Kirk F White then provided the Ferrari for Penske to run.

Chassis 1040 had been built as a 512S Spyder and raced with no significant success by amateur Jim Adams. The team tested the car in this form and was unimpressed. It decided on a total rebuild, with Lujie Lesovsky being brought in from Holman-Moody to help.

Using pictures of Ferrari's new 512M and limited parts from Maranello, the team, which included top mechanic John Woodard, created its own version, strengthening, lightening and improving things as it went. As had become standard Penske practice, the team also used a skidpad to fine-tune the chassis. "Even the plumbing and wiring was done our way," said Donohue in his autobiography *The Unfair Advantage*, written with Paul Van Valkenburgh.

"Our team created new body panels and remade the suspension for the car," recalls Penske, now 82. "I am not sure how different our car was from the standard 512M Ferraris but we made the changes we felt would improve the performance of the car overall for the endurance races."

A large, full-width rear wing, courtesy of Penske's Don Cox, also



demonstrated how American aerodynamic thinking was still ahead of the Europeans, while Penske engine partner Traco performed similar magic on the five-litre V12. Donohue reckoned it produced 630bhp at Daytona, more than the 917s, helping to explain how it was able to outrun the 917s on the banking. The power-to-weight disadvantage the 512 had previously suffered had been eradicated.

White liked to promote the car as 'the world's fastest Ferrari' and the events of 1971 would support that claim. Wherever it went, the Penske Ferrari was a thorn in Porsche's side, and this at a time when sportscars were quicker than Formula 1 machinery on fast circuits.







Penske's Ferrari could have beaten Martini 917K at record-breaking Le Mans

**FAST FACT**

Chassis 1040 has enjoyed success in historic racing with Peter Heuberger and Lawrence Stroll

Following Daytona, the Penske Ferrari's next outing was the Sebring 12 Hours, but preparations didn't go well. Although the car had a bigger rear wing, suspension geometry tweaks and an improved fuel system and electrics, the team's better V12 had blown up on the dyno and Donohue had twisted his ankle. The works Ferrari 312P was also present. Despite all that and having 'only' 580-600bhp, Donohue beat the Jacky Ickx/Mario Andretti 312P to pole by 0.82s and was 2.19s faster than the best 917!

The race was harder, with Siffert having one of his better days and the agile 312P requiring fewer pitstops. Penske remained in contention until another clash, this time with Rodriguez.

"Mark is convinced that he was already past the Porsche, when Pedro deliberately moved over into him and he counts the number of impacts at three," said Pete Lyons in Autosport's report. "Pedro feels that Mark hit him when still behind, when the Porsche was committed to its line."

Whoever was at fault, the Ferrari lost 19 laps. Penske made three separate protests, but the race was lost. After the 312P's transmission failed, the Martini Porsche of Elford/Gerard Larrousse overcame the leading Alfa Romeo to win, while Donohue and Hobbs finished sixth, 17 laps down.

Penske's attention then turned elsewhere – it would win the Trans-Am title with AMC, and Donohue would finish eighth in the 1971 USAC Indycar season despite missing several races – but the 512M reappeared for the team's Le Mans 24 Hours debut in June. "It bristled with evidence of the time and trouble that had gone into preparing it," reported Autosport. "There was even a vacuum device on the brake master cylinders to draw the fluid back from the brakes during a pitstop, to pull the pistons back into the calipers and therefore make changing pads easier."

Once again, Donohue and Hobbs proved quicker than the 917Ks, but this time Penske had the fully developed long-tail 917s to deal with too. They were capable of over 240mph on the Mulsanne

PENSKE'S 512M 1971 WORLD SPORTSCAR RESULTS		
EVENT	QUALIFIED	RESULT
Daytona 24 Hours	1st	3rd
Sebring 12 Hours	1st	6th
Le Mans 24 Hours	4th	Retired-engine
Watkins Glen 6 Hours	1st	Retired-steering

Straight – the Sunoco Ferrari managed 212mph – and duly qualified 1-2-3, but Donohue was fourth on the grid, just ahead of the Helmut Marko/Gijs van Lennep magnesium-chassisised Martini 917K that would go on to win the race at a then-record speed.

All the 917Ls hit trouble, but Penske wasn't able to capitalise. "For some reason or another, on the Friday Roger said, 'Ferrari will give us a new engine, I want us to put it in,'" says Hobbs. "We put the engine in and at about 8pm it blew up."

"Would we have won it? It was the year the fastest record was set and they had a long stop even with the distance record, so we might have won it and we would have definitely been on the podium."

There was still time for one last race weekend for the Penske Ferrari to try to get the result it deserved. The Watkins Glen season finale was set for 24 July, the day before the Can-Am round there, and Penske entered both.

The 512M showed its pace again in practice, recording 184.6mph (faster than most of the Can-Am cars) and taking pole for the 6 Hours by 0.8s. "As so often – so heartbreakingly often – the Penskemobile looked like nothing but bad luck could catch it," said Autosport.

And poor fortune did once again thwart Penske. Donohue led from the off and pulled away until the left-front steering arm broke and sent him off the road. No harm was done, but >>



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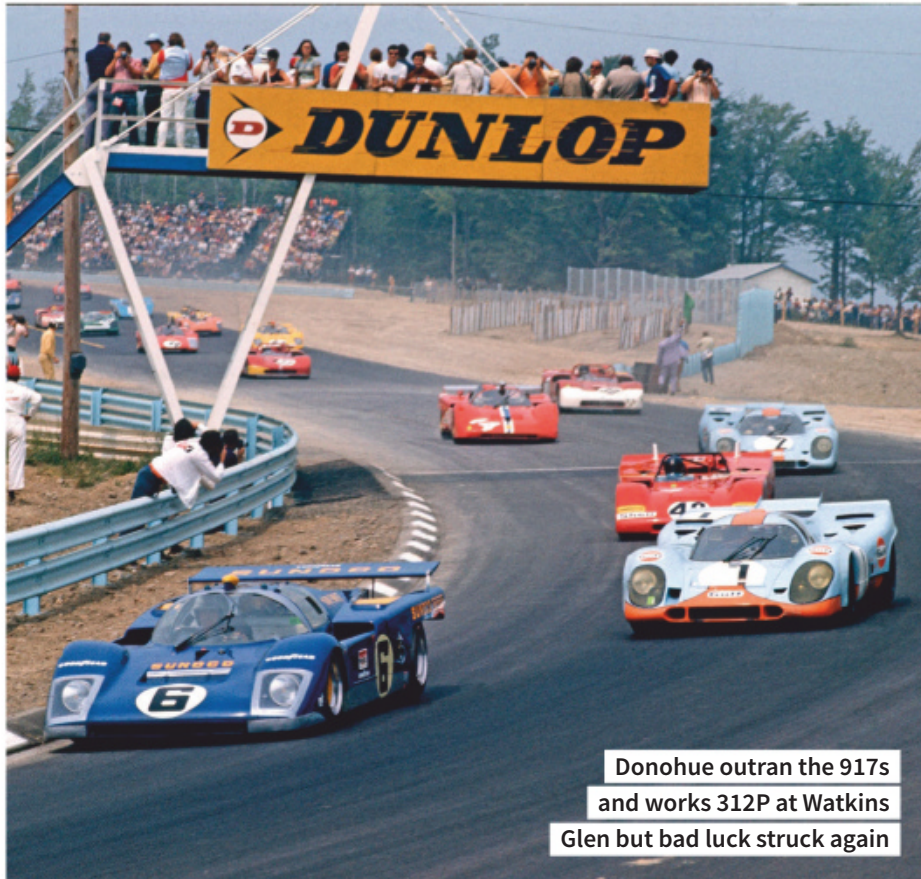
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Donohue outran the 917s  
and works 312P at Watkins  
Glen but bad luck struck again

## “IT’S PROBABLY THE MOST ICONIC FERRARI 512 AND THE MOST EXPENSIVE AND FAMOUS, YET IT WON NOTHING”

the SuperFerrari’s last chance to win had gone.

