F1 The struggle of Britain's first world champion

IndyCar Why Dixon leads the way in new era BTCC How Turkington topped a titanic tussle





Williams picks Russell

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Mercedes protege lands Formula 1 debut for 2019

Team's first full-time Brit since Jenson...

...and why he can be as big as Button

'It's great following in those footsteps, but I need to up my game'

OCTOBER 18 2018

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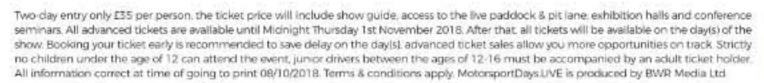
























RUSSELL'S BREAK IN F1 IS ANOTHER BIT OF GREAT NEWS

The last time I wrote this leader while our editor Kevin Turner was taking a few days off, Charles Leclerc and Antonio Giovinazzi had just had their seats with Ferrari and Sauber announced for 2019. Now it's George Russell who has had his graduation confirmed with Williams. Give me a few more weeks, and there won't be a single driver over the age of 25 left on the grid...

Seriously though, Russell's F1 chance is fantastic news. Scott Mitchell interviews George on p14 as part of his feature about what this means for the man who will surely wrap up the Formula 2 title next month. In it, he uses the word 'erudite' to describe Russell, and I couldn't agree more. I'm casting my mind back to the press conference following the first European Formula 3 round of 2016 at Paul Ricard, and Russell — who had finished third — gave an impassioned and articulate speech as he slammed the team orders he'd just seen in front of him that resulted in Lance Stroll winning the race (ironic that he should replace Stroll for his F1 move).

So mature was his reasoning that it was hard to believe that Russell was only just 18. The resulting story caused a storm and, whether or not it was a coincidence, the drivers were hauled in by the FIA for a media-skills course at the next round. This left poor trainer Louise Goodman exasperated at the poor attention span of one nameless individual, who is now a fully fledged pro driver!

Of course, it'll be tough for Russell at Williams, and Edd Straw investigates the team's current painful malaise on p20 in conversation with Paddy Lowe and Claire Williams.

Beyond that, it seems amazing to think that we're already into our season reviews. Matt James and David Malsher, our grizzled gurus of the BTCC and IndyCar, give their verdicts on the 2018 action.







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Motorsport Images/Romney/LAT Gary Hawkins

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ASTON MARTIN COMMITS

DTM

After more than a year of soul-searching, the DTM finished its 2018 season in party mood - a massive crowd turned out last weekend to watch the three-way title decider at Hockenheim, and that followed Thursday's long-anticipated news that the series had attained its holy grail of a new third manufacturer.

Rewind to summer 2017 and the news was bleak. Mercedes had announced its withdrawal effective from the end of '18, and Audi and BMW weren't going to prop up the DTM indefinitely between the two of them. But by June's Hungaroring round, news that an Aston Martin project was gaining traction began surfacing.

The saviour of the DTM is AF Racing, the Swiss team of Florian Kamelger and Andreas Baenziger that runs its race operations under the name of R-Motorsport, which entered the Blancpain Endurance Cup this year with a squad of Aston Martin Vantages. AF has entered into a partnership with former Mercedes works team HWA to build the DTM Vantage, which will make its race debut at some point in 2019 prior to a full assault with four cars in '20.

"The DTM has built up a very strong momentum this year, but the highlight of this momentum is today," glowed DTM chief Gerhard Berger as he sat alongside

Kamelger when they met the press on Friday. "Aston Martin confirmed yesterday to be part of the family, and I'm extremely happy and proud that we could find an agreement with such a luxury brand. It will add a lot of value to our platform."

Kamelger added that what is referred to as the 'internationalisation' of the DTM its common rulebook with Japan's Super GT series that will be finalised by 2020 - was key to the project. "That was one of the base points of the negotiations with Gerhard and the ITR [DTM promoter] for our entry," he said. "For us it's very important to work not just on this market, but to go to Japan, which is an important market for Aston Martin."

But how much of an official team is the Aston DTM effort? Kamelger explained that this is purely an extra branch in the manufacturer's promotional effort in the sport: one is the World Endurance Championship with Prodrive under the Aston Martin Racing banner; one is Formula 1 with Red Bull; and now it's the DTM with R-Motorsport. Kamelger,

"THE DTM HAS BUILT UP MOMENTUM, BUT THE HIGHLIGHT OF THIS IS TODAY"



FOR DTM SALVATION

whose AF Racing is already a partner in the Aston Martin Valkyrie project, said: "We are very proud to be part of that family now, and that Aston Martin trusts us to run its cars in the DTM."

What about the nuts and bolts of the programme? Well, after rumours that the Aston would use the engine from the Super GT Honda, Kamelger confirmed that "it will be a bespoke engine done by our joint venture with HWA". The first race will be "when we are ready. It depends on development and testing possibilities of the cars. We want to be prepared." The number of cars "in the mid-term will be four". And on drivers "we will explore that. We have a couple of people in our mind." Sebastien Buemi, Brendon Hartley, Jean-Eric Vergne, Nicki Thiim and Maxime Martin have been linked with the project in the past - and to that you can add HWA Mercedes DTM star Paul di Resta.

It's probably no coincidence that the good news continued on Friday with the formal announcement that Belgian Blancpain megateam WRT, as we predicted last week, will field a pair of customer Audis — that's two more cars on the grid at a stroke, to add to the six factory RS5s, even if the Aston debut gets delayed.

The calendar was also confirmed. Due to existing contracts expiring and interest from new venues, Zandvoort has made way for Assen, while the Red Bull Ring and Hungaroring have disappeared, and Zolder

– venue of the very first DTM race in 1984

– returns. The reduction to nine rounds is
to make way for the 'match race' in Japan
against the Super GT teams.

The new women-only W Series will support the first six rounds of the DTM, while the current Formula 3 European Championship cars' still-unnamed successor series will adhere entirely to the DTM schedule. This means that the traditional F3 rounds at the Pau Grand Prix, Silverstone and Spa will no longer feature on the schedule, but it does mean a return to Brands Hatch for the first time since 2013, and at least this time it will be on the Grand Prix circuit.

MARCUS SIMMONS

DTM CA	LENDAR	
ROUND	VENUE	DATE
1	Hockenheim (D)	May 4-5
2	Zolder (B)	May 18-19
3	Misano (I)	June 8-9
4	Norisring (D)	July 6-7
5	Assen (NL)	July 20-21
6	Brands Hatch (GB)	Aug 10-11
7	Lausitzring (D)	Aug 24-25
8	Nurburgring (D)	Sept 14-15
9	Hockenheim (D)	October 5-6

HWA enters F3 – and is tipped for F2

FORMULA 2/3

As well as its significant role in the new Aston Martin DTM project and its Formula E entry, HWA will expand into junior single-seaters as a team next year in the inaugural FIA Formula 3 Championship, and it's also strongly tipped to compete in Formula 2.

HWA was one of the 10 teams on the FIA F3 entry list, which has not yet been announced but which Autosport uncovered late last week. "I can only tell you that we are interested in doing F3, but we have not made a final decision yet," said company boss Uli Fritz. "As far as I know there is nothing officially done." And on F2, he added: "This is quite interesting to us, but things need to fit together."

FIA F3 chief Bruno Michel, who takes over the category to replace his GP3 Series, has selected five GP3 teams: ART Grand Prix, Trident, MP Motorsport, Campos Racing and Jenzer Motorsport. Arden International is pulling out of this level of the sport to focus on its other programmes. There is one F2 team, Charouz Racing System, on the list. And this leaves room for only three F3 European Championship teams: Prema Powerteam, Hitech GP and Carlin.

That means there is no room for F3 loyalists Motopark (below) and Van Amersfoort Racing. Motopark principal Timo Rumpfkeil - who has supplied at least 25% of the Euro F3 field throughout 2018 and has run the series runner-ups in the past two seasons is furious about his team's omission. "I would say after Prema we would be the second team in F3," he said, "and I don't know on what basis the others got the entry over us. We have had no reasons given. It's difficult to follow in fact it's not understandable. We have been an integral part of FIA F3. For us not to be able to participate is a very strange decision."

MARCUS SIMMONS





Vandoorne and Wehrlein secure Formula E drives

FORMULA E

Formula 1 refugees Stoffel Vandoorne and Pascal Wehrlein will enter Formula E for its next season with HWA and Mahindra respectively.

While Vandoorne will race alongside newly crowned second-time DTM champion Gary Paffett at the Mercedesaffiliated HWA, Wehrlein's team-mate will be Jerome d'Ambrosio, who joins Mahindra after driving for Dragon Racing over FE's first four seasons.

Autosport understands that Vandoorne impressed HWA during simulation tests. He completed the first two days of FE's official pre-season test, which is taking place at Valencia this week, before travelling to Austin to take part in the US Grand Prix.

Vandoorne paid tribute to McLaren, which has supported him since 2013, saying: "I would like to thank everyone at McLaren for having supported me throughout the last [six] years, starting with the Young Drivers' Programme days, through to my two seasons as a test driver and finally as a Formula 1 driver."

Wehrlein, who reportedly turned down a long-term Mercedes-backed FE seat as he is intent on finding a way back into F1 in the long run, is also making his debut in the electric championship. "I'm very happy to be joining Mahindra," said Wehrlein, who returned to the DTM for 2018 with Mercedes. "It's a small team but with really high ambitions and I have the same high ambitions. I have a feeling the team is the right environment for me."

In other FE news, Swiss capital Bern has been confirmed as Zurich's replacement on the 2018-19 calendar, with a 1.65-mile track — to be built in the city centre to the east of the Aare river — set to host the event on June 22 2019. Santiago's place on the 2018-19 schedule has also been confirmed, with the race moving to a new 14-turn track based in O'Higgins Park in the Chilean capital's centre. Both tracks remain subject to FIA homologation.

F1 sponsor Heineken has entered into a five-year partnership with FE as the series' official beer and cider partner. The company's presence will first be seen at the third round in Santiago, with "substantial pouring, activation and access rights". Sounds good to us!

ALEX KALINAUCKAS

F1, WRC dates set by FIA chiefs

WORLD MOTOR SPORT COUNCIL

The FIA World Motor Sport Council confirmed draft calendars for the 2019 Formula 1 and World Rally Championship seasons in Paris last Friday.

While there are no surprises on the F1 schedule, the WRC goes up from 13 to 14 events for next season. Rally Japan had appeared on WRC Promoter's draft calendar, but since then the Tour de Corse has won a reprieve. The extra rally is a second South American event in Chile, which follows two weeks after Argentina. Japan and Kenya will both run candidate rallies next year with a view to inclusion in 2020.

ROUND	VENUE	DATE
1	Australian Grand Prix (Melbourne)	March 17
2	Bahrain Grand Prix (Sakhir)	March 31
3	Chinese Grand Prix (Shanghai)	April 14
4	Azerbaijan Grand Prix (Baku)	April 28
5	Spanish Grand Prix (Barcelona)	May 12
6	Monaco Grand Prix (Monte Carlo)	May 26
7	Canadian Grand Prix (Montreal)	June 9
8	French Grand Prix (Paul Ricard)	June 23
9	Austrian Grand Prix (Red Bull Ring)	June 30
10	British Grand Prix (Silverstone)	July 1
11	German Grand Prix (Hockenheim)	July 28
12	Hungarian Grand Prix (Budapest)	August
13	Belgian Grand Prix (Spa)	September
14	Italian Grand Prix (Monza)	September
15	Singapore Grand Prix (Marina Bay)	September 22
16	Russian Grand Prix (Sochi)	September 29
17	Japanese Grand Prix (Suzuka)	October 13
18	Mexican Grand Prix (Mexico City)	October 2
19	United States Grand Prix (Austin)	November:
20	Brazilian Grand Prix (Interlagos)	November 1
21	Abu Dhabi Grand Prix (Yas Marina)	December :

ROUND	EVENT	DATE
1	Monte Carlo Rally	January 24-27
2	Rally Sweden	February 14-17
3	Rally Mexico	March 7-10
4	Tour de Corse	March 28-31
5	Rally Argentina	April 25-28
6	Rally Chile	May 9-12
7	Rally Portugal	May 30-June 2
8	Rally Italy	June 13-16
9	Rally Finland	August 1-4
10	Rally Germany	August 22-25
11	Rally Turkey	September 12-15
12	Rally GB	October 3-6
13	Rally Spain	October 24-27
14	Rally Australia	November 14-17



Slowdown for hypercars

WEC

The projected performance of the new breed of hypercar concept prototypes that will come on stream for the 2020-21 World Endurance Championship is being scaled back. The cars will be slower than first announced as the rulemakers continue their drive to create a cost-effective category attractive to both manufacturers and privateers.

The FIA and WEC promoter the Automobile Club de l'Ouest, which are jointly writing the rules, announced on the unveiling of the hypercar concept at the Le Mans 24 Hours in June that they were targeting a season's budget for a two-car factory team of €25-€30million. A revised figure of €20m has been included in what is essentially a prospectus sent to manufacturers in the past week.

The ACO has yet to comment officially on the move, but it is privately confident that it can achieve this target by reducing the projected performance of the cars and with a raft of cost-saving measures. A target qualifying lap time of 3m2os around the 8.46-mile Le Mans circuit, just over five seconds down on Kamui Kobayashi's record pole position for Toyota in 2017, has now been increased to 3m24/25s.

The core principle of the new rulebook involves setting performance targets that cannot be exceeded, such as a maximum downforce level. These targets are now being lowered to reduce design and development costs.

Other measures to help achieve the c20m figure include strict limitations on development over the course of the five-year lifespan of the cars. No testing will be allowed during the non-European leg of the championship from October through to March, and only 10 days in total will be permitted.

The LMP1 replacement category will be a spec-tyre formula. Toyota Motorsport GmbH technical boss Pascal Vasselon, a vocal supporter of the hypercar concept, said that there "would be no logic in allowing tyre development".