The Can-Am outing was somehow fitting for the car. Donohue got to the front of the Group 5 sportscar runners – inside the top 10 overall – only to break a piston...

“We knew it was the fastest five-litre car on any track besides Le Mans,” wrote Donohue. “In spite of all the careful detail preparations we put into that car, pieces broke and fell off continuously.”

White tried to petition the FIA to give the five-litre Group 5 cars a stay of execution, but the new world sportscar three-litre limit arrived in 1972 and Penske’s 512M became obsolete. “It’s probably the most iconic Ferrari 512, and the most expensive and famous, yet it won nothing,” concludes Hobbs.

But Penske’s 512 shows that results aren’t the *only* things that matter, and it also introduced a legendary American team to those who hadn’t been paying attention before that Daytona weekend. ❧

## MAKING YOUR BEST RIVAL INTO YOUR GREATEST ALLY

When it comes to sports-racers of the early 1970s, Penske is best known for its Can-Am domination with Porsche. The American team, and its lead engineer-driver Mark Donohue, played a key role in the development of the revolutionary turbocharged 917/10 (pictured) and 917/30 monsters, but the 1971 outings with the Ferrari 512M played their part.

Porsche’s appointed works team in world sportscars, JW Automotive, had been in talks with the German manufacturer about a possible Can-Am programme as early as 1970. Team boss John Wyer was keen, but Porsche wouldn’t commit, though it did provide limited support for Jo Siffert in 1971.

During that season, Penske’s raids on the International Championship of Makes must have grabbed

Porsche’s attention.

At the same time, Penske was growing frustrated at the lack of support from Ferrari, not to mention the cost of parts that then took a

**“AS MOMENTUM FOR CAN-AM DEVELOPED, PORSCHE WAS LEANING MORE TOWARDS PENSKE”**

long time to arrive. The response to the car’s engine blow-up at Le Mans, where Penske and Porsche powerhouse Ferdinand Piech agreed in principle to a Can-Am challenge for 1972, was not atypical.

“Instead of giving us a new motor as they agreed, Ferrari rebuilt the one they borrowed and sent it back to us,” wrote Donohue in his autobiography *The Unfair*

*Advantage*. “When Porsche executives asked Roger to meet with them, he was more than willing to listen.”

A key advantage Penske had over JWA was its engine dynos. In *Porsche 917 – The winning formula* by Peter Morgan, Porsche programme manager Helmut Flegl stated: “Wyer was a race team, working with more or less what they had. Penske

preferred to cautiously develop the car.”

Given the impressive developments JWA had brought to the Ford GT40, that could be considered a little harsh, but the point is that, as momentum for the Can-Am project developed, Porsche was leaning more and more towards Penske.

While there was logic in going with Penske thanks to its knowledge of the American racing scene, it can’t have hurt that the solo Penske Ferrari 512M had been the only five-litre car able to take the fight to the phalanx of 917s.

Both models were effectively banned at the end of 1971 but, before the new three-litre world sportscar season started, Donohue and Penske had already been to Porsche’s Weissach facility in Germany, and work on the project that would change the face of Can-Am had begun.



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## TOP FIVE



SUTTON

## PRIVATEER FERRARI SPORTSCARS

To sit alongside Penske's overhaul of the Ferrari 512M, here are our top five examples of when the minnows stole the limelight in sportscar battle away from the Maranello elite

MATT KEW

ALL PHOTOGRAPHY  
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IMAGES

### 5 MICHELOTTO F40 GTE

Of the 11 rounds comprising the 1996 BPR Global GT Series, an F40 GTE scored the fastest lap in seven. Michelotto's lead entry, headed by ex-Formula 1 driver Jean-Marc Gounon, bagged four (100%) of the car's poles that year. Unfortunately, the F40 won only one race that season. Patchy reliability was combined with the crushing domination of the McLaren F1 GTR and then the arrival of the Porsche 911 GT1.



SUTTON

### 4 ROB WALKER 250 GT 'SWB'

From breaking both legs in June's Belgian Grand Prix, Stirling Moss bounced back to win the 1960 Tourist Trophy at Goodwood in August. He did it with a Rob Walker-entered 250 GT 'SWB', beating Roy Salvadori's Aston Martin DB4 GT. It also marked Ferrari's first victory in the famous race. Two more wins at Brands Hatch and Nassau completed a Moss clean sweep that year and he won the TT again in 1961.



### 3 DORAN-MORETTI 333 SP

Arguably, winning the 1998 Daytona 24 Hours was not the 333 SP's finest hour. But without driver Giampiero Moretti – under whose Doran-Moretti team name the car entered the race – the 333 SP wouldn't have existed. It was his and Piero Ferrari's brainchild, with the design then handed over to Dallara and later Michelotto. For different teams, the 333 SP also won at Sebring and multiple FIA Sportscar titles.



SUTTON

### 2 PRODRIVE 550 GTS

Prodrive wasn't the first to make a race car from the 550, but its version was the most successful. In 2003, the car narrowly lost out to the Chevrolet Corvette in the American Le Mans Series after some epic contests, but did win the GTS class at Le Mans. It also laid the foundations for Prodrive's ultra-successful involvement with Aston Martin. But, that's not quite the same as overall Le Mans victory...



CAPILTAN

### 1 NART 250 LM

The Ford onslaught had fallen only six hours into the 1965 Le Mans, and the leading factory Ferraris had duff discs, forcing drivers to rely on engine braking. All eventually retired. Still, North American Racing Team duo Jochen Rindt/Masten Gregory had to recover two laps to score victory, which remains Ferrari's most recent in the 24 Hours. No other car on this list can boast such a prestigious and unlikely win.



SCHLEGELMILCH



# Conti king of the hill to end Bentley duck

DANIEL KALISZ

**BATHURST 12 HOURS**  
**MOUNT PANORAMA (AUS)**  
**2 FEBRUARY**  
**INTERCONTINENTAL GT CHALLENGE**  
**ROUND 1/5**

After five years of trying, Bentley broke its Bathurst 12 Hours drought thanks to Jules Gounon, Maxime Soulet and Jordan Pepper.

While there was a gaggle of cars that hung around the lead lap, the race was for the most part between the M-Sport Bentley Continental GT3 and the GruppeM Mercedes-AMG of Raffaele Marciello, Felipe Fraga and Maximilian Buhk.

For much of the 12 Hours it was a seesawing battle, the Mercedes stopping slightly earlier in the cycle than the Bentley – the lead changing hands accordingly.

It wasn't until late in the race that the two went head-to-head. After a whopping four hours and 11 minutes of green running – the longest in the race's history – a pair of cautions leading up to the three-quarter mark squared the strategic ledger.

The final restart, with three hours to go, initially played into Bentley's hands when Soulet was able to sprint as Buhk found himself stuck behind Maximilian Gotz in a Triple Eight Mercedes, which

was out of position after not taking on fresh rubber. It took half an hour for Buhk to find a way back into second, and when the car made its penultimate stop for Marciello to take over 20 minutes later it made its play for track position by not taking on tyres.

It worked, too – Marciello nicked the lead when Soulet stopped to hand over to Gounon at the 10-hour mark. Gounon had the pace to swiftly hunt down the leading Mercedes but, with the long straights playing into the AMG's hands, finding a way past proved difficult.

Gounon instead opted to bide his time, readying himself for an all-out attack as soon as Marciello made his final stop. With a little over an hour to go, the Mercedes hit the lane, Gounon immediately setting the fastest first sector of the race followed by a personal best second sector. However, plans for a five-lap sprint for a clear overcut were obliterated when his right-rear tyre exploded down Conrod Straight.

Luckily, the pit entry was close. Gounon dived in for four new tyres and, thanks to some traffic on Marciello's out-lap, still managed to emerge with the lead.

Once in front, Gounon had the pace to keep Marciello at arm's length, a job made easier when the Merc suffered a puncture of its own inside the last 10 minutes.

The question mark, however, was the weather. After a week of oppressive heat, with temperatures hovering around 40C, thunderstorms circled the circuit for the final hour of the race.



L-r: Gounon, Pepper, Soulet finally secured Bentley honours

DANIEL KALISZ



WEEKEND WINNERS

BATHURST 12 HOURS

**1 Jules Gounon/Maxime Soulet/Jordan Pepper (Bentley Continental GT3)** 314 laps in 12h00m33.871s; **2 Alvaro Parente/Ben Barnicoat/Tom Blomqvist (McLaren 720S GT3)** +41.5239s; **3 Shane van Gisbergen/Jamie Whincup/Maximilian Gotz (Mercedes-AMG GT3)**; **4 Mathieu Jaminet/Patrick Pilet/Matt Campbell (Porsche GT3 R)**; **5 Maro Engel/Luca Stolz/Yelmer Buurman (Mercedes)**; **6 Felipe Fraga/Maximilian Buhk/Raffaele Marciello (Mercedes)**; **7 Dirk Werner/Matteo Cairoli/Thomas Preining (Porsche)**; **8 Dominic Storey/Fraser Ross/Martin Kodric (McLaren)**; **9 Earl Bamber/Laurens Vanthoor/Craig Lowndes (Porsche)**; **10 Stephen Grove/Brenton Grove/Ben Barker (Porsche)**.

TOYOTA RACING SERIES

HAMPTON DOWNS

- Race 1** Igor Fraga  
M2 Competition  
**Race 2** Franco Colapinto  
Kiwi Motorsport  
**Race 3** Igor Fraga  
M2 Competition



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But the gods were kind to Bentley, the heavens opening the very second the car crossed the line for an emotional win.

“I saw some drops on the windshield and I was like ‘Oh no,’” Gounon explained. “We always say Bentley brings the thunder, and I was like ‘Not this time, please.’ The team said it should only be a few drops, it could be tight for the end of the race. I crossed the line and the rain came. It was one of those days when the racing goes with you.”

For the Merc, the drama continued until after the flag. The late unscheduled stop initially dumped Marciello to third behind the 59Racing McLaren 720S driven by Tom Blomqvist. However, the Italian looked to have saved second place with a bold move at Murrays Corner on the penultimate lap. But a 30-second post-race penalty for not switching the engine off during the scramble for a new tyre at the end meant the Merc was reclassified in sixth.

That promoted the McLaren, shared by Blomqvist, Alvaro Parente and Ben Barnicoat into second, with the Mercedes of Gotz, Jamie Whincup and Shane van Gisbergen rounding out the podium.

There were costly tyre issues elsewhere in the Mercedes camp, too: the Craft-Bamboo entry of Maro Engel, Luca Stolz and Yelmer Buurman missed out on a podium thanks to an unscheduled stop with 25 minutes to go.

ANDREW VAN LEEUWEN

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Fraga leads Ptacek and Collet in early stages of opener

# Fraga jumps Lawson with double and Hulme trophy

TOYOTA RACING SERIES  
HAMPTON DOWNS (NZL)  
1-2 FEBRUARY  
ROUND 3/5

Brazilian talent Igor Fraga wrested the lead of the series from 2019 champion and M2 Competition team-mate Liam Lawson, thanks to two wins, the second of which earned him the Denny Hulme Memorial Trophy – the actual pot won by Hulme for victory in the 1974 Argentinian Grand Prix.

The Japanese-born, Roberto Moreno-mentored *Gran Turismo* ambassador, who was a leading contender in the Formula Regional European Championship last year, took the lead of the opener when he swept past polesitter Petr Ptacek and front-row man Lawson from third on the grid. Lawson, with a new clutch after burning one out in practice starts during Thursday testing, slumped to fifth in a duff getaway.



Fraga as good in real car as digital version

With Fraga up front, focus turned to Lawson, who battled his way past Franco Colapinto for fourth, then passed Caio Collet for third before grabbing second from Ptacek. Next, he set off after Fraga, but there was nothing the New Zealander could do.

Ptacek was third, with Collet fourth and Colapinto fifth.

Fraga led all the way in the headline race, too, while Lawson again needed to do some overtaking after dropping to third at the start. He passed Gregoire Saucy for second, then raced side by side with Fraga for the lead on the first of three restarts. His challenge ended when a technical problem caused his retirement.

This elevated Giles Motorsport runner Saucy to second, with the M2 machine of Yuki Tsunoda taking third from Collet and Lirim Zendeli.

Argentinian Colapinto made it an all-South American weekend by winning the second, reversed-grid race in his Kiwi Motorsport car. The reigning Spanish Formula 4 champion and Fernando Alonso protege beat poleman Oliver Rasmussen to the first corner, and led the challenging Dane until Lawson came through with a brave dive to take second on a restart.

Rasmussen completed the podium from Tsunoda, although the Japanese Red Bull and Honda protege was contentiously penalised for his part in a clash with Collet, and that promoted Fraga to fourth.

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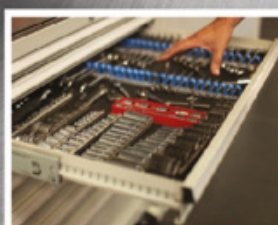
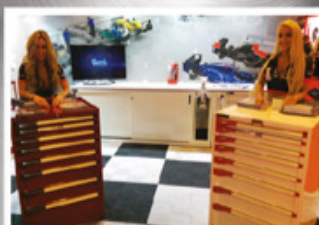
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Foster (inset) will move to Double R's BRDC British F3 squad for this season



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## FOSTER GOES BRITISH F3 AFTER SUCCESS IN F4

### BRDC BRITISH F3

British Formula 4 title contender Louis Foster will graduate to the BRDC British F3 Championship this year, remaining with the Double R Racing squad.

The 2018 Ginetta Junior runner-up was on the pace from the start as he switched to single-seaters last year, and headed the F4 standings in the early part of the season. He struggled to maintain that form during the middle stages of the campaign and finished third in the points after taking six wins.