Manufacturers developing a car for the new rules will be required to supply full hybrid systems to privateers if requested. A lease of €2m per season for two cars will be laid down in the regulations.

The final rules are scheduled to be signed off at the December meeting of the FIA World Motor Sport Council, and WEC figures are suggesting that the first commitment to the new category could follow before the end of this year.

GARY WATKINS



Ilott and Eriksson set for Macau

MACAU GRAND PRIX

GP3 race winner Callum Ilott and BMW DTM rookie Joel Eriksson will return to Formula 3 to chase glory in next month's Macau Grand Prix.

Ferrari junior Ilott (below) has secured a berth at Carlin, the team with which he contested his debut car-racing season in the Formula 3 European Championship in 2015, while Eriksson is back at Motopark, which carried him to the Euro F3 runner-up slot last year. The duo collided while battling for the lead of last year's Macau GP, putting both out of contention for the win.

"The real appeal is the challenge of the track — I just love it," said Ilott. "It's given me some highs and lows over the last three years; I've kissed the trophies and the walls. It's unique; it can be rewarding, frustrating and even cruel, but when it all comes together a decent lap there is like nothing else. To have won that Saturday race last year, and then not have the closure of the win on Sunday, it's unfinished business."

Newly crowned Formula 3 European champion Mick Schumacher bids to emulate father Michael and uncle Ralf by winning Macau on his second visit. He is joined by his race-winning Prema Powerteam stablemates Marcus Armstrong, Robert Shwartzman, Ralf Aron and Guan Yu Zhou. Other Euro F3 race winners entered are Jehan Daruvala and Sacha Fenestraz (both with Carlin) and Enaam Ahmed (Hitech GP). Meanwhile, last year's doomed-last-corner-win-bid hero Ferdinand Habsburg switches from Carlin to Motopark.

Dominant Japanese F3 champion Sho Tsuboi is entered by TOM'S with team-mate Ritomo Miyata — the only other driver to win in JF3 this year.

MARCUS SIMMONS



Super Swede Lundqvist Secures Challenge Win



Linus Lundqvist Wins 2019 Sunoco Whelen Challenge

Congratulations to Sweden's Linus Lundqvist who has won the 2019 Sunoco Whelen Challenge. The newly crowned 2018 BRDC British F3 Champion is the tenth driver to claim arguably Europe's biggest motorsport prize – a fully funded race seat at the 2019 Rolex 24 At Daytona, courtesy of Whelen Engineering Inc and Anglo American Oil Company Ltd.

The prize - worth an estimated \$250,000 - includes all flights, accommodation, pre-race testing, HRX custom race suit and of course the chance to win one of the world's most prestigious motorsport events - the Rolex 24 At Daytona!

Hall of fame – Sunoco Whelen Challenge



2010 2011 Derek



Ross Johnston Kaiser



2012 Felipe Nasr





2013 Ivan Bellarosa



2014 Bradley Smith



2015 Phil Keen



2016 Jonny

Adam

2017 Seb Morris



2018 Stuart Middleton

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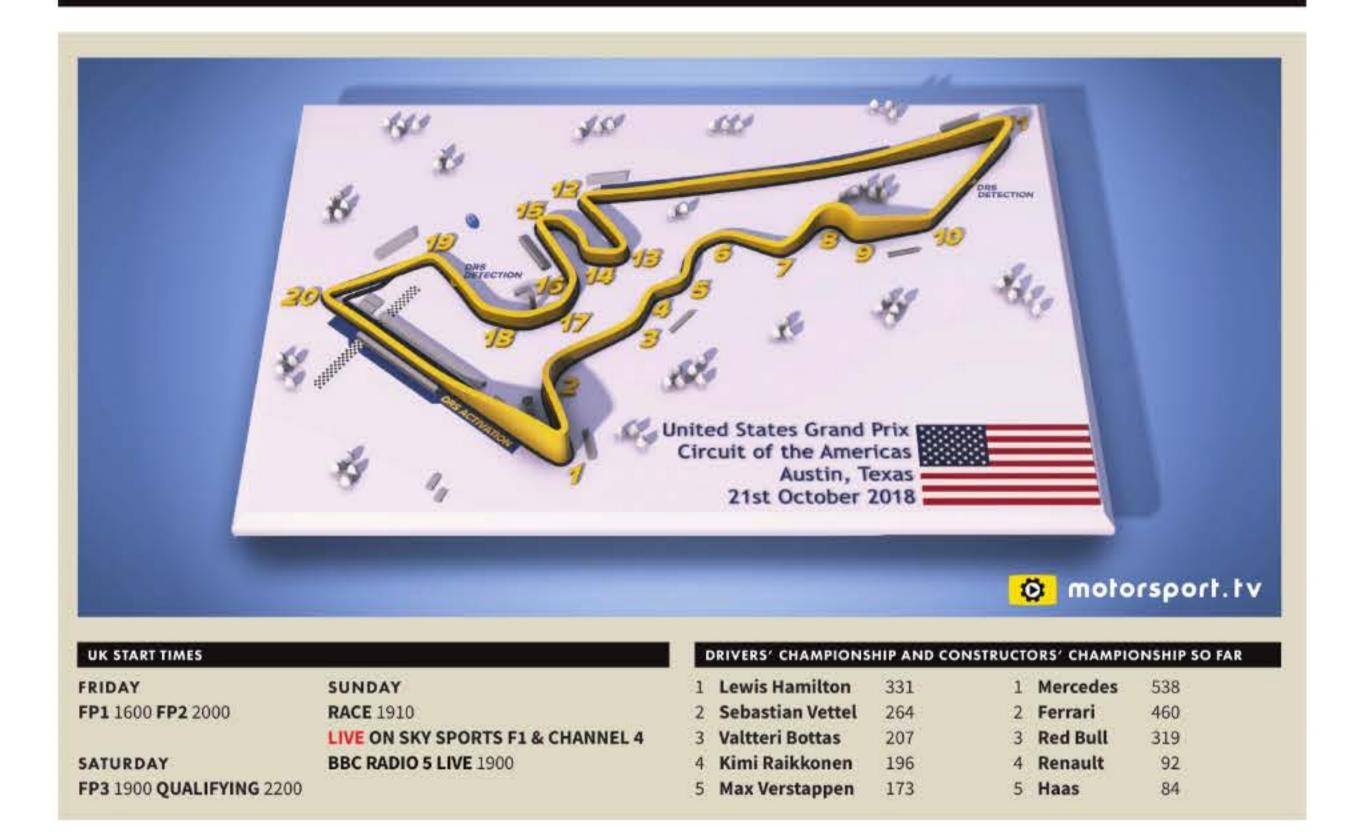
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AVAILABLE

LENGTH 3.426 miles

NUMBER OF LAPS 56

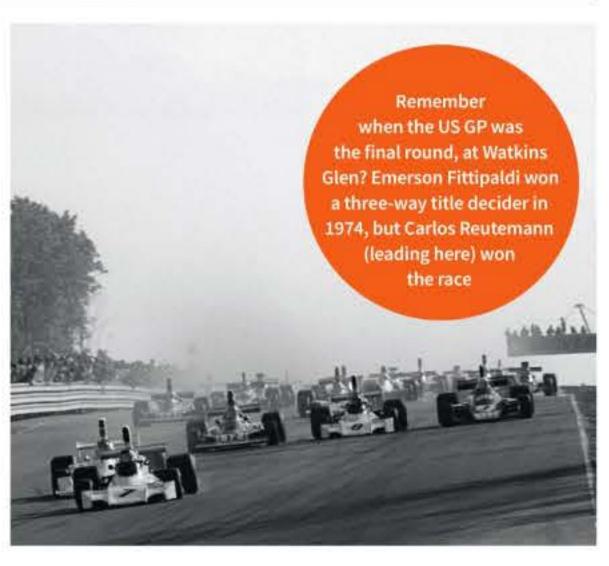
2017 POLE POSITION Lewis Hamilton 1m33.108s

POLE LAP RECORD Lewis Hamilton 1m33.108s (2017)

RACE LAP RECORD Sebastian Vettel 1m37.766s (2017)

PREVIOUS WINNERS

	OOD HINTING	
2017	Lewis Hamilton	Mercedes
2016	Lewis Hamilton	Mercedes
2015	Lewis Hamilton	Mercedes
2014	Lewis Hamilton	Mercedes
2013	Sebastian Vettel	Red Bull
2012	Lewis Hamilton	McLaren
2007	Lewis Hamilton	McLaren
2006	M Schumacher	Ferrari
2005	M Schumacher	Ferrari
2004	M Schumacher	Ferrari



THEMES TO WATCH

HAMILTON'S TITLE SHOT

Lewis Hamilton can become a five-time world champion by outscoring Sebastian Vettel by eight points in Austin. That means if he wins and Vettel is lower than second, the title is done and dusted with three races to spare. Vettel needs to be in the top two to be sure of keeping the race, such as it is, alive to Mexico.

FERRARI MUST STABILISE

The chances of Ferrari setting the pace in Austin given recent form are minimal, but what it can do is show it has regained its equilibrium after some questionable decisions in recent races - notably the absurd gamble on intermediates in Q3 at Suzuka. Ferrari must regroup, and fast.

RENAULT UNDER PRESSURE FOR FOURTH

Renault's objective for this year is to finish fourth in the constructors' championship. It has been on course for that all season, but its performance level has trailed off and it's now under serious pressure from Haas, which is only eight points behind.

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SUBJUGATE TO DOMINATE

The unofficial 'Class B' battle in F1 has provided plenty of entertainment this season, but it's only a happy by-product of the inequality that is quashing competition

EDD STRAW



mid Formula 1's ongoing soul-searching, you could argue that it simply needs to start looking within itself for a pathway for the future. F1's 'Class B', comprising the seven teams not way out front, has been enormously competitive this year.

Six of those seven teams have 'won' races, the exception being Williams, and half a dozen drivers are still in title contention. Currently, Nico Hulkenberg leads the championship with 193 points, six ahead of Sergio Perez, with the top five covered by just 16 points — and Fernando Alonso is hanging on in there 37 points down. So is this F1's template? Simply curb the spending of the big three teams, bring them back to the rest and you'll replicate that competition at the front?

While 2018's 'Class B' championship looks like a blueprint for the show F1 is chasing, it's a mirage because of the nature of the different teams. Renault isn't a true Class B squad as it has invested and expanded rapidly, and by rights over the coming years should break away from the pack and turn the big three into a big four.

Haas is effectively propped up by Ferrari, quite legitimately taking what parts are permitted by the regulations and even using its bigbrother team's windtunnel (albeit in a programme that must be

"THIS DESTRUCTIVE EXAMPLE OF COMPETITION HAS BECOME ENSHRINED IN TWO-TIER F1"

entirely separate from Ferrari's own). It's the logical, perhaps only, way for a start-up to perform creditably in F1. Likewise, Sauber is increasingly moving in that direction. While stopping short of the Haas model, it uses the Ferrari engine package and gearbox, and is very much in Ferrari's sphere of influence.

The Racing Point Force India team is in a state of flux. Mercedesaffiliated, albeit in a far less potent way, it is receiving serious
cash injections and there are aspirations to make it a frontrunner
through prodigious shareholder investment. Contrast that with
Williams, which is operating tightly as a business and, despite
its struggles, is a going concern without the ability to squander
too much money — or the assistance gained from writing off
debts thanks to being reborn as a new team.

In between the two is McLaren. Like Williams it's an independent team. It has very loose links to Renault through its engine supply, it has relied on serious cash injections from its stakeholders to allow it to part company with Honda and, in the coming years, rebuild. Toro Rosso, meanwhile, is owned by Red Bull and acts as a driver training ground — and, this year, engine proving ground.

Smaller teams aligning themselves with the grandees was once unheard of, certainly once the days of customer cars ended, and has its roots in Force India striking a technical alliance with McLaren-Mercedes for 2009. It's hard to see it now given the landscape, but this was a big story at the time: Force India had not only the Mercedes engine, but also the McLaren gearbox. While it made financial sense for McLaren, it was difficult to come to terms with for those inside the team. Others quickly caught on. Caterham and Manor formed their own affiliations, and that built to the current situation where Haas entered F1 facilitated by Ferrari's existence by producing only the requisite 'listed parts' required to be considered as a constructor.

F1 was built on competition, and on-track and technically needs to get back to that. Ironically, this destructive example of competition — of chasing the best financial deal — has become enshrined in this two-tier system in grand prix racing. It has become a self-sustaining closed loop.

Legitimately, there are concerns about affiliated teams becoming servant teams. Previously, these might just amount to being a voting block when trying to manipulate F1's decision making, but they could now actively become the enemy of attempts to clamp down on big-team spending. Restricted in how much power-unit analysis you can do at Ferrari? Well, just get Sauber and Haas to do it.

Many of these teams are dependent on the big squads for their very existence, and will inevitably be well-served to maintain their close connections. They can then, because of this pragmatism, end up being the agents for their own subjugation in the midfield.

This is about far more than simply the inequitable share of F1's revenue among the teams. It's about locking in a two-tier system that will remain even if the big teams do get pulled back. Limiting spending is one thing, but income is also the problem.

Ferrari already gets an inequitable share of the revenue simply for being Ferrari, which means that regardless of where it finishes in the championship it coins in a hefty 'long-standing team' payment and a 'constructors' championship bonus' for its historic success. That's worth over \$100m — more than the rank and file would get for winning the championship. Meritocracy? Hardly.

Mercedes, Red Bull and McLaren also receive constructors' championship bonuses, while Williams gets \$10m simply for being Williams. So even among the Class B teams, inequality is locked in.