Foster was one of the unsuccessful finalists for the Porsche GB Junior shootout at the end of last year, but has decided that continuing up the single-seater ladder is his best option. "I think it is probably the best step for us right now in terms of budget and age," he explained. "We didn't really see the point in doing another year in F4 – there's always more to learn, but not enough that required another year.

"We had a few tests in the F3 car – I've done five days so far. The first day was awesome at Silverstone. It's a really, really fast car. I think it's more of a step to F3

from F4 than F4 from Ginetta Junior, just because of the higher power and downforce."

Foster says the changes being made to British F3's Tatuus car for this year – which include gaining a frontal protection fin, along with a significant number of tweaks to the aerodynamics with revised front-wing endplates and the addition of bargeboards – will limit the advantage of second-year drivers.

"The aim this year is to win the championship," Foster added. "The last two years I've been so close but I think this year we're going to be giving it our all. Kiern [Jewiss, 2018 F4 champion and F3 race winner] is going to be quick at the start but we will look to pull back in and grab some points off him. It's a tough grid and a lot of people are coming back for a second year."

Foster admits that continuing to progress in European single-seaters beyond British F3 is not a realistic option as "budgets go through the roof". But he is looking at a potential move to American single-seaters or GT racing in Europe longer-term. "If you do single-seaters, you leave options open," he said.

STEPHEN LICKORISH



## Wylie to make full-time Carrera Cup return



### PORSCHE CARRERA CUP GB

Former Britcar and British GT4 champion Ross Wylie will contest a full campaign in the Porsche Carrera Cup GB this year.

Wylie made his return to the series, in which he competed in 2017, at Silverstone last season and took a podium. He has joined In2Racing for the 2020 season.

"I am not there to make up the numbers, I want to give it a good crack," said Wylie, who thanked his former Britcar co-driver

David Mason for sponsoring him via his MacConnal-Mason Gallery. "I'm also under no illusion that the series is, without doubt, the most competitive one-make series around and is arguably the toughest championship I have ever contested."

Another driver to confirm they will be on the grid is British GT4 racer Mark Kimber. The 18-year-old, who contested his first season of car racing in a Century Motorsport BMW M4 GT4 last year, will drive for the Brookspeed squad.

## CALLAHAN TO RACE IN ALL PORSCHE TROPHY

### CALM ALL PORSCHE TROPHY

Former *X Factor* contestant Sam Callahan will compete in the CALM All Porsche Trophy in his second season of racing this year.

Callahan made his debut in Bernie's Sports Racing and V8s last year, sharing a Taydec Mk3 with his father Mark. The duo will again share the car in Sport Specials this year, and Callahan Jr will combine that with racing a Porsche 924 in the CALM (Campaign Against Living Miserably) series.

"CALM Porsches were invited into one of the races I was at last year so I got talking to them," said Callahan. "In December I released an album and the proceeds from that go to the CALM charity so that's where the link came from. I've been doing stuff as an ambassador for CALM. I'm going to be creating a bunch of content — I will be doing a YouTube and Facebook blog, I'm going to be really pushing it to raise awareness."

"I knew about CALM through motor racing but I chose it for my album because I released a song at the end of 2018 called *Stitches and Scars* and this was about different mental health issues that I had after being in the public eye after *X Factor*."

"I had some amazing people around me and I'm lucky to have a good family to help me, but I had two friends I lost in a year through mental health. This is a great charity for me to do something for."

The Porsche series was launched as the 4-Pot Trophy but has been opened to all of the manufacturer's cars this year.

STEPHEN LICKORISH



## Clio Cup Series joins Britcar Trophy

### BRITCAR

Organisers of the Clio Cup Series have teamed up with Britcar so the championship will now run as a standalone class within the new Britcar Trophy category.

The Clio series formerly had Michelin backing but will now switch to using Dunlop trackday rubber to reduce

costs. It struggled for numbers last season, despite fourth-generation Clios joining the third-edition models in being eligible, and averaged nine cars.

The Britcar Trophy is for production cars and features 50-minute races, so Clio drivers will now be able to share their car or race on their own.

The Clio category's promoter Richard Colburn said: "Taking

on board the feedback from competitors — higher-profile events, TV coverage, hospitality options and, above all, reduced costs — this presented by far the best option and I believe the championship heads into 2020 stronger than ever."

"The Britcar team operate an incredibly successful championship and the fit for the Clio is excellent."





# Clio ace Coates joins Elite for Mini Challenge title bid

## MINI CHALLENGE JCW

Renault UK Clio Cup runner-up Max Coates will switch to the Mini Challenge JCW category for this season with Elite Motorsport.

Coates has been a Clio title contender in each of the past two seasons but narrowly missed out both times. He had targeted a move to the British Touring Car Championship for this season but was unable to raise sufficient budget, although it remains his goal for 2021.

He will instead join the Mini series as it replaces the Clio Cup on the BTCC support bill this year.

“Minis is an attractive option and it’s the natural progression,” said Coates. “I’ve driven the car already and really enjoyed it.”

He added that missing out by just five points to Jack Young in the Clio title race last year has made him “more hungry” to claim the crown this season.



“The plan is to win the championship – that’s what we will be aiming to do,” Coates said. “I don’t want to finish second again and we will be giving it our all. There’s a decent field of drivers who have had championship success before, so I think it’s going to be competitive.”

Coates will join Lewis Galer at Elite as the successful Ginetta team, which powered Harry King and James Hedley to the GT4 Supercup and Ginetta Junior crowns last year, makes its debut in the series.

The team has recruited Richard Skeels

and Martin Poole to head up its Mini division, and both worked alongside 2017 Mini Challenge champion Brett Smith in his title-winning year. Coates is therefore confident that the team will be competitive from the start of the year.

“The team’s new to the series but the people aren’t,” he said. “Eddie [Ives, team boss] and Elite have a successful championship history so the mentality of how you do that [winning titles] is certainly there.”

**STEPHEN LICKORISH**

# New Goodyear driver programme is launched

## JSCC/MINI CHALLENGE

Goodyear has created a new driver development programme to take racers from karting up to the British Touring Car Championship.

The tyre manufacturer has partnered up with the Junior Saloon Car Championship and Mini Challenge to create the driver scheme. There will be a ladder of progression through the series as the winner of the JSCC title will get a free test in a Cooper class Mini Challenge machine along



with free tyres in the series.

Goodyear event manager Mickey Butler explained: “We are proud to build a ladder into the BTCC through Goodyear’s support of the Mini Challenge and Dunlop’s investment in

the teenage racers of the JSCC.

“By building a bridge from one of the UK’s strongest junior series into the UK’s highest-profile one-make touring car feeder series, we are supporting young talent in their goal of

getting to the pinnacle of British racing, racing on the touring car weekends in either the Mini Challenge or BTCC.”

JSCC coordinator Dave Beecroft added: “JSCC has been going from strength to strength, year on year and it’s exciting to be able to offer this opportunity to our junior drivers.

“The Mini Challenge is a great championship to progress to after JSCC and it’s brilliant to be a part of this development programme to aid young drivers to progress all the way through to the BTCC.”

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## IN THE HEADLINES

## CONNOR, JUFFALI BACK IN F4

Alex Connor and Reema Juffali will remain in the British Formula 4 Championship this season. Connor will complete a full campaign with Arden, having taken his maiden car racing win in the UAE F4 series at last year's Abu Dhabi Grand Prix. Juffali, the first female Saudi Arabian racing driver, will stay with Double R Racing for a second year. She has raced in the Jaguar I-PACE eTrophy and UAE F4 during the winter.

## STEED STAYS IN GINETTA GT5s

Ginetta GT5 Challenge racer Josh Steed plans to contest a full season of the series this year after missing the opening 2019 events with an arm injury. He took his maiden category podium in the season finale at Donington Park. The Mutation Motorsport driver said: "Now that we know what it takes to be at the front, we're hoping for a very successful 2020."

## STURGES TO BRITCAR TROPHY

Castle Combe GT champion Jamie Sturges will move into the new Britcar Trophy championship in his SEAT Leon Eurocup this year. Sturges has previously raced in a range of different categories, including the Classic Sports Car Club's New Millennium and 750 Motor Club's Roadsports, but believes Britcar provides him with the "opportunity to race at a higher level in a more prestigious championship".

## CENTURY TO SELL GT3 BMW

Century Motorsport is set to downsize to a single BMW M6 GT3 in British GT this season, but team boss Nathan Freke says he will still enter two cars in GT4. The 2018 GT4 title-winning squad has put the M6 raced by Dominic Paul and Ben Green (below) up for sale after a challenging return to GT3 last season learning the nuances of the M6, which was competing in the series for the first time.



MOTORSPORT IMAGES/JEP



Plowman and Fletcher will run two or three-car team

## Plowman and Fletcher set up their own MX-5 Supercup team

### MAZDA MX-5 SUPERCUP

British GT4 Pro-Am champions Martin Plowman and Kelvin Fletcher have set up a team that will contest the Mazda MX-5 Supercup under the Paddock Promotions Motorsport banner.

Will Killick, the stepson of Imagine Cruising owner Robin Deller who sponsors Plowman and Fletcher, is the first confirmed driver. Deller could take the wheel of a second car.

Plowman said he had long planned to set up his own team after finishing racing, but was surprised at how quickly the programme came together.

"I had no real plan to start a team even

as late as mid-November," he said. "The catalyst for it was Robin really got the racing bug and challenged me and Kelvin with the goal of setting out a roadmap for them."

Plowman said he chose the MX-5 series as a pathway for Killick into GT racing as it costs around one fifth of a GT4 season. "My plan was to do as much mileage as possible for the least amount of money, so you would accelerate the learning curve for both of them," he said.

Plowman and Fletcher will graduate to GT3 in British GT this year in a JRM-run Bentley, and Plowman added that he is not concerned about combining driving with team management.

**JAMES NEWBOLD**

## FoS reveals all-rounders theme

### GOODWOOD

The central theme for the Goodwood Festival of Speed on 9-12 July has been announced, with this year's event celebrating 'motorsport's great all-rounders'.

Jacky Ickx, who enjoyed success in F1, sportscars, touring cars, rallying and cross-country events, has been named as the first maestro to be honoured.

The Duke of Richmond said:

"The heyday of the Goodwood Motor Circuit coincided with a time when some astonishing talent could be seen winning in different cars from one week to the next or even during the same race meeting.

"It is this level of artistry which we will be paying tribute to with our 2020 theme: 'The Maestros – Motorsport's Great All-Rounders'."

It has also been announced that leading drivers from the British Rally Championship

will be given the chance to compete at the Festival of Speed this year on the event's all-gravel Forest Rally Stage for the first time.

Ten crews will be chosen based on championship position after the second round of the BRC – West Cork – or by invitation from Goodwood.

The competitors will then get to tackle the stage, which was designed by BRC champion and 1983 World Rally title winner Hannu Mikkola.





## Nuthall wows the South African crowds in Cooper-Climax T53

### HISTORICS

Historic Grand Prix cars were a new focal point to Zwartkops's 19th Passion for Speed event last weekend as Will Nuthall took a double win at the South African venue.

Racing Giorgio Marchi's Cooper-Climax T53, the Nottingham driver lapped father Ian (ex-Peter Whitehead Alta F2) in the lunge for the finish line in the second leg. "It had to be done," he grinned.

Andrew Beaumont (Lotus 18) pipped Nuthall to pole, but carburation issues brought about by extreme heat and altitude – the du Toit family's challenging circuit is almost 6000 feet above sea

level – left him and many others misfiring breathlessly in the chase. Not Belgian Christian Dumolin's magnificent ex-Roy Salvadori Maserati 250F, however, which wowed the audience.

There was double joy for the Campos family as father Rui (Lola T70 Spyder) and son Keegan (Porsche RSR) bagged a win apiece. Peter Lindenberg's Shelby Mustang was victorious after mighty tin-top action.

Race engineer Matt Nash (in Ian Hebblethwaite's Van Diemen RF81) aced a stonking Formula Ford 1600 contest within the Historic Single-Seater Association pack.

**MARCUS PYE**

## LYDDEN GETS APPROVAL FOR NEW FACILITIES

### LYDDEN HILL

The Lydden Hill circuit has finally been given the go-ahead for a £5.5million scheme to improve its facilities, after more than five years of protracted planning committee talks.

The plan allows for the demolition of the existing offices in the paddock, to be replaced by a much larger VIP pavilion, which will include a hospitality area with a viewing balcony, a press room, medical facilities and scrutineering bay.

The viability of the circuit should be improved by the granting of more "quiet" days to include car shows, cycle racing and driver tuition.

The previous plans to build 14 engineering units and a larger campsite, which have been a stumbling block, were dropped.

After more than two hours of debate, Dover District councillors voted five-two in favour of the plans.

Pat Doran, the former British Rallycross champion who leads the consortium that owns the circuit, said: "We worked very hard for this. We see this as the way forward for the circuit. Now the future is much more certain, otherwise we would have been on a downhill trajectory."

**KERRY DUNLOP**

## Pembrey to build new pit garages for 30th year

### PEMBREY

Work to build a new pit garage complex at Pembrey will begin in the next few weeks.

The Welsh venue will feature a new building that will contain 12 double garages and these will be located next to the circuit's race control tower. There will be a large paddock space behind them.

The construction work at the circuit is due to be completed in

time for the start of Pembrey's 30th anniversary season. It follows other improvements at the track in recent years, including the creation of a new circuit layout and improved spectator banking.

There will be four circuit racing events at Pembrey this year, including the popular British Truck Racing Championship and the return of the Historic Sports Car Club. "With a new garage complex



and some of the marquee events we have, I'm confident that 2020 is going to be a special year for the venue and I'm

looking forward to welcoming spectators and competitors alike in joining us as we celebrate," said circuit manager Phil Davies.



# What Autosport's looking forward to this season

*From exciting TOCA support entries to a new Formula Ford event and the sights of the Monaco GP Historique, there's plenty the Club Autosport team is eagerly awaiting*

STEPHEN LICKORISH, STEFAN MACKLEY AND MARCUS PYE



**STEPHEN LICKORISH**  
GROUP NATIONAL EDITOR

There is always plenty of drama among the British Touring Car support series and no shortage of things to write about. But the 2020 season is set to be exceptional as some impressive entry lists are forming. British Formula 4 is looking much stronger than in recent seasons, the new Mini Challenge JCW class is set for packed grids with two BTCC support stalwarts Ant Whorton-Eales and Max Coates battling for honours, while a lack of second-year drivers means this season's Ginetta Junior fight is set to be wide open. But it is the Porsche Carrera Cup GB that is currently leading the way in terms of confirmed entries and it too features some quality drivers.