F1's biggest problem is the commercial agreements, and that's proved no more than by looking at the incredible battle for the Class B title. Only if this is tackled in harness with technical and sporting regulation changes will the show' live up to expectations. **



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Every other major series has refuelling of some sort. We don't need the massive refuelling rigs of the past. NASCAR uses a tank held by a mechanic

STEVE DI MARTINO

Call for the return of Formula 1 refuelling

I'm writing to discuss the predictability of modern F1. There is no strategy available for a team to upset the polesitter winning. Yes, a safety car can shake things up, but also can mean a driver is injured or worse. The only tactic is when to change tyres. If you look at how many winners came from poor qualifiers since refuelling was abandoned, it is strikingly small.

Every other major series has refuelling of some sort. We don't need the massive refuelling rigs of the past. NASCAR (right) uses a tank held by a mechanic. A slower, safer refuelling method will also increase pitstop times and allow more strategic pitting.

I'm also bored with cars that wallow with full fuel tanks at the beginning of the race, or procession to be more correct. My suggestion is simple. Maximise the fuel cell at 40kg. This will force all races to be two-stoppers since the cars are designed to use 100kg per race. Then a car that qualified fifth, say, can start with 20kg and be faster than a car ahead that has 40kg.

I remember when refuelling was allowed, one of the major issues discussed during the race was the fuel level of the cars. Was he light to build up a lead, or heavy to go longer? In those days, the fastest lap could come during any phase of the race; now it is almost always in the last few laps.

Steve di Martino By email

Kudos to Channel 5 for its rallying coverage

While it might not be quite *Top Gear Rally Report*, I think Channel 5 needs praise for its Rally GB coverage. It had highlights of Friday and Saturday stages, and live coverage of the finish on Sunday. It has also provided one-hour highlights from all the other WRC rounds.

Nick Morgan Bath, Somerset

Blue-flag ban could cause even more trouble

So many people have recently expressed their views on the subject of blue flags, both for and against. Has anyone (including the 'experts') considered that a ban on blue flags could have an



even bigger negative effect on racing than the current situation?

Let's say a battle for the lead between a Mercedes and Ferrari comes up to lap a Haas, Williams, Sauber or Force India. The backmarker could quite conceivably let one car slip past while holding up the other, depending on which badge is displayed on their engine cover. How will that improve the show?

Matt Densham Lowestoft, Suffolk

From W Series to Formula 1?

With the announcement that a new series for female racers is to take place next year, will these racers then go on to become the drivers of the third cars for the F1 teams?

Nick Smith Dorset

Correction

JJ Lehto's Pacific Reynard had a Toyota engine in 1988, not a Mugen as stated in the Martin Donnelly retrospective in last week's Performance supplement.

HAVE YOUR SAY, GET IN TOUCH

Autosport editorial

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WTHORN: BRITAIN'S FIRST WORLD CHAMPION FORMULA 1'S SLOWEST TEAM . BTCC REVIEW RUSSELL JOINS WILLIAMS REVIEW . MIKE INDYCAR





WHY RUSSELL IS THE IDEAL DRIVER FOR WILLIAMS

George Russell will step up to Formula 1 next season, becoming the first full-time Brit at Williams since Jenson Button in 2000. The Formula 2 title favourite has what it takes to make as much of a success of F1 as the 2009 world champion

SCOTT MITCHELL



COVER STORY GEORGE RUSSELL

hen Jenson Button made his Formula 1 debut with Williams in 2000 it would have been tough to predict the long, difficult road the team would tread before fielding another British driver full-time. By the time George Russell starts a grand prix for the first time, almost two

decades will have passed since Button got his big break. F1 is a very different place now, and Williams a very different prospect for a young driver.

Williams's only homegrown talent since Button has been Paul di Resta, who made an unexpected appearance in the 2017 Hungarian Grand Prix substituting for Felipe Massa. Russell bears a few striking similarities to Button and, much like making the link to Lewis Hamilton when Lando Norris signed for McLaren, it's very tempting to draw parallels. Like Button, the erudite Russell is a confident young man, he has major junior success on his CV, and will be barely out of his teens by the time he lines up on the grid.

But unlike Button in 2000, Russell will need to be patient to make a sizeable impact in F1. Williams had endured a winless couple of seasons after its title successes in 1996 and '97 when Button arrived on the scene, but it was still a podium-finishing force and about to embark on its racewinning BMW years. Its newest Brit is joining the team at a time when points are a rare commodity and the podium feels a long, long way off.

"Jenson went on to make a great career and a great name for himself," says Russell. "Following in those footsteps gives me a good feeling, but I can't sit back and relax. F1 is a ruthless sport and I need to up my game and work extremely hard to compete and strive to be the best possible."

It's a very George Russell take. He is self-critical almost to a fault, but this has helped him overcome a slightly stuttering couple of years in European Formula 3 - hardly disappointing, given he won races, but a blip in the context of what looks like being three titles in five years of racing.

Russell's commitment to the cause stands him in good stead ahead of his F1 chance. He, like Williams, is aware that 2018 has been a bad year for the team and a low point in its history. It is the slowest team on the grid thanks to its overhauled FW41 car concept, will lose title sponsor Martini at the end of the year, and has been bombarded with criticism for fielding Lance Stroll and Sergey Sirotkin together this season and, the allegation goes, putting money above performance.

Williams knows things need to change and Russell, fresh with the enthusiasm of an incoming F1 debutant, is excited to be a part of that.

"It's hugely motivating," he says. "From a personal point of view it's almost the perfect time to get this opportunity to really show myself not only as a quick driver, but somebody who can lead the team and progress further forward. It's a huge privilege to be part of Williams. It has a huge amount of success and history. It's no secret it's been a difficult season for them this year, but there's lots of things taking place at Williams to try to improve their future and I really hope I can be part of that journey."

Russell's on-track record speaks for itself, but there's more to the

"RUSSELL, LIKE WILLIAMS, IS AWARE THAT 2018 HAS BEEN A LOW POINT IN THE TEAM'S HISTORY"

youngster that makes this deal a major coup for Williams. Signing the (expected) 2018 Formula 2 champion is a throwback to what feels like an old-fashioned attitude of just going for the best driver available. Williams has always vehemently denied the pay-driver accusations it has faced with its Stroll-Sirotkin line-up, but the fact is they are drivers whose budget makes up for what their CVs lack. There is nothing wrong with signing a European Formula 3 champion and a GP2 race winner, but Russell is something else: he's in another echelon to those two and probably the most exciting junior driver outside of F1.

It's a statement of intent to identify a proper talent and get him on the books. And Russell will be a proper Williams driver. He maintains a faint Mercedes link, having been backed by the manufacturer since 2017, and there will be scepticism given Williams needs funding and uses Mercedes engines, but this appears to be a straight signing.

Modern F1 does not work commercially if a manufacturer hands >>



























McLAREN AUTOSPORT BRDC AWARD TEST 2014

FIRST SIGNS OF WHAT MAKES RUSSELL SO SPECIAL

"In the time we have spent with him so far, we believe that he will be a great fit for our team," said Claire Williams in announcing George Russell as one of her drivers for the 2019 Formula 1 season, "His commitment, passion and dedication is exactly what we need to drive the positive momentum building at Grove as we focus on the future."

Those words will not come as a surprise to anyone who was part of the small group of people present for the McLaren Autosport BRDC Award test days at Silverstone in 2014. Then, Russell gave more than just a glimpse of the on and off-track attributes that have since marked

him out as one of the most exciting talents around.

The Award evaluation is a tough process and Russell faced tough opposition four years ago: his current Formula 2 title rival Alexander Albon; Formula Renault Northern European Cup frontrunners Morris; fellow BRDC F4 racer Sennan Fielding; and British Formula Ford runner-up Harrison Scott, Across MotorSport Vision F2, McLaren GT and Mercedes DTM machinery, Russell made the decision quite easy.

Immediate one-lap Ben Barnicoat and Seb pace is difficult to produce in such circumstances, but Russell did exactly that across all three cars. Particularly impressive was his ability to turn a hot lap straight out of the box on a new-tyre run in the Mercedes that was so good

MOTORSPORT IMAGES/GRIFFITHS/LAT Russell impressed in and out of MSV F2 car

it didn't matter that the car stopped on the following lap and limited his running!

Even more impressive was Russell's demeanour off-track. He was the youngest finalist in the Award's history at the time, and became the youngest winner as a result. Debriefing with him, you would not know it. He was very intricate in his feedback but able to do so without labouring the point. That has since emerged as one of Russell's strongest traits: an ability to dial into the finer details without getting too bogged down. He's an intense, determined character as Williams says, perfect for the revival the team is seeking to produce.

out free or discounted engines for the sake of running a young driver. Mercedes F1 boss Toto Wolff has made it clear that the company is not willing to pay teams to field its youngsters, and introducing an engine component into any Williams/Russell deal would be the same thing. Also, judge the recent history: Williams has been a Mercedes customer since 2014 and has never run one of its juniors. Force India did, but when it collapsed into administration it emerged that it owed Mercedes money why would that be the case if it was getting them free for running Esteban Ocon? Why would Mercedes have forked out to make Williams release Valtteri Bottas for 2017, and why would Williams have re-signed Felipe Massa instead of taking Mercedes junior Pascal Wehrlein?

For further evidence of the Russell-Williams alliance being independently formed, consider that Russell triggered the conversation back in July." My first contact with them was about two weeks before Hockenheim," says Russell. "I had a phone call with Paddy [Lowe] and I told him, I want to be in Formula 1 next season and I want to be in a Williams. Can we have a meeting with you and Claire [Williams] and discuss the matter further?' - that was the point I knew things were moving in F1 and I needed to get in there before I missed an opportunity.

"I always feel it's better off coming from the horse's mouth rather than the likes of Toto or whoever from Mercedes making that point of contact for me. As I knew Paddy from when he was at Mercedes, we had a bit of a relationship prior to that so I was more than comfortable picking up the phone with him and arranging to meet him and Claire."

That story is also an example of Russell's assertive nature. It would be unfair to call him arrogant, but he is forthright and extremely driven, and this is a trait that will feed into boosting the Williams revival.

Russell can afford to gamble his 2019 season on the team making progress, even if it doesn't mean a rapid ascent in the competitive order. If there is no major step and the team remains at the foot of the times, or thereabouts, Russell still has plenty to gain in experience alone.

Whatever Williams does next season, this is win-win for Russell if he can produce. Proving yourself in a bad car is a great way to impress

potential suitors but, if Williams makes the improvement it is hoping for, then Russell can go even further and mix it with more established drivers. There is no real downside.

That is just reward for a driver who was beaten to confirming a 2019 F1 seat by Norris, despite defeating the McLaren signing in F2. How the two British hotshot rookies get on as part of their respective fallen giants'revivals will be one of the great subplots next season.

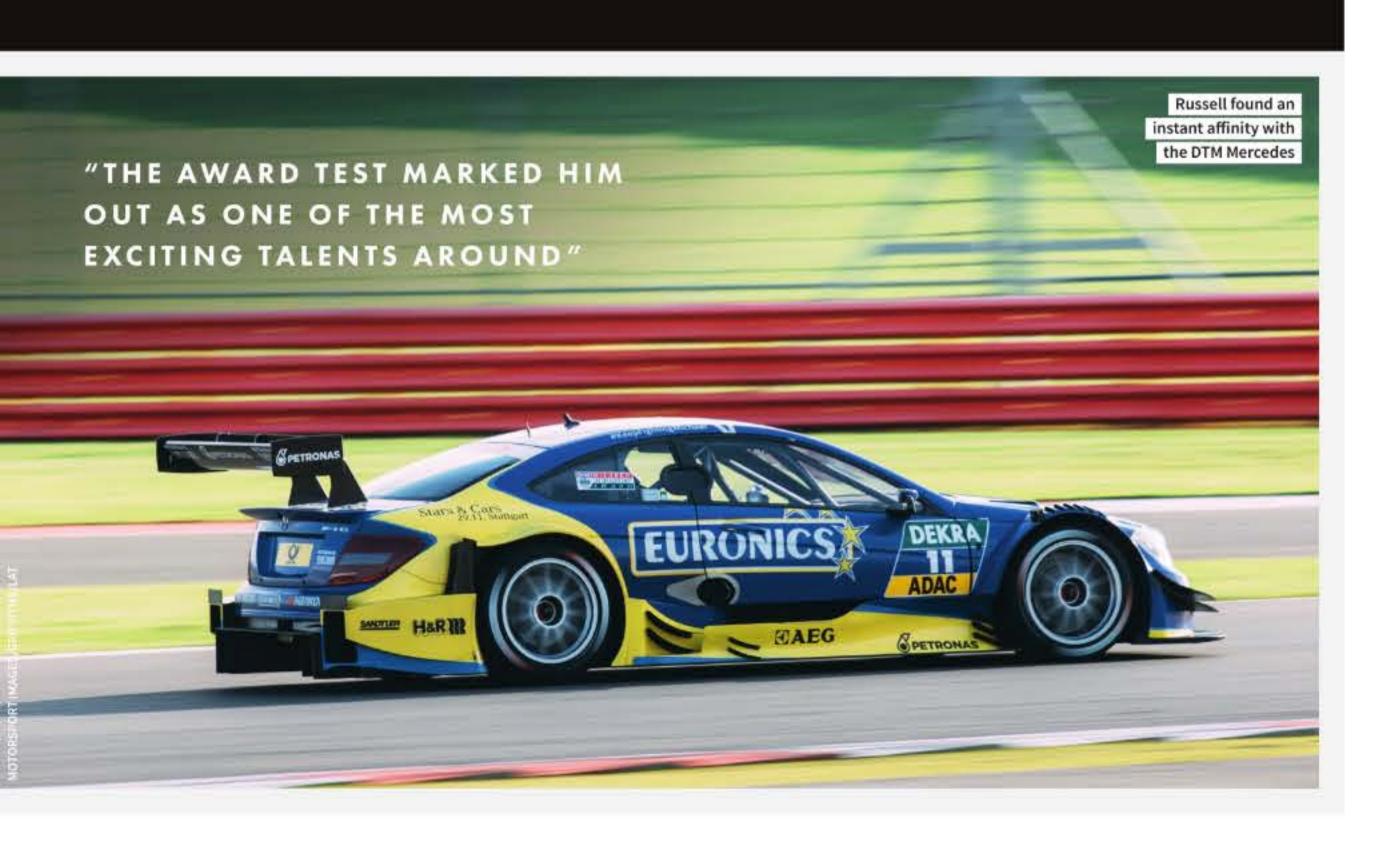
"I saw it as a massive positive to be honest when Lando got his opportunity with McLaren," says Russell. "We're both [F2] rookies, McLaren believes he is capable of taking a race seat - that must bode very well for me. I wasn't bitter or disappointed he had that opportunity before me because at that point I was unsure what the future held. But I saw that as a positive, that this made me look extremely good."