**STEFAN MACKLEY**  
DEPUTY NATIONAL EDITOR

Slipstreaming thrillers, a reliance on mechanical grip over aerodynamics, and where the dying art of heel-and-toe comes to the fore. There may be faster and louder forms of motorsport but, if it's close, competitive racing you're after, Formula Fords are pretty hard to beat. Alongside the traditional end-of-season Formula Ford Festival and Walter Hayes Trophy, there is another event for Formula Ford fans to attend in 2020. The Jim Russell Trophy Meeting will take place on 4-5 April at Snetterton and features 10 Formula Ford races to honour the memory of the racing school pioneer and the early heritage of the Festival. It's certainly going to be an event not to miss.



**MARCUS PYE**  
SPECIAL CONTRIBUTOR

My season started in South Africa with something new at Zwartkops last weekend. Goodwood's Members' Meeting and Revival, remodelled Zandvoort, the unmissable Spa Six Hours, Castle Combe's 70th Anniversary Autumn Classic weekend and the opportunity to see racing at Estoril for the first time are all inscribed in my calendar, interspersed with 20 other meetings. May's Monaco GP Historique is aspirational for so many fans. Having missed recent editions, I'd love to be commentating on the ACM's landmark 10th edition, where the pull of shrill Ford Cosworth DFV engines showcases the wonderfully photogenic Formula 1 sets.



Award winner  
Hoggard made his  
sportscar debut at  
legendary Daytona  
24 Hours







# HOGGARD IN THE EYE OF A HURACAN

*It's been a whirlwind few weeks for Aston Martin Autosport BRDC Award winner Johnathan Hoggard. New car, new discipline, new track... and a freak injury*

GARY WATKINS

PHOTOGRAPHY



**A** brand-new car he'd never so much as sat in. A track on which he had completed just seven laps. And racing in an endurance event, with night-time running, for the first time. They were all new to Aston Martin Autosport BRDC Young Driver of the Year Award winner Johnathan Hoggard as he took up his Sunoco Whelen Challenge prize drive at the Daytona 24 Hours late last month. As if that wasn't enough, a freak injury meant he also had to pick up a whole new driving style as he went in the race – braking with his right foot.

The sportscar debutant twisted his left leg as he struggled to get out of his Precision Performance Lamborghini Huracan GT3 Evo while the team practised driver changes on Friday afternoon ahead of the start of the IMSA SportsCar Championship opener the following day. As his knee swelled up and restricted his movement, Hoggard realised that left-foot braking wouldn't be possible for the race.

"I was trying to get out of the car quickly and got my foot stuck," recalls Hoggard, the latest in a line of Sunoco Whelen Challenge winners that includes Felipe Nasr, Jonny Adam and Seb Morris. "I was trying to get myself unstuck and, while twisting my left leg, I got pulled out by the team.

"That's part of the game in endurance racing. You've got to change drivers as quickly as possible, so if you can't get out on your own, you get dragged out. I think my knee popped

out and then popped back in again as I straightened up my leg. That's what the doctors think, anyway."

Hoggard used his left foot to hit the stop pedal through a season and a bit in British Formula 4 and then the BRDC British Formula 3 Championship campaign last year that yielded second in the points and the prestigious Sunoco prize. But fortunately, he explains, he does use his right foot to brake in his road car.

"I wasn't quite coming to a brand-new concept," he says. "But braking on the road doesn't involve the same kind of forces required in a racing car. Hitting the pressure wasn't too bad, but the most difficult thing was learning how to bleed off the brakes with my right foot. You've got to make sure you aren't hard on the ABS when you turn in, because otherwise the car just goes straight on. It was a case of trying to learn how to bleed off so the car hooks round."

Anti-lock brakes were also new to Hoggard, save for 12 laps aboard an Aston Martin Vantage GT3 during the Award tests last winter. That, and a similar stint in a Ligier-Nissan JSP3 LMP3 car during the Silverstone shootout, also represented his only experience of driving a racing car with a roof.

Hoggard had been due to drive another prototype at the Rolex-sponsored Daytona enduro, an LMP2 car. He took part in the official pre-event Roar test in early January at the wheel of a Riley-Gibson Mk30 entered by Rick Ware Racing, the >>



self-styled “biggest little team in motorsports” and a regular in the NASCAR Cup Series.

The test was brought to an early conclusion when one of his team-mates crashed, while the decision of another, the mandatory bronze-rated driver, to duck out of the programme resulted in the late withdrawal of the car. That resulted in Anglo-American Oil Company boss Anders Hildebrand, who masterminds the twin Sunoco challenges, to turn to his old friends at Precision Performance Motorsports – the North Carolina-based team that had run 2018 Sunoco Whelen Challenge winner Linus Lundqvist 12 months before found a berth for his successor in its GT Daytona-class Lambo.

The late swap of machinery only steepened the learning curve for Hoggard. Racing a P2 prototype, he reckons, would have been a smaller step from the F3 Tatuus he raced last year.

“The P2 car was easier to drive for me,” he says. “It’s closer to what I’m used to in terms of the level of downforce and the way it drives and doesn’t have ABS, though it’s probably more complicated in terms of all the controls. Driving a GT car put me in a whole new environment, but that made it more of a challenge. It was nice to drive something completely different from what I’m used to and gain some good experience.”

Hoggard admits that he was surprised at the lack of pre-race running at Daytona. Practice and qualifying offer approximately four hours of track time prior to race day, and that’s not including red-flag stoppages of course. But he points out that there was “plenty of time to pick things up in the race”.

Hoggard was going from a 20-minute F3 dash to spending the better part of two hours behind the wheel during a double stint in the GTD car. That was a big jump, he reckons, not so much physically – leg injury or no – but mentally. “A GT3 car isn’t too physical, so the mental strain was the biggest thing,” he says. “It was all about concentrating as much as possible, because one small mistake can lead to a big loss of time if you are in a battle or maybe in traffic.”

Hoggard climbed aboard the Lambo he shared with Brandon Gdovic (son of team owner Richard), Eric Lux and Mark Kvamme



at the first round of pitstops. He overtook a handful of cars and was running sixth in class when he handed the car over to Kvamme.

By the time Hoggard had climbed back aboard for his second double stint during the night, the car was already out of contention. Lux was hit up the rear by an Aston GTD car as he came into the pits, the subsequent repairs losing the Lambo four laps. And with the right-hand portion of the diffuser missing, the Huracan wasn’t quite the same racing car as before. “The team did a pretty good job to only lose four laps considering how much damage there was,” says Hoggard, “though we were missing some pace. We were struggling a bit after that.”

“But driving at night was probably still my favourite part of the weekend. In the second part of my double there was a safety car that bunched everyone up. There was a massive train of cars, which made it almost like a sprint race. Everyone had their elbows out and was trying to squeak past each other. It was really good racing and a highly enjoyable moment.”

Hoggard’s maiden sportscar racing adventure came to a premature end in the 20th hour. He was back in the car for what should have



Hoggard didn’t let his foot injury stop him getting the most from his Daytona experience





Hoggard took part in  
Daytona Roar test  
in Riley Mk30 LMP2

DOLE

been his third double shift of the race, but the Lambo ground to a halt out at Turn 5 in the Daytona International Speedway infield shortly after the halfway point of his stint.

“I was coming up to the pit entrance and the car kind of lost drive but then seemed to fix itself,” he recalls. “I was thinking it might have been a fuel-surge problem, so I carried on but the car packed up at Turn 5. I was on the radio telling them what was going on and we tried all sorts to get the car going again. Nothing was making any difference. We got towed back to the garage, and there it was confirmed that the gearbox had gone and couldn’t be repaired in time. It was a bit heartbreaking really.”

The Sunoco prize drive has whetted Hoggard’s appetite for some more sportscar racing, though he’s yet to confirm his programme for 2020. His plans remain fluid for the moment after, he says, “taking some time out to enjoy the Daytona experience”.

A step up to either the FIA Formula 3 Championship or Euroformula Open are among the options for the 19-year-old, depending on finance of course. He’s also hinted that switching codes to endurance racing is there somewhere in the melting pot, and he’s not ruling out some more sportscar outings should he continue his single-seater career.

“I got chatting to a quite a few people out at Daytona and it definitely got my name out there in North America,” he explains. “I know the Sunoco Whelen Challenge is held in very high regard in the IMSA paddock – you only have to look at the names of the people who have won it. I wouldn’t turn down any opportunities because I enjoyed the Daytona experience so much. It would be good experience to drive some different cars and learn how best to jump from one to the other. Doing Daytona was pretty cool.” ❦



JEP

## DALGLEISH GETS REWARD FOR HAT-TRICK

Robbie Dalglish had lofty ambitions as he headed into 2019. The Scot aimed to win the Mini Challenge GB Cooper Pro title at his second attempt, to retain his Celtic Speed Mini Cooper Cup crown, and to seal the Sunoco 240 Challenge. He pulled off the clean sweep and took up his Sunoco prize drive on the undercard of the Daytona 24 Hours in the IMSA Michelin Pilot Challenge last month.

“It was kind of the dream to do all three after finishing second to Kyle Reid in Cooper Pro in 2018,” says the 25-year-old. “He won the Sunoco, so I wanted that one as well.”

Like Reid in 2019, Dalglish raced a BMW M4 GT4 for the Fast Track squad. And just like Sunoco Whelen Challenge winner Johnathan Hoggard in 2020, pretty much everything was new to him. The Scot had to master a rear-wheel-drive machine with more than three times the power of his Mini, as well as learn the Daytona International Speedway while sitting on the ‘wrong’ side of the car.

The Fast Track BMW that

Dalglish shared with fellow Scot Stevan McAleer and W Series driver Beitske Visser didn’t set a qualifying time courtesy of an electrical glitch. That meant the Sunoco winner would start from 32nd on the grid.

A dozen laps into the race, Dalglish was into the top 20. He went on to overtake 14 cars before climbing out of the car at the first round of pitstops. “I made progress from the first corner,” says Dalglish, a firefighter at Edinburgh Airport. “I was pretty happy with the number of cars I overtook.”

The chances of a strong result for the Fast Track trio disappeared with two punctures in short order for Visser. A stop/go penalty and a further issue in the pits left them three laps down in 22nd at the finish.

Dalglish now has his eyes set on further GT4 outings in the British GT Championship. “I’ve been living in a different world since the beginning of January,” he says. “I don’t really want it to end but who knows? This could be the start of something.”



Dalglish drove BMW  
M4 GT4 from 32nd into  
top 20 in first 12 laps

JEP

JEP





## THE FALL FROM PACE AND GRACE

### AUTHOR INTERVIEW IBRAR MALIK

Ibrar Malik made a bold statement when he revealed plans to publish his first book *1994: The Untold Story of a Tragic and Controversial F1 Season*. Presenting the storm surrounding the death of Ayrton Senna and allegations of Benetton running illegal driver aids in a coherent and balanced narrative had the potential to be a legal minefield. But the result was critical acclaim from both former Williams and Benetton employees alike.

Now, just 12 months on, Malik has co-authored a second release entitled *Team Lotus: Struggling Beyond the Post Colin Chapman Era*. He and researcher Neil White hope this book – which began life in 2012 and covers the 1983 to 1989 seasons – can kick-start a series of titles on the Hethel-based outfit.

Autosport wanted to find out how such bold plans had come together so quickly.



**AS** You said you were going to take a break from writing. What made you return so soon?

**IM** I decided that could I accept releasing the 1994 book without making any money. If I look at it in terms of the time I spent on the 1994 book, it's not been financially beneficial. That's part of the reason why I decided to take a sabbatical after writing it because I've got bills to pay like everyone else. But I was helping Neil anyway in the background and I just eventually got more and more inspired by reading through all of the races for Team Lotus. At the start of the 1987 season Team Lotus were, on paper, as strong as any other team – they had Senna, Honda engines and active suspension. It was really interesting seeing how the team fell from that.

**AS** Why did you decide to co-author a book this time around?

**IM** I started with the idea of writing a book surrounding how teams failed, especially at the end of the 1980s around a major rule change when normally aspirated engines came in. That was done to save cost, because a lot of the teams were going out of business. In the early 1990s, when the global recession hit, you had teams like March and Fondmetal going. Lotus went as well. I was playing around with those ideas and then I started going through Neil's research. It made sense for us to join forces because his skill is in the passion



Team Lotus had the driver, engine and tech to mount a title tilt in 1987

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JOHNNY HERBERT ON LE MANS



In 1991, Johnny Herbert helped Mazda to become the first Japanese marque to win the Le Mans 24 Hours with its shrieking 787B. Three-time Formula 1 race winner Herbert sat down with Autosport to discuss the prestigious French enduro – including how tough it can get, plus the trials and tribulations (and the luck of the draw) involved in racing at the Circuit de la Sarthe. **Go to [bit.ly/HerbetLM](https://bit.ly/HerbetLM)**

of Lotus and digging out all this research. My skill is in coordinating all that research into a book.

**AS What is it about the 1994 season and post-Chapman era Lotus that you like?**

**IM** The 1994 season is a personal thing. I wrote the book because I needed to find the answer for myself. The Lotus book came about because I was helping Neil. He was working on a book but didn't know how to release it. There were all kinds of research that he'd been working on for seven years. I said I'll release this [first Lotus] book as a tester to see if there's an interest and use any profile built up over the 1994 book. This is a bit like a test for future Team Lotus books. Volume one covers 1983 to 1989, the second volume we're planning will likely cover 1990 to the end of the team in early 1995.

**AS Is [co-author] White a Lotus fan, or more focused on the team's decline?**

**IM** White is massively passionate, you'll see that in the design of the book as well because of the illustrations and computer-aided designs of all the amazing Team Lotus cars from the 1980s. The 98T that Ayrton Senna drove in 1986, this is what really got me passionate about the subject. You could see Ayrton Senna's qualifying laps from 1986, where he scored a record number of poles that season. I learned a few stories as well about Senna, both good and bad, during his time at Lotus. For example, at Hockenheim 1987, I didn't know before writing the book, but Senna actually finished that race with his active suspension malfunctioning. He finished on the podium, which I think is possibly one of his best drives ever, knowing that now. It's actually quite pertinent for the Team Lotus story because, essentially, they had active suspension in 1987 before Williams but squandered that advantage.