The other element Russell had to survive was the turbulent driver market that claimed fellow Mercedes protege Ocon as a victim. For a time, it looked like neither would be on the grid - for the same financial reasons as mentioned earlier, there were rumours that Williams could take an all-Russian line-up in Sirotkin and Artem Markelov. While Ocon watched deal after deal fall apart, Mercedes stayed silent on Russell's future. He became the Schrodinger's cat of the F1 driver market: simultaneously never in or out of any frame.

"Mercedes and Toto were absolutely clear that if I performed, the opportunity would come," says Russell. "That impressed in my mind. It might sound a bit silly saying that off the back of Esteban's predicament but that was a very bizarre situation, a very unfortunate situation."

Now Russell is clear of any such misfortune with an opportunity to build on an immensely impressive two years. He holds a 37-point lead with 48 available in next month's Abu Dhabi finale, and clinching the title will give Russell back-to-back GP3 and F2 successes prior to his F1 debut.

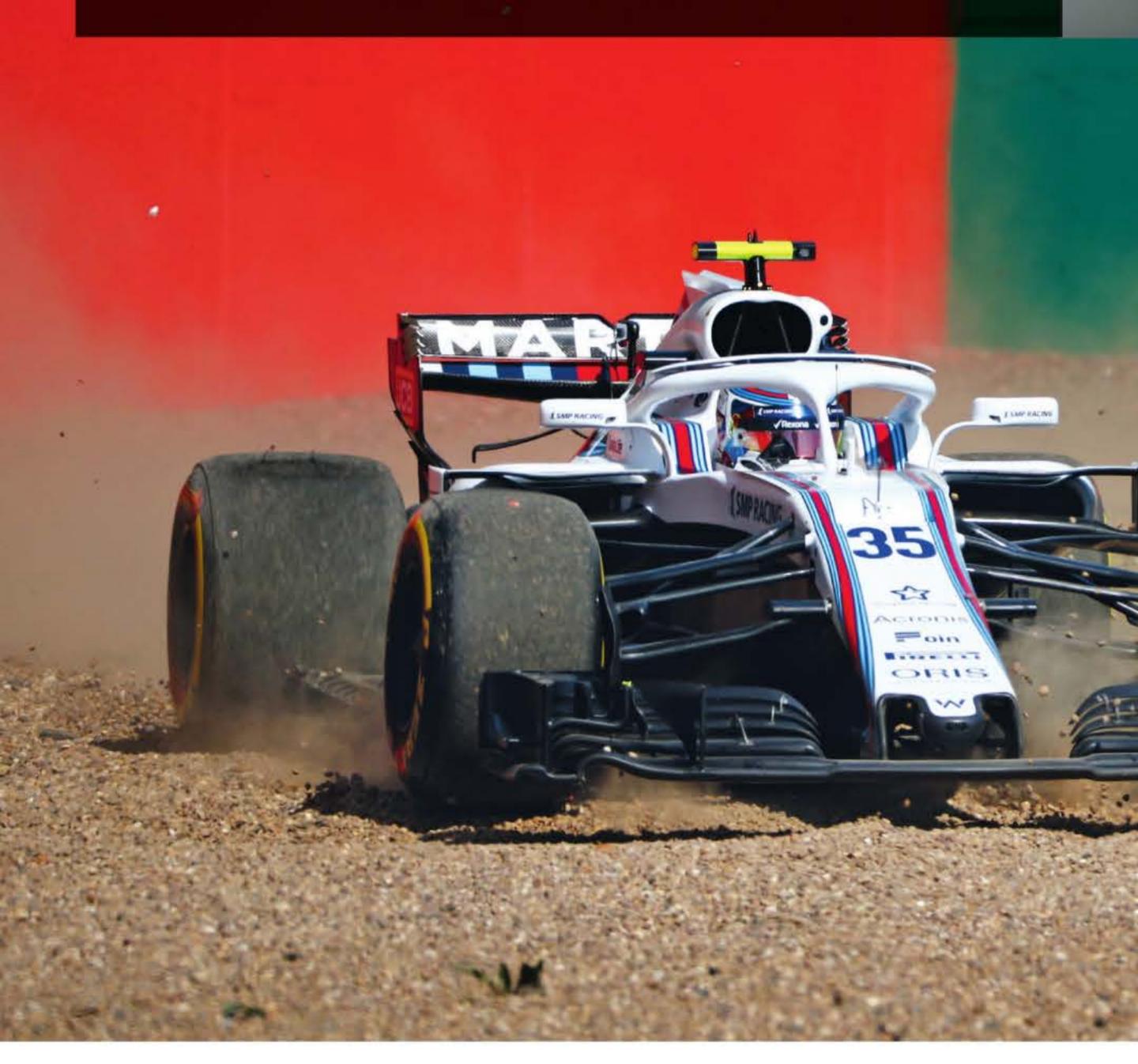
That rare feat has only been achieved on the F1 support bill before by Charles Leclerc, who will race for Ferrari in F1 next season after a stunning rookie campaign with Sauber. There is little reason to doubt Russell's ability to continue to emulate Leclerc's story arc on the main stage. At

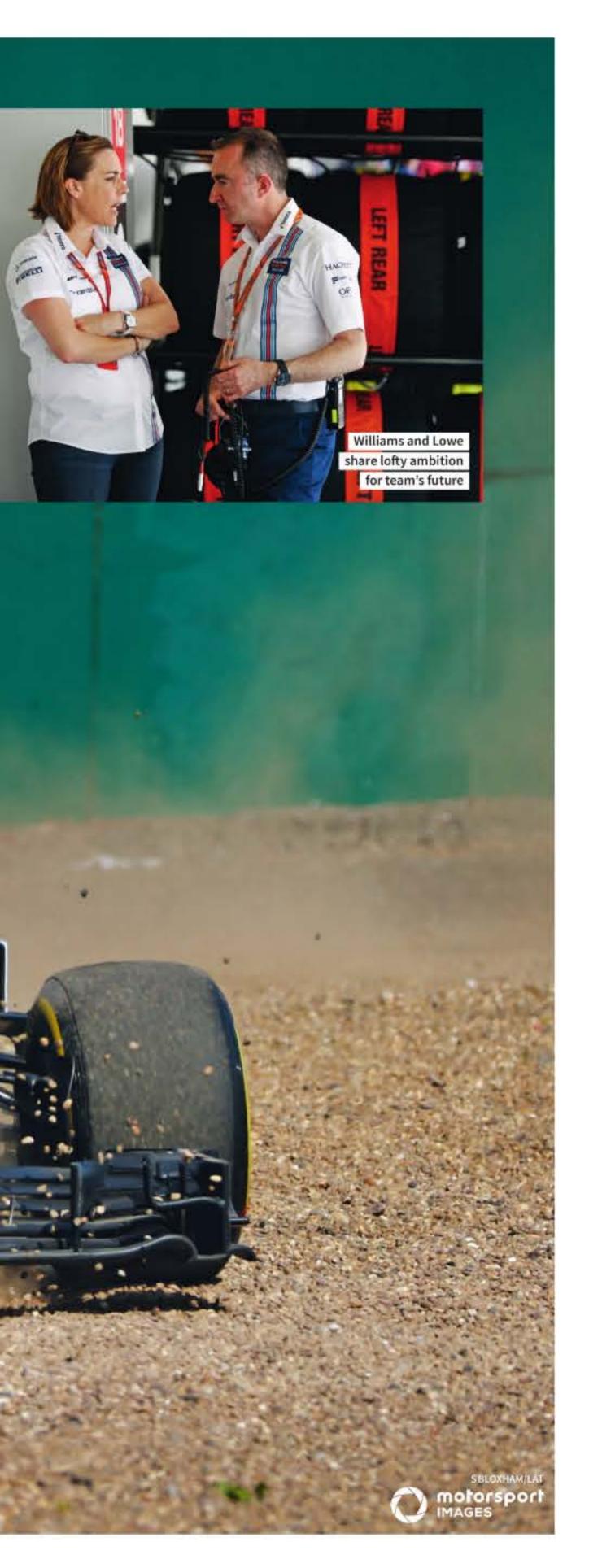


WHY WILLIAMS IS F1 2018'S SLOWEST TEAM

Pre-season optimism swiftly evaporated as one of grand prix racing's great names slumped to the back of the field. At least the only way is up...

EDD STRAW





t's official: Williams has never been slower. Its pace deficit is bigger than it has been since becoming a constructor in 1978. To put a number on it, Williams is on average 3.614% off the pace over this season, equating to three and a quarter seconds around a 1m30s lap. That's almost as slow as it was in its first season, when the nascent team ran an off-the-peg March for pay driver Patrick Neve and failed to qualify on three occasions. For a team as illustrious as Williams, that's dismal.

This lack of pace means Williams is cast adrift, far enough off the back of the very congested midfield to have little chance of scoring points without making further gains. It has only scored in two races in 2018, the first being Lance Stroll's eighth place in the Azerbaijan Grand Prix at Baku, a circuit of long straights and short, sharp 90-degree corners that did not expose the aerodynamic weaknesses of the FW41 as dramatically as others. At Monza in September, where downforce is least influential, Stroll and Sergey Sirotkin took ninth and 10th. Even so, Williams is certain to finish last in the constructors' championship for the first time.

For a season that started amid tremendous optimism, with a car that chief technical officer Paddy Lowe expected to deliver a "step change" in the team's performance, it's been a devastating campaign that offers few obvious reasons for cheer and completes the slump from the strong campaigns in the first two years of the turbo-hybrid era, in 2014-15, to the back.

"We came in last year with, compared to where we are now, a pretty good car, but we felt that it was not a great car," says Lowe. "We were two seconds off the front. What would we have to do to jump that gap? Quite a lot of change was introduced, and some of it quite ambitious. The programme was quite late because of that; there was a lot of stress in the system even to put the car together. Then a number of those more radical design changes didn't really work for us.

"On top of that, we've slipped back competitively because of some of our processes; perhaps things that we'd lost our way with some years back have started to become more critical. In some ways, it's the perfect storm of things not working as they should have done and having bigger consequences this year than anybody expected."

Lowe points to the aggressively undercut sidepods, effectively what's known as a 'twin-floor' concept, as one such radical misstep. He won't go into detail, but it's clear the idea hasn't worked. This is one example of the mistakes that have led to a car that had a diffuser-stall problem and that still suffers from corner-entry instability — albeit in a form dramatically mitigated from the start of the year.

"THE PROGRAMME WAS QUITE LATE AND THERE WAS A LOT OF STRESS EVEN TO PUT THE CAR TOGETHER"

Lowe, used to working with F1's big teams, has tried to oversee the production of a car of frontrunning detail and complexity at a team that isn't yet ready for it. And he has quickly recognised that and started to work on improving the foundations required for such a car to be made.

While there have been such errors, the bottom line is that downforce is the overwhelming performance differentiator for F1 cars. Given Williams has performed at its best at Baku and Monza, and was at its least competitive at heavily aero-dependent Barcelona, it's clear that the FW41's key weakness is aerodynamics. There have been changes in that area, with former Renault and Ferrari man Dirk de Beer departing, leading to Dave Wheater taking over as head of aero and Doug McKiernan overseeing the aerodynamic and design direction of the car under Lowe. But even more important will be studying and understanding the research and development >>>

INSIGHT WILLIAMS WOES

approaches in both windtunnel and CFD testing.

Gathering data is the easy bit, but it doesn't give you the answers. They lie in the way you analyse and interpret, which for the top teams is founded in huge amounts of research and knowledge built up over the years. Williams, in common with that other fallen giant McLaren (which at least can remember its glory years more clearly), is lacking in that area. And with every passing year, it falls further behind the massively well-resourced superteams at the front.

The aero department is not the only part of the team that has played its part in the team's struggles — these things are all interconnected — but downforce remains the key to performance. And it impacts other areas; more downforce, for example, makes it far easier to work the tyres properly.

"There's no single thing — there are a whole lot of things we need to be better at, but most of them are aerodynamic in the same way that most of the performance differences on the grid are aerodynamic," says Lowe. "I think that's pretty evident when you see the leaders all on different engines, and the midfield. We're not divided on the basis of engines, it's mostly aerodynamics. We've got a lot of catching up to do on that subject."

In the V6-turbo-hybrid era, the start of the seven-year Mercedes engine-supply deal helped Williams jump to near the front under the technical leadership of Pat Symonds, only to slide back gradually. Again, Williams had a strong engine, but a car that wasn't quite as good aerodynamically as it looked. The idea then was that the strong performance would allow the team to strengthen in that area, which has not happened for many reasons.

It all adds up to a team looking very closely at itself, and according to deputy team principal Claire Williams it's responding well.

"We have had a terrible year to date," says Williams. "It's not where any of us thought we would be, expected to be, hoped to be. It came as a shock to us, but we have done a good job of galvanising internally. From the outside, you don't necessarily see the work that is going on behind the scenes in an F1 team to try to turn things around and, unfortunately, doing that is not the work of a moment."

Realistically, we won't be able to judge the progress of the changes in process made as a result of this year's problems until next season, because many of the limitations are locked into the design of the 2018 car. This season has been one to endure, rather than enjoy.

There's no question that some of the problems Williams has encountered were easily avoidable. But the big risk of what could be termed an aggressive car that's designed to be a dramatic step is you never know what underlying weaknesses you may expose. In the case of Williams, it seems to have exposed many.

An example of this came at Silverstone during July's British GP weekend, where a new rear wing was introduced that led to a serious stalling problem after the DRS was closed. This caused both Stroll and Sirotkin to go off in qualifying. For the race, Williams reverted to an older-specification floor and rear wing, but analysis indicated that the rear wing wasn't the problem. It was simply that the interaction of the DRS closing and some fences introduced on the diffuser led to the stall. A lesson learned.

"Sometimes random, sometimes completely out of your control or knowledge," says Lowe of what may be termed unpredictable problems, for the knowledge level of the team. "I've always tried to stay humble around the times that I've been fortunate to be in successful teams because it would be too easy to get arrogant about the great car you've put together and how brilliant you are. Actually, there's still so much we don't understand and that can go our way without us understanding why that is. Equally, it can go the other way.

"You have to be careful and understand things like tyres and aerodynamics, which are very, very complicated subjects. We learn more and more every year about both of those topics. If you jump back 10 years, you'd be shocked at how much we know now. You built cars that were good on tyres and aerodynamics but some of that was just good luck."

Claire Williams also talks about the challenge of evolving the company culture. This has led to some changes within the Grove



factory that both Williams and Lowe cite as beneficial. While such things may sound trivial, they can have far greater impact than endlessly changing around the senior personnel.

"Of course, it's about people collaborating and talking," says Williams. "One really nice example is all our aerodynamicists were based in the windtunnel [separate from the main building at the Williams base at Grove]. "The collaboration was hardly there because you had to walk a mile and people don't pick up the phone anymore. Now, we have totally redesigned the first floor of the main building and all our aerodynamicists are set in a huge open-plan office with the design office, with Paddy and Doug sitting right in the middle.

"Things like that, from a cultural perspective, send a really positive message. We've got people coming out to the track that have worked for us for 27 years and yet had never been. The association, the emotional connection they have with the car, is necessary."

The big concern is the impact this current slump could have on the team's financial health. While Williams is stronger than it was 15 years ago, when it had to go through a taxing period



"BUDGET IS A VERY BIG CONSTRAINT ON THE TEAM, AS ON ALL INDEPENDENT TEAMS"

of financial retrenchment after parting company with BMW and title sponsor HP, the situation does not allow devil-maycare spending. Doubly so given that Stroll and his backing will switch to Force India next year, albeit a situation ameliorated by Mercedes-contracted George Russell coming in and the likelihood of Sirotkin and his SMP backing remaining.

"Budget is a very big constraint on the team, as on all the independent teams," says Lowe. "We've seen that with Force India. We have great challenges around putting together the right budget to compete and we have to be very efficient with what we have. It requires us to make compromises in different directions.

"I wouldn't be surprised if these are some of the most difficult >>



times for an independent team like Williams in terms of financing because of the way the sport is. The nature of the [financial] distribution at the moment has made it particularly challenging."

For Williams to get back to the sharp end of the midfield is a very realistic goal. That could conceivably be done in one move with the 2019 car — although it would have to be a big step to do that so quickly. But when it comes to breaking into the frontrunning teams, that's a completely different question.

Williams does not lack ambition, and this is the aim. But either it must be transformed with a vast influx of resources, or the F1 landscape will have to change spectacularly. Either is possible, but both feel like a stretch right now.

Williams is a racing team that exists to win and Lowe has gone there intent on taking it back to the front. "We think of ourselves as contenders for championships because that's what we've done and we'd never want to let go of that and become a making-up-the-numbers team," says Lowe. "We have the ambition to get there. It will be a long haul, but that is absolutely the reason for the existence of the team. Frank [Williams] set it up that way and Claire continues it that way, so that's where we are headed."

For that statement to seem anything more than bluster, we need to see the following things from Williams. First, for the small aero steps made before the break to continue over the season. It doesn't need to be consistently in the top 10, but the gap needs to close.

Second, we need to see evidence next year that Williams has re-established itself as, at least, a solid midfield team.

Third, we need to see it continuing to climb the order and, in whatever form F1 takes down the line, not giving anything away to the big guns in terms of resources and facilities.

Those are big asks, and each step is exponentially harder than the previous one. And Williams faces a huge task. Its position

"WE THINK OF OURSELVES AS TITLE CONTENDERS BECAUSE THAT'S WHAT WE'VE DONE"



is worse than that of McLaren, which is struggling badly but is starting from a higher baseline, while to progress Williams must also overcome teams like Haas that are smaller but stand on the shoulders of giants such as Ferrari.

Realistically, it's difficult right now to see Williams returning to the glory days — although if the 2021 regulations tackle key problems like the uneven distribution of wealth to teams (unlikely), that could change. But perhaps rather than thinking of it as a return, it's time to regard Williams more as an emerging team on the up. That's part of the culture change that's perhaps required. Its illustrious history is a wonderful facet of the team, but history doesn't get you results.

Williams has hit rock bottom. And what it does now, in the worst of times, is what will decide if it recovers, how far it can go and — in the more distant future — whether it can ever hope to contend for championships again. **

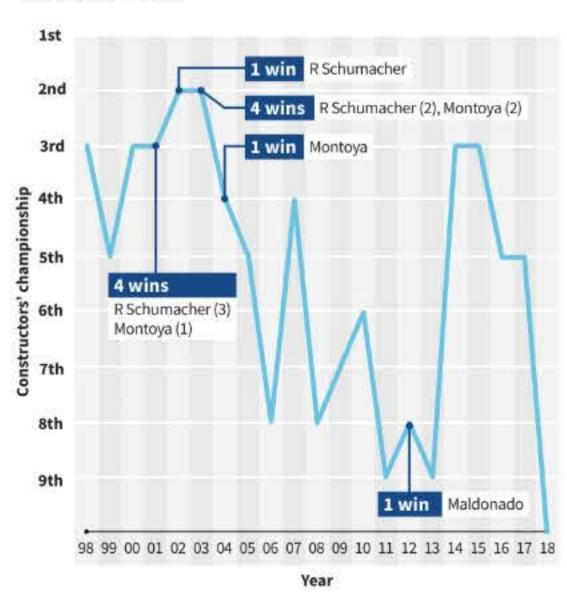


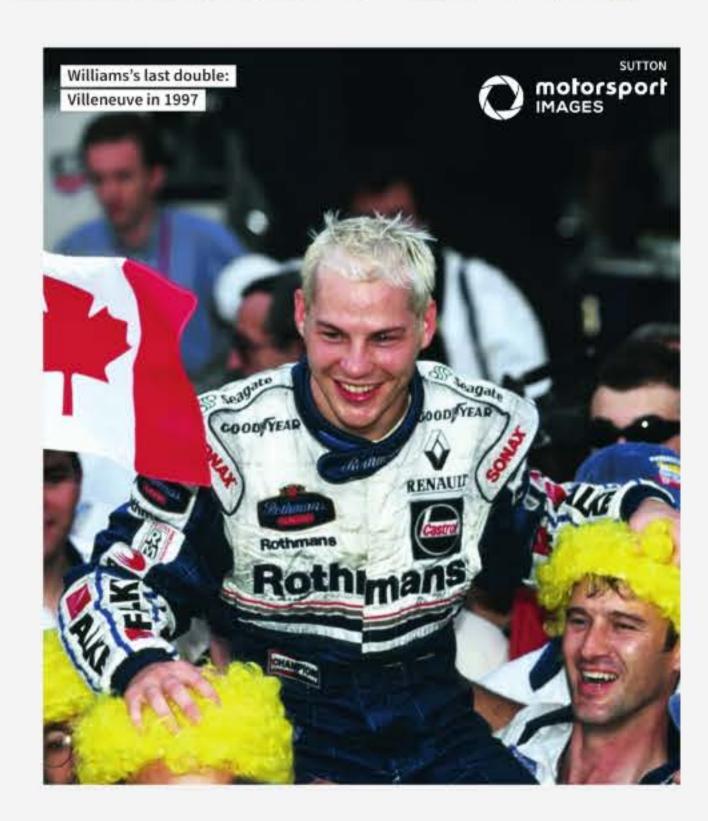


During its first 21 seasons, what started as Williams Grand Prix Engineering and is now Williams F1 won 103 GPs plus seven drivers' and nine constructors' championships. Only McLaren and Ferrari can eclipse those numbers.

During the next 21 campaigns, including 2018, it has only won 11 times and never finished higher than second in the constructors' or third in the drivers' standings.

Here's how Williams has fared since its last double title success in 1997.







HOW TURKINGTON TOPPED TITANIC TUSSLE

Seventeen drivers stood on the top step of the BTCC podium in 2018. Colin Turkington managed that feat only once in a campaign that nevertheless fully tested his indefatigable fighting spirit

MATT JAMES



he headline facts about the 2018 British Touring Car Championship are that there were 17 different winners over 30 rounds, and Colin Turkington climbed highest of all with a 12-point title victory in his WSR BMW to nail down a third crown.

Behind that story is one of the toughest fights that the series has seen in modern times. Although there were only two drivers in with a realistic shot at the end - Turkington and Speedworks Motorsport Toyota Avensis ace Tom Ingram - the path to glory has never been so full of potential pitfalls given all drivers' high level of competitiveness.

Turkington's 125i M Sport is not the freshest car on the grid.

It was first introduced to the BTCC in 2013 and, while it has been through several evolutions since then — including the new B48 powerplant, which was introduced in '17 - there isn't much more to come from the rear-wheel-drive car.

That meant Turkington was always going to have an uphill battle on his hands to climb back to the summit of the series, although there were a couple of factors very much in his favour.

The first of those was a new engine tuner for the Team BMR Subaru Levorgs of reigning champion Ash Sutton and team-mate Jason Plato. It took several rounds, during which they were well out of victory lane, for this new combination to find a sweet spot.



The second was the brand new Team Dynamics Honda Civic Type Rs, the FK8 versions, of Matt Neal and rookie Dan Cammish. The low-slung car took some refining too, and that left the way clear at the top of the points for Turkington to strike early on — but it wasn't plain sailing for him either.

"At no stage this year did we have the fastest car," says Turkington.
"I had just one win at Oulton Park, but I had nine other podium finishes over the course of the year, which was more than any other driver. It was consistent scoring from Thruxton through to Silverstone that was where I felt the key to my season was."

That's because in the second meeting of the year at Donington

Park, a rare reliability nightmare for WSR left Turkington with just six points from the three races, and a slip off the road in race two in the showdown at Brands left him floundering. That mid-season strike rate was vital.

But it's also a mark of the competitiveness of the series that success ballast now has much more of an impact with the field so closely grouped. Only in the first three rounds of the year did Turkington carry less than 66kg of success ballast into the event. "It means you have to plan your weekends so much more carefully," he says. "There has to be a strategy to it, you play for the races where the factors will be more in your favour. That's why it's become >>>





ROUND BY ROUND

Brands Indy

R2 Senna Proctor

R1 Jack Goff

R3 Tom Ingram
Polewinner Goff
narrowly fends off
Turkington's charging
BMW in the drizzle
in the opening race,
while the second
is a barnstormer:
Proctor picks slick
tyres on a drying track

tyres on a drying trace and powers through the pack late on for a dramatic victory. Ingram slices through the order for a race-three win from 11th on the grid, fending off Morgan's Merc.

Donington Park

R1 Josh Cook

R2 Tom Ingram R3 Adam Morgan

Cook blasts away from pole position in his Vauxhall and wins a battle with Smiley. He goes on to land his maiden BTCC win. Ingram performs another charge through the pack in race two to eclipse Smiley, while Morgan charges to racethree glory from fifth on the grid. Turkington collects only six points after electrical woe blights his charge.

Thruxton R1 Matt Neal

R2 Josh Cook R3 Adam Morgan

The new Honda is super-fast in Hampshire and Neal heads home Turkington and Cammish in the opening race. Cook keeps the pressure on with a race-two victory from ninth on the grid, again with Turkington second, while Morgan once again is the master of race three. Ingram's charge is thwarted when an electrical problem strikes his Toyota.

Oulton Park R1 Matt Simpson

R2 Colin Turkington R3 Rob Collard

Simpson blasts away from a careerfirst pole position to a faultless win, although his sick engine rules his Honda out for the rest of the day. Turkington nails down his only victory of the season, while things get even better for the WSR team in race three as Collard heads home Jordan and Turkington in a podium lockout.

Croft

R1 Ash Sutton R2 Ash Sutton

R3 Dan Lloyd Subaru returns to form in Yorkshire, with Sutton and Plato landing the Levorg's first onetwo of the season; Sutton repeats the feat in race two, while Plato is handed a drivethrough penalty for an out-of-position start. Ingram cedes an early lead for second, ahead of Turkington. Lloyd breaks his BTCC duck with a triumph in the reversed-grid finale.

harder to win the title. It requires so much more thought."

His crown was set against the backdrop of the death of his mother Mavis in June. For such a tight-knit family, it was clear that this was a painful season, and the tears when Turkington claimed the crown showed what a long road the 2018 season had been for him.

While the new champion handled himself with dignity at Brands, so did his defeated rival Ingram. The 25-year-old took yet another step forward in his remarkable career but, like Turkington, was forced to play the percentages. After round one, he didn't go to a circuit with less than 48kg on his car. That meant race one was always a battle - indeed, only 18% of his tally came from the weekend openers. This had the double whammy of putting him way down the grid for race two, where the grid is set from the result of race one.

Once the success ballast was out of the Toyota, it proved it was the fastest car on the grid. He made up 156 places over the 30 races - and it was this ability to claw back what had been lost in race one that kept him firmly in the picture. But there were three very painful car failures - one on the very last lap at Rockingham - where those 12 points to Turkington could have been banked.