**AS How has the experience of writing a book changed second time around?**

**IM** I found writing the 1994 book quite natural. It was



Rising debt forced  
Fondmetal out of  
F1 after 19 starts

motorsport  
IMAGES

difficult at first, but it's a bit like exercise. The hardest thing is just forcing yourself outside the door and doing it but, once you start, you gain enthusiasm if you're enjoying the subject. The 1994 book really kind of snowballed. It grew from a quite small project. I was going to self-publish initially and then it grew as soon as the likes of Mark Blundell, Frank Dernie and Willem Toet got involved. This is essentially what the Team Lotus book is hoping to do. The publishing experience is very, very different. We're self-publishing with the second Lotus book. That was a conscious decision because we wanted control to grow at our own pace and control things like the price.

**AS Other than subject matter, will the Lotus book be a departure from the 1994 release?**

**IM** There's a bit more intention to be more controversial within this book. In the 1994 book, one of the big reasons why I didn't self-publish was to get legal protection because it was such a controversial subject with some very powerful figures involved. But with the Lotus book, I can point the finger a bit as to why I feel the team went the way it did towards the latter end of the 1980s.

**INTERVIEW BY GRAHAM KEILLOH**

WHAT'S  
ON

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#### FROM THE ARCHIVE

A huge impact between the Sauber-Ferrari C21 of Nick Heidfeld and Takuma Sato's Jordan-Honda EJ12 violently interrupts the 2002 Austrian

Grand Prix at the A1-Ring. Heidfeld had locked his brakes – still cold from running behind the safety car only moments earlier – and lost control before slamming rearwards into Sato's right-hand sidepod.

Both drivers suffered minor injuries – Prof Sid Watkins described Sato's survival as miraculous – and were kept overnight in hospital, but were cleared to race at the next round in Monaco.



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ESTABLISHED 1950



## The rise of Formula 2 and Formula 3

7 February 1964

The relaunch of the Formula 2 and Formula 3 categories for 1964 after an absence of some years was the foundation for the single-seater ladder we have today. The F2 and F3 names had both been used before, but returned to phase out Formula Junior, which had been producing talent into the top echelons for the previous few seasons.

Autosport's editorial on 7 February 1964 focused primarily on F2 and F3, which, with attractive calendars featuring grand prix circuits, started to draw the attention of many factory teams and strong privateers. Future world champion (and 'Formula Junior expert', as Autosport referred to him) Jochen Rindt was announced as an F2 driver with Brabham, while Piers Courage and Frank Williams were reported to be racing in F3.

Autosport also covered the formation of the Formula 1 Constructors' Association, or FOCA, that week. British teams Brabham, BRM, Cooper

and Lotus were the founding members. FOCA would infamously engage in conflict with governing body FISA in the 1980s, while the natural successor FOTA (Formula 1 Teams' Association) threatened to break away from the world championship in 2009.

The 1964 magazine also announced that Autosport was planning to visit the Indy 500 and then the 200-mile sportscar race at Mosport. The two-week tour was fully outlined, with travel, accommodation and complete itinerary listed, as well as the price – £265 per person!

The main race report centred around the Tasman Series. Bruce McLaren beat Cooper team-mate Timmy Mayer (brother of future McLaren team boss Teddy) by 0.1 seconds at Teretonga New Zealand to secure his third successive win, with Chris Amon (Reg Parnell Lola) and Denny Hulme (Brabham) also in the field.

**CRAIG WOOLLARD**



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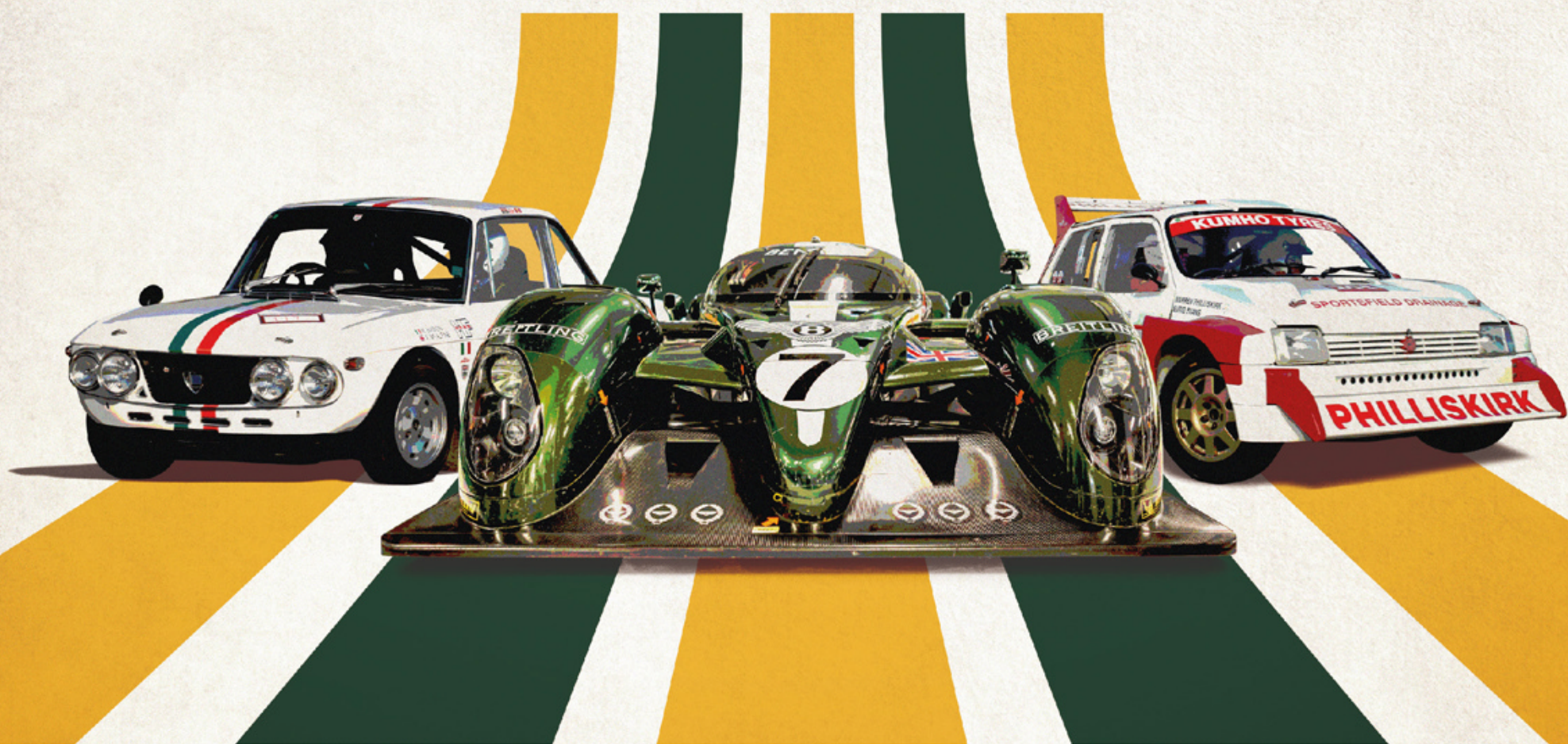
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