"There really was nothing more we could have done," says Ingram. "I can be disappointed that I didn't win the title, but I can't be upset with anything we did over the course of the campaign. We gave it everything - but hey, we were up against Colin. To come second to someone who is widely regarded as one of the best tin-top racers in the world isn't too shabby."

Tom Chilton was the final man who went into the finale with an outside shot of the title - remarkable for a driver who had flown under the radar somewhat. The reworked Motorbase Performance Ford Focus RS was a step forward in that it offered consistency at every round, rather than the peaks and troughs of previous campaigns. The former Independents Trophy winner's ability to keep the tally ticking over amid the fluctuations in the frontrunners was strong, and he failed to score on only three occasions. His sole win was at Knockhill, but it was a highly creditable one.

Last season, six wins were enough for Ash Sutton to claim his maiden championship trophy. He took the same number of victories in 2018 too but came up short — due, in no small part, to the engine woes the car suffered early on. Indeed, three quarters of Sutton's points were scored from Croft onwards. The North Yorkshire track was an epiphany. The team had been granted slightly more boost for the Levorg, and that was combined with an alteration in the permitted rideheight of the car, allied to some aero upgrades. That transformed Sutton's car at least, although Plato continued his unfathomable struggles. Sutton's charge up the order to fourth in >>





Snetterton

R1 Jack Goff R2 Ash Sutton R3 Matt Neal

In a thrilling finish, Goff narrowly pips Sutton in a last-gasp dash to the line in the opening race, while Cammish lands third place. Sutton redresses the balance with victory in the second encounter, fending off Cook's Vauxhall. The third race is a special double-points diamond event to mark 60 years of the BTCC: three-time champion Neal wins.

Rockingham R1 Adam Morgan

R2 Ash Sutton **R3 Chris Smiley** Morgan takes his first career pole position in the category and that sets him up to blast to an unchallenged win. Sutton pounces on Chilton late on for second place. Sutton dominates race two after powering into the lead straight away. Ingram's car is robbed of points with a throttle problem. Smiley breaks his victory duck in the final race of the weekend.

Knockhill

R1 Ash Sutton R2 Andrew Jordan

R3 Tom Chilton Sutton climbs from eighth on the grid to take lead halfway through and leads home Turkington, who had earlier been involved in a collision. Sutton grabs race-two win in the wet as Ingram snatches second at the death, but both are excluded for rideheight infringements, which hands glory to Jordan. Chilton takes first 2018 win in race three from Turkington.

Silverstone **R1 Sam Tordoff**

R2 Tom Ingram R3 Aiden Moffat

Tordoff heads home a Motorbase one-two after converting his pole into an early lead from teammate Chilton, while Ricky Collard nabs a career-first podium in his WSR BMW. Shorn of success ballast, Ingram takes race two from 14th spot on the grid, while Moffat collects the silverware in race three after holding off a queue fronted by Ingram and Turkington.

Brands GP R1 Dan Cammish

R2 Dan Cammish **R3 Ash Sutton** From pole, Cammish powers to two excellent victories - the second one while carrying 75kg of success ballast. He heads home Neal in race one and race two. In race two, Turkington slips off the road and finishes last, but as Ingram struggles to make to the podium, Turkington takes the crown. Sutton

pips Cook for

race-three glory.





CAMMISH'S TOUGH ROAD

There was pressure on Dan Cammish coming into the 2018 season. The Porsche Supercup ace had been picked to replace three-time champion Gordon Shedden in the Team Dynamics Honda Civic Type R and the rookie was in one of the plum seats: there were envious eyes.

One of the major goals, as well as racking up the points for Honda in the manufacturers-constructors' and teams' title contests, would be the Jack Sears Trophy. He duly claimed the award for drivers who had not had a podium before the start of the campaign.

That was the high point of the season – and it was off the back of his first two wins in the category at the Brands Hatch finale. But it had been a tough year up to that point.

He was booted out of pole at the opener at Brands in April for missing the weighbridge and then got in hot water for comments he made about traffic during qualifying at Rockingham, which landed him with a £1000 fine.

"I'd come away from most race weekends thinking, 'Did I do a good job? How did it go for me personally?' Maybe I had two races out of the three that were good and then maybe one got away from me," says the double Porsche

Carrera Cup GB title winner. "Then I would look at some of the other people's results and they would be pretty much the same. To have three good races is nigh-on impossible really. Most of the time one of the results goes missing. That's what makes it hard."

"IF IT HAD
ONE WHEEL,
I'D STILL TRY
TO DRIVE IT
AS FAST AS
I COULD"

By the end of the year he had 10

JST wins to his name and things
were beginning to click. He was enjoying his switch to
front-wheel drive and has laid some strong foundations.

"Quite often this year, particularly in qualifying when you've got a bit of grip from newer tyres, it's a real adventure and you're beaming inside the helmet because they're a pleasure to drive," he adds. "If it had one wheel on it, I'd still try to drive it as fast as I could."

Cammish headed BTC Norlin Honda Civic Type R driver Chris Smiley in the JST points, and the Northern Irishman had a breakthrough season with a maiden win, although there are still some rougher edges to his driving. Matt Simpson, another first-time winner in 2018, was third in the standings and switched from Eurotech to his own team running his Honda Civic Type R at the end of the season. Credit must also go to Rory Butcher, a one-time JST winner who was fourth in the table in the AmD Tuning MG.

the standings was something to behold, and rivals will be glad it took until just before the midpoint of the year for those upgrades to be forthcoming, otherwise the result might have looked very different.

The 2013 champion, Andrew Jordan, was full of optimism coming into '18. With a year's experience of the BMW 125i M Sport behind him, a title challenge was on his radar. But if there was any WSR finger trouble going around, it always seemed to land on his Pirtekbacked car. Turbo problems at Donington and electrical woe at Silverstone knocked out four potential points-paying chances,

"IF THERE WAS ANY WSR FINGER TROUBLE GOING AROUND, IT LANDED ON JORDAN'S CAR"

while a gastro virus meant he was carted out of Thruxton in an ambulance before the end of the day.

A maiden BTCC win for Josh Cook at Donington Park in the Power Maxed Racing Vauxhall Astra was a reward for the work the team had done on the chassis over the winter, and Cook repeated the result at Thruxton. The softly sprung machine revelled at front-wheel-drive-friendly tracks and Cook — whose team-mate Senna Proctor was also a winner — was in the heart of the title fight until a disastrous mid-season run through Oulton Park and Croft.

Adam Morgan's Ciceley Motorsport Mercedes A-Class was a three-time winner, but he was another to suffer two terrible rounds, with damage at Croft and two crashes at Snetterton that took the wind from his sails. A return to form at Rockingham brought him a third win of the year — and remarkably, his first pole in the BTCC after nearly seven seasons of trying.

One of the races of the year was the opener at Snetterton, where Jack Goff's Eurotech Racing Honda Civic Type R pipped Sutton. It was Goff's second win of 2018 after claiming the opener, but too often he was all at sea with set-up and there were no solid answers.

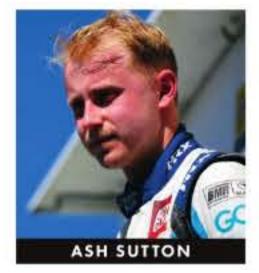
The factory Honda pairing of Neal and Cammish were both winners. The new Civic was tough to tame, but it has a longer wheelbase than the older version, which meant it was well planted at places like Thruxton. That was where Neal took his first win of the year, while Cammish was left to wait longer (see panel, left). With a year under its belt, the team has a greater understanding of the car and 2019 will be a serious attack. **

DRIVERS' CHAMPIONSHIP

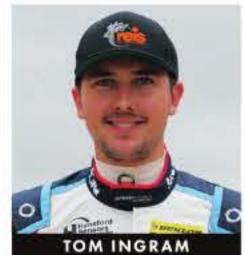
POS	DRIVER	TEAM/CAR
1	ColinTurkington (GB)	WSR/BMW125iMSport
2	Tom Ingram (GB)	Speedworks Motorsport / Toyota Avensis
3	Tom Chilton (GB)	Motorbase Performance / Ford Focus RS
4	Ash Sutton (GB)	Team BMR/Subaru Levorg
5	Andrew Jordan (GB)	WSR/BMW125iMSport
6	Josh Cook (GB)	Power Maxed Racing/Vauxhall Astra
7	Adam Morgan (GB)	Ciceley Motorsport / Mercedes A-Class
8	Jack Goff (GB)	Eurotech Racing/Honda Civic Type R
9	Matt Neal (GB)	Team Dynamics / Honda Civic Type R
10	Dan Cammish (GB)	Team Dynamics / Honda Civic Type R

11 Sam Tordoff (Motorbase Performance Ford Focus RS) 202; 12 Senna Proctor (Power Maxed Racing Vauxhall Astra) 170; 13 Chris Smiley (BTC Norlin Racing Honda Civic Type R) 152; 14 Rob Austin (HMS Racing Alfa Romeo Giulietta) 126; 15 Matt Simpson (Eurotech Racing/Simpson Racing Honda Civic Type R) 120; 16 Aiden Moffat (Laser Tools Racing Mercedes A-Class) 117; 17 Rory Butcher (AmD Tuning MG6) 99; 18 Daniel Lloyd (BTC Norlin Racing Honda Civic Type R) 87; 19 Rob Collard (WSR BMW 125i M Sport) 86; 20 Brett Smith

AUTOSPORT'S TOP 10 DRIVERS



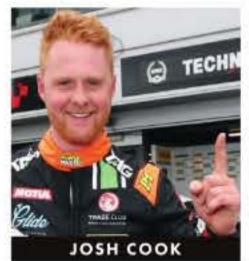
Won six races and the crown in 2017. He matched the victory tally in '18 – but was only fourth in the points. Once BMR had ironed out engine problems, the car flew. From Croft, Sutton collected 77% of his tally. His racecraft is first class.



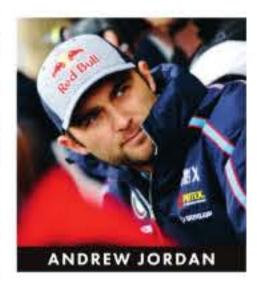
2 Once again, made progress in 2018 with a season-long title challenge, only thwarted by some poor reliability in the middle of the year with the Speedworks Toyota Avensis – which left him with lots of overtaking to do.



An emotional rollercoaster for Turkington, who held his head high and got on with the job. There was only one win and some unreliability, but he still showed his class to withstand all that was thrown at him.



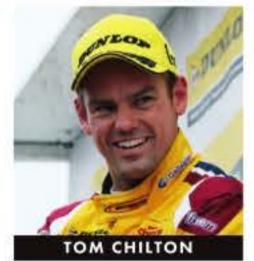
After his maiden win at Donington, Cook was a threat everywhere and his racecraft was evident, particularly in his final-round battle with Sutton. He's building some impressive career momentum and is a future champion.



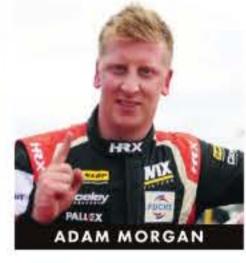
There was only one inherited win for Jordan, but he deserved so much more. Some terrible reliability ripped the heart from his hopes for the campaign, but he kept his composure and his points tally ticking over strongly.



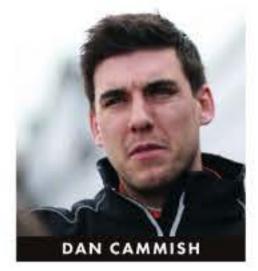
Two wins were a good reward for Goff, but there was some inconsistency in the results where the team and driver were struggling to find a decent set-up. But for that, he would have been in the title hunt.



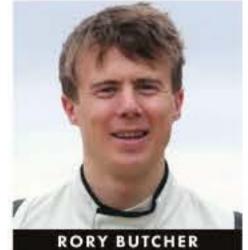
In the second season of his return, Chilton flew under the radar but was highly consistent, scoring in 27 races to keep himself in the hunt for the title until the Brands finale. One win at Knockhill saw his puppy-dog enthusiasm go off the scale.



A mid-season nightmare at Croft and Snetterton took the momentum out of Morgan's challenge, which was a shame. He was a three-time winner, showed more consistency than in previous years and has taken a step forward.



The season was turbulent for Cammish, with some run-ins with officialdom, but his pace was evident from the start. He learned quickly and made the breakthrough with two wins at the end of the year. Will build again next season.



Might not have hit the headlines with his results, but the way he gelled with the AmD Tuning team and the long-in-the-tooth MG was highly impressive. A couple of sixth places didn't really show the effort he put in.

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	PTS
2	27	9	10	DNF	21	2	2	5	6	1	3	5	3	5	15	DNF	6	7	5	2	2	4	2	8	8	3	12	22	23	304
4	11	1	14	1	8	DNF	12	7	15	10	6	3	2	9	DNF	3	3	DNF	3	5	6	DSQ	16	15	1	2	14	4	5	292
5	28	27	29	10	9	5	9	11	2	3	7	15	6	2	13	11	5	3	10	DNF	12	6	1	2	13	6	9	6	4	266
7	12	4	12	8	6	15	11	20	21	23	13	1	1	7	2	1	20	2	1	17	1	DSQ	8	11	27	12	DNF	8	1	256
3	21	17	21	18	5	6	5	W	3	4	2	10	5	6	12	9	4	15	13	DNF	4	1	3	DNF	22	9	8	3	9	247
NC	15	10	1	7	2	9	1	6	17	26	11	7	DNF	18	4	2	7	DNF	12	12	5	2	6	DNF	12	4	22	10	2	246
6	13	2	23	5	1	14	7	1	18	11	5	DNF	19	12	10	DNF	DNF	1	2	8	9	5	4	6	2	17	19	DNF	11	232
1	10	8	13	3	23	13	8	2	8	8	4	21	18	DNF	1	17	2	13	15	19	15	8	9	4	6	22	4	DNF	18	228
DNF	29	12	6	16	7	1	3	8	5	2	14	9	7	4	14	21	1	18	14	15	DNF	17	15	DNF	14	7	2	2	21	223
8	16	11	2	4	DNF	3	26	13	13	12	22	19	11	10	3	4	14	5	21	10	3	3	17	10	15	8	1	1	17	218

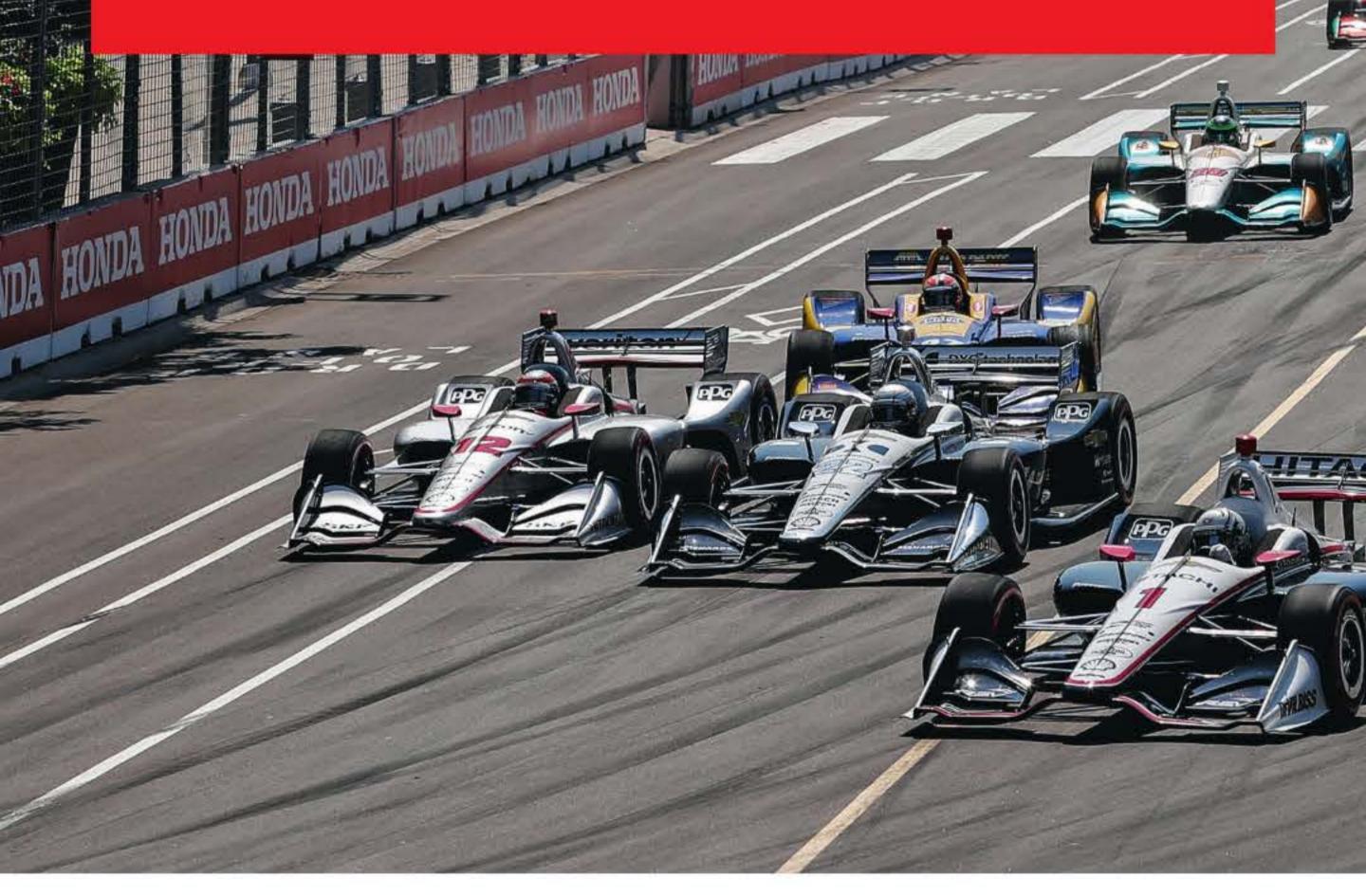
(Eurotech Racing Honda Civic Type R) 70; 21 James Cole (Motorbase Performance Ford Focus RS) 67; 22 Tom Oliphant (Ciceley Motorsport Mercedes A-Class) 63; 23 Ollie Jackson (AmD Tuning Audi S3 Saloon) 59; 24 Mike Bushell (Team Hard Volkswagen CC) 59; 25 Ricky Collard (WSR BMW 125i M Sport) 46; 26 Jake Hill (Team Hard Volkswagen CC) 29; 27 Jason Plato (Team BMR Subaru Levorg) 26; 28 Bobby Thompson (Team Hard Volkswagen CC) 23; 29 Tom Boardman (AmD Tuning MG6) 14; 30 Ant Whorton-Eales (AmD Tuning MG6) 6; 31 James Nash (BTC Norlin Racing Honda Civic Type R) 6; 32 Stephen Jelley (Team Parker Racing BMW 125i M Sport) 4; 33 Glynn Geddie (AmD Tuning MG6) 1; 34 Michael Caine (Team Hard Volkswagen CC) 0; 35 Daniel Welch (Team Hard Volkswagen CC) 0; 36 Sam Smelt (AmD Tuning Audi S3 Saloon) 0; 37 Josh Price (Team BMR Subaru Levorg) 0; 38 Ethan Hammerton (Team Hard Volkswagen CC) 0; 40 Ollie Pidgley (Team Hard Volkswagen CC) 0; 41 Josh Caygill (AmD Tuning MG6) 0.



INDYCAR'S RETURN TO REAL RACING

Scott Dixon earned a fifth title, Will Power won the Indy 500, and yet the biggest winners in 2018 were the IndyCar fans, who witnessed the most satisfying American open-wheel championship of this century

DAVID MALSHER





hen four drivers representing three teams and both engine manufacturers go into the penultimate round of the IndyCar Series deservedly in contention for the title, then something has emphatically gone well. Several things in fact, many of them linked.

While judging aesthetics is a subjective matter, surely few would disagree that this year's Indycars, clothed in the 2018-specification Dallara aerokit, were a vast improvement over their predecessors. Of even greater importance than the look was the effect this new aero package had on the racing, for which IndyCar president of competition Jay Frye, his VP Bill Pappas and head of aero Tino

Belli should be commended for a job 85% well done. Suddenly there was passing at tracks where previously we hadn't seen a whole lot — Mid-Ohio, Iowa, Phoenix, Gateway and Sonoma.

Why? 1) Because without the flicks, flaps and widgets of the previous-gen kit, the 2018 IndyCar was relying far more on its underfloor to generate downforce, and that's air relatively undisturbed by following a car closely; 2) there was an overall cut in downforce — between 15 and 40% depending on track and depending also on who you asked! — so tyres went off more rapidly and drivers made more little errors; 3) the drivers could better feel when they were approaching the limit, so were more confident to



push hard, while also knowing the car was recoverable from bigger yaw angles; 4) that reduced downforce meant lower apex speeds, particularly for medium and high-speed corners, but the reduced drag also meant higher terminal speeds on the straights. Ergo, there were longer braking zones to shed more mph from that higher maximum and lower minimum speed — and then more throttle control required as drivers went back to the gas.

Ryan Hunter-Reay found the car much more satisfying, for instance, diving into Turn 4 at Mid-Ohio, that tight 100-degree corner at the end of the long straight.

"In the old car it seemed like everyone hit the brakes at the

same point, changed down from sixth to third at the same point, and then went back to 100% throttle at the same point," he says. "The difference between the top guys to one of the slow guys was probably only a tenth of a second because it's a high-grip surface.

"Now you can actually make time up on another guy by being later on the brakes, smoother bleeding off the pressure and then getting back on the gas that little bit sooner but with more care, especially on old tyres.

"It's great, and it's been like that at a lot of corners on a lot of tracks. The challenge has come back now the car doesn't feel so planted and the driver feels like he can make more of a difference. >>



And honestly, it's just as much hard work even if the g-forces have gone down on a lot of tracks, because you're now doing so much more correcting when you're running on the limit."

The new aero package's one drawback, according to many drivers and the more strident fans, was the new superspeedway kit. The problem in the week-long practice for the Indianapolis 500 was that, while the second car in a convoy could pass the car ahead, further down the line it became increasingly difficult to pull off a manoeuvre around the car in front, mainly due to a confidence-sapping lack of stability.

This year's cars may have looked far more lithe than their predecessors, but they had more drag in superspeedway trim thanks to the absence of rear-wheel guards. Team owner Dale Coyne described the aero effect at Indianapolis as being "more intense, but narrower, so you tow up real fast - faster than with the last car - but when you move out to pass, you just don't pull past at a great rate".

On race day, single-car shunts for series veterans such as Helio Castroneves, Tony Kanaan and Sebastien Bourdais helped persuade IndyCar to allow more aero variations for the Pocono race, and further tests are continuing this off-season to find a way to make the cars more stable in dirty air at 210mph-plus.

At most tracks, however, there were simply more areas in which the elite drivers could distinguish themselves from the very good drivers, and the very good drivers separate themselves from the merely adequate. Roger Penske predicted before the season started that the new aerokit would be more demanding and thus ensure the cream rose to the top — and IndyCar's new-for-2018 race director Kyle Novak also helped make that happen. By hammering home the importance of drivers obeying local yellows, there were far fewer full-course cautions and, whenever they were necessary, if possible he would delay the closure of the pits so as not to screw over the drivers who were running longer than their rivals.

Rejoice, then, all those who enjoy pure racing: almost without exception, the 17 events were won on merit. Only at Portland, when Zach Veach spun and stalled at a hugely inopportune moment for team-mate Alexander Rossi but at the ideal time for Scott Dixon to make up ground from the first-lap pile-up, did we see a truly lucky winner (Takuma Sato). And so the top five in the championship standings - Dixon, Rossi, Will Power, Hunter-Reay and Josef Newgarden — accurately reflects the best drivers of the year.

It should really have been a group of six, the missing man from that group being Robert Wickens who, despite being a rookie, had a pole (scored on his debut!) and several podium finishes before his appalling accident at Pocono. The absence of Indycar racing's most

St Pete

ROUND

BY

ROUND

1 S Bourdais

2 Graham Rahal 3 A Rossi

IndyCar debutant Wickens defeats Power to take pole, fends him off in Turn 2 and leads the majority of the race, but clashes with Rossi right after the final restart and spins into the tyre wall. Rossi's delay is enough to hand the lead and second place to Bourdais and Rahal respectively.

Phoenix

1 Josef Newgarden

2 Robert Wickens 3 Alexander Rossi

Bourdais starts from pole, but after Power's brush with the wall Schmidt Peterson Motorsports is running one-two. A late-race caution means both impressive oval debutant Wickens and veteran Hinchcliffe remain on track and each prove relatively easy prey for newly reshod Newgarden, who wins ahead of Wickens and resurgent Rossi, recovering from an early penalty.

Long Beach

1 Alexander Rossi

2 Will Power 3 Ed Jones

Rossi is masterful in qualifying, earning a well-deserved pole position. He then fends off Power's best efforts on race day to score his first win of the year. A late caution presents Jones with the possibility of scoring his and Chip Ganassi Racing's first podium finish of the season, as Andretti Autosport rookie Veach chalks up the very first points of his IndyCar career.

Barber

1 Josef Newgarden

2 Ryan Hunter-Reay 3 James Hinchcliffe

Polesitter Newgarden takes full advantage of clear vision to drive away from everyone in soaking conditions as Power aquaplanes into the pitwall. Further rain forces IndyCar to red-flag the race. Monday restart sees Newgarden pick up where he left off. DCR leaves Bourdais out too long on slicks and he loses a podium finish to Hunter-Reay and Hinchcliffe.

Indy GP

1 Will Power

2 Scott Dixon 3 Robert Wickens

Power beats Wickens to pole, while in the race it's his ability on primary tyres to stay within range of Wickens on alternates that proves decisive. Once onto fresh alternates, Power sweeps past to his first win of the season and Penske's 200th Indycar victory. Wickens drops to third behind Dixon, who charges from a disastrous 18th on the grid to claim his first podium of 2018.

Indy 500 1 Will Power

2 Ed Carpenter 3 Scott Dixon

Power becomes the first Australian to conquer the 500 and the first driver to win the Indianapolis Motor Speedway 'double', fending off polesitter Carpenter. Wilson, Harvey and Servia try a brave fuel gamble that fails with three laps to go; Dixon makes a similar strategy work to claim third, while Rossi charges to fourth from the back row with a series of brave passes on restarts.



startling rookie since Sebastien Bourdais's arrival 15 years earlier was felt keenly at Schmidt Peterson Motorsports and throughout IndyCar over the final three races. We wish him well in his recovery.

Spec aerokits not only eliminated excuses for underperformance, but also emphasised the differences between the engine characteristics. Honda had better low-down torque at 1.5-bar boost, as seen at Long Beach and Detroit, and also superior fuel economy on superspeedways at 1.3-bar boost. Chevrolet and Ilmor prioritised top-end horsepower in order to (successfully) chase Indy 500 victory, a little to the detriment of reliability. Long before the season was over, each of the three Penske drivers was on his fifth engine and was therefore ineligible for manufacturer points. Therefore HPD, with Ganassi and a thoroughly revived Andretti Autosport team in its books - together with a more reliable engine - was onto a winner and truly deserved its first manufacturers' title since the 2.2-litre regulations were introduced back in 2012.

But what gave Dixon the edge over his four title rivals? In short, consistency, the absence of significant errors on race day, and an ability to make the most of every opportunity. Just twice this year did the #9 Chip Ganassi Racing car finish outside the top 10 >>

Detroit 1

1 Scott Dixon

2 Ryan Hunter-Reay 3 Alexander Rossi

Andretti scores pole but in the opening stint is stalked by Dixon, who goes a lap longer before stopping and emerging from the pits ahead, going on to score his first victory of the year. Hunter-Reay and Rossi also get around team-mate Andretti to claim the other podium places, while Power loses out to the Rahal Letterman Lanigan cars at the start and ultimately finishes seventh.

Detroit 2

1 Ryan Hunter-Reay

2 Will Power 3 Ed Jones

Rossi leads from pole but, under intense pressure from team-mate Hunter-Reay, he makes an error on worn tyres in the closing laps and goes down an escape road. RHR scores his first win in almost three years, ahead of Power who saves face for Chevrolet on home ground, despite Chevy's torque curve being unsuited to street courses. Jones holds off team-mate Dixon for third.

Texas

1 Scott Dixon

2 Simon Pagenaud 3 Alexander Rossi

New aerokit helps produce sensible racing once more. Dixon is dominant when in front, as the Chevroletpowered Penske cars use up tyres (and fuel) too quickly. Pagenaud holds off Rossi for second. Power crashes when Roger Penske talks over his spotter as another car draws alongside, while Wickens makes his first major mistake of the season while trying to lap Carpenter.

Road America

1 Josef Newgarden 2 Ryan Hunter-Reay

3 Scott Dixon Newgarden nips pole

by a few hundredths from team-mate Power, whose misery is completed when his engine dies at the start. Thereafter Newgarden dominates, his closest challengers being Hunter-Reay and Dixon, the trio covered by less than 6s despite no cautions. Rossi falls to 16th after an unplanned pitstop to replace shims lost, possibly as a result of more contact with Wickens.

lowa

1 James Hinchcliffe

2 Spencer Pigot 3 Takuma Sato

Newgarden leads for the majority but his handling goes off as the track grips up and he's passed by Hinchcliffe, who charges to victory from 11th. Pigot scores his first IndyCar podium finish, but the race ends under yellow. This catches out Tim Cindric, who pits Newgarden from second after expecting a couple more laps of green. The reigning champion drops down to fourth.

Toronto

1 Scott Dixon 2 Simon Pagenaud

3 Robert Wickens Arguably the turning point of the season as Dixon wins with relative ease after his primary title rivals – Rossi, Newgarden, Power and Hunter-Reay - all make errors and bounce off walls/each other. Pagenaud has another rare day in the sun by claiming second ahead of Schmidt Peterson Motorsports' Canadian pair, while Kimball scores the first topfive finish for rookie team Carlin.



CARLIN'S ROOKIE CAMPAIGN

Trevor Carlin has high standards, given his team's great 20-year history in junior formulas, but he knew it would be tough in IndyCar. Yes, every team had to start from base camp learning the new aerokit, but a rookie team at this level, running with two drivers of experience but some way off 'ace' standard, was always going to struggle for ultimate pace.

Yet there was notable progress made from first race to last. The season opener at St Petersburg was predictably chaotic, but by mid-season Carlin was pretty slick. Charlie Kimball scored the team's best finish with fifth in Toronto, and its best oval qualifying performance with 12th on the grid at Texas Motor Speedway. Max Chilton reached the Firestone Fast Six at Mid-Ohio and started 10th for the first Detroit race.

On a glass-half-full day at season's end, Carlin said: "I'm generally pleased with what we've achieved. I'll be pleased to have the opportunity to get closer to what I'd say was the standard of this team. But when you have a grid where 20 or 22 cars are covered by one second, IndyCar is the tightest field we've ever raced in – and on such a variety of tracks too. So it just shows that teams and drivers have to get everything absolutely perfect. Miss out on one tenth, and you slip three or four places. It's pretty brutal."

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— at Long Beach thanks to a tactical blunder by the team and at Iowa Speedway when he was among several frontrunners who never found a set-up that worked throughout a whole stint. Across 17 races, Dixon finished in the top five in 13 of them, including nine appearances on the podium. Rossi, Power and Newgarden all matched his win tally of three, yet they accumulated 'only' 10, eight and six top-fives respectively.

"Dixie just never has a bad day," says Power as he recalls four mistakes on his part and a couple of mechanical issues, the

"NEWGARDEN WAS MASTERFUL AT TIMES, BUT HE COULD BE LEFT BEWILDERED BY POWER'S PACE"

combined effect of which blunted his title challenge, despite attaining an absurdly brilliant average starting spot of 2.7.

"He's always there," concurs Rossi, who in his third year with Andretti Autosport blended speed with aggression, carried out a couple of 'impossible' fuel strategies and impossibly brave passing moves, but also made a few significant blunders, including right at the start of the double-points finale at Sonoma.

For Penske's reigning champion Newgarden, the year was odd
— he led the most laps (Dixon was only fourth in that list) but his
three wins were the only occasions on which he visited the podium.
He was masterful at times — Barber Motorsports Park, Road
America — but there were also days when he was left bewildered
by Power's pace, either in qualifying or across a race stint, so that
occasionally his presence in a race went almost unnoticed.

Hunter-Reay, as usual, had a season that fluctuated between awesome and awful, and it was the first time since he joined Andretti Autosport in 2010 that he was outqualified by a team-mate across a season (it was 10-6 to Rossi in the races where the grid order was decided by speed). But being Hunter-Reay, 2012 champion, it was also never a surprise when he had the edge over Rossi. If he could ever get luckier, he'd take the title fight down to the wire.

Where he'd undoubtedly have to beat Dixon. The five-time champion denies feeling that any driver has to go through him in order to win the IndyCar championship, but the stats would suggest otherwise. Three times in the past six years he's emerged on top, and this was the most convincing of them all. **

Mid-Ohio

1 A Rossi

ROUND

OUND

2 R Wickens 3 Will Power

Polesitter Rossi makes a two-stop strategy work as he scores his second win of the year, while a three-stopper vaults Wickens ahead of the Penske cars of Power and Newgarden to claim his fourth podium of 2018. Bourdais charges from the back row to finish sixth behind Dixon.

Pocono

1 Alexander Rossi

2 Will Power 3 Scott Dixon

A vicious crash for Wickens at Turn 2 after clipping Hunter-Reay halts the race for almost two hours as debris fences are repaired. Rossi dominates from thereafter, with polesitter Power hampered by a lean engine setting in order for his Chevy to get the same fuel mileage as Rossi's Honda. This pair lap all but the third and fourth-placed cars of Dixon and Bourdais.

Gateway

1 Will Power

2 Alexander Rossi 3 Scott Dixon

Grid is decided in points order after rain disrupts practice. Dixon leads after Rossi falters, and later holds off an outside challenge at Turn 1 from Power. But Power slices back to the front with passes on Rossi and Dixon, while the Andretti driver beats the Ganassi man by lapping slowly and avoiding a late splash-and-dash fuel stop. Rossi is now 26 points behind Dixon.

Portland

1 Takuma Sato

2 Ryan Hunter-Reay 3 Sebastien Bourdais

Power's sensational qualifying lap - which lifts him above AJ Foyt into second in the all-time polewinners' list – is all for nothing when a gearbox issue drops him to 12th, and he later spins off. Dixon salvages a fifth place despite being embroiled in a first lap pile-up, and Rossi can only finish eighth after being wrong-footed by a full-course caution. Sato wins ahead of Hunter-Reay.

Sonoma

1 Ryan Hunter-Reay

2 Scott Dixon 3 Will Power

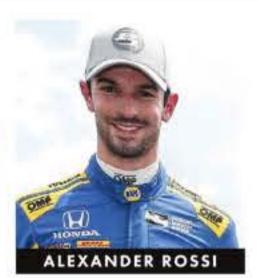
The heat is taken out of the fight for the championship on lap one as Rossi clips the rear of team-mate Andretti's car and punctures a tyre. Some brave passes aren't enough for him to regain ground on Dixon, who drives a conservative race to second, behind a dominant Hunter-Reay and just ahead of Power, to claim his fifth championship and his third in six years.



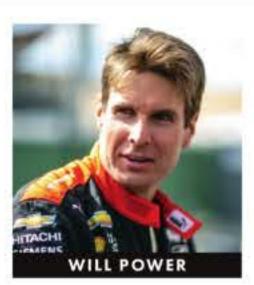
AUTOSPORT'S TOP 10 DRIVERS



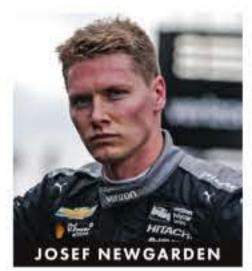
As fast as anyone else on race days and makes astonishingly few errors. Occasionally you wonder if he needs to rule his team with an iron fist rather than become reliant on others' instructions, but he delivers whatever the circumstance.



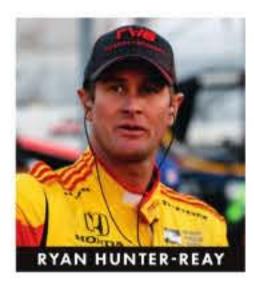
His self-control pays off when it comes to taking instructions and ensuring his 100% effort exceeds anyone else's, but when he hits the 'aggression' button he's a phenomenally good overtaker. He'll be a star for years to come.



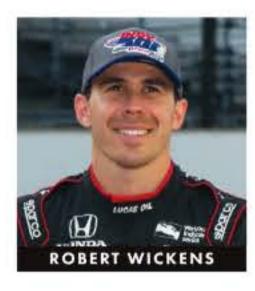
He's still supremely fast - his pole at Portland was the lap of the year and only unforced errors in the first half of the season and then mechanical issues in the second half prevented him taking the title battle to the finale.



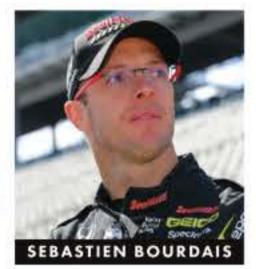
The reigning champion missed out on retaining the crown but made fewer mistakes than ever before, and proved he can excel in the wet, be supremely aggressive on an oval and absorb pressure from strong rivals.



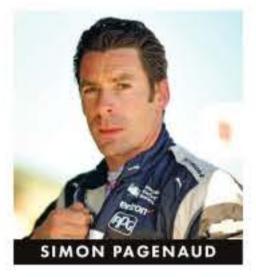
Overshadowed by team-mate Rossi in the title fight, but that was largely down to bad luck and a touch of desperation on the weekends when Andretti Autosport had the edge. RHR remains a match for anyone.



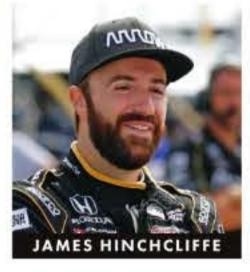
Given his injuries, it sounds selfish to say but Wickens proved that his absence is a huge loss to IndyCar. Brilliantly quick, a swift learner, a charming interviewee and a smart man. His return can't come soon enough.



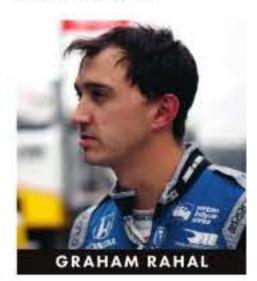
Bourdais is no fan of cars with a 'positive' front end, but race engineer Craig Hampson came up with a set-up that enticed the best out of him and he responded with consistency and brain power, and thoroughly deserved a win.



In qualifying, the 2016 champion frequently looked lost and slow compared with Team Penske team-mates Power and Newgarden but, when he overcame his mental issues with the car's loose rear end, he could still look a class act.



Overshadowed by rookie team-mate Wickens in the first half of the season, Hinch dug deep and responded with his best season-long performance since scoring three wins for Andretti Autosport in 2013.



A winless season for Rahal as the Rahal Letterman Lanigan Racing squad took a dive despite expanding to two cars and having a vast squad of engineering expertise. But Rahal excelled (as usual) in his charges through the field.

POS	DRIVER	TEAM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	PTS
1	Scott Dixon (NZ)	Chip Ganassi Racing	6	4	11	6	2	3	1	4	1	3	12	1	5	3	3	5	2	678
2	Alexander Rossi(USA)	AndrettiAutosport	3	3	1	11	5	4	3	12	3	16	9	8	1	1	2	8	7	621
3	Will Power (AUS)	Team Penske	10	22	2	21	1	1	7	2	18	23	6	18	3	2	1	21	3	582
4	Ryan Hunter-Reay (USA)	Andretti Autosport	5	5	20	2	18	5	2	1	5	2	19	16	7	18	20	2	1	566
5	JosefNewgarden (USA)	Team Penske	7	1	7	1	11	8	9	15	13	1	4	9	4	5	7	10	8	560
6	Simon Pagenaud (F)	Team Penske	13	10	24	9	8	6	17	10	2	7	8	2	8	8	4	6	4	492
7	Sebastien Bourdais (F)	DaleCoyneRacing	1	13	13	5	4	28	13	21	8	13	11	19	6	4	21	3	6	425
8	Graham Rahal (USA)	Rahal Letterman Lanigan Racing	2	9	5	7	9	10	23	5	6	6	7	21	9	14	10	23	23	392
9	Marco Andretti (USA)	Andretti Herta Autosport	9	12	6	10	13	12	4	9	14	11	16	10	11	7	14	25	5	392
10	James Hinchcliffe (CDN)	Schmidt Peterson Motorsports	4	6	9	3	7	?2	11	16	4	10	1	4	14	20	15	22	15	391

11 Robert Wickens (Schmidt Peterson Motorsports) 391; 12 Takuma Sato (Rahal Letterman Lanigan Racing) 351; 13 Ed Jones (Chip Ganassi Racing) 343; 14 Spencer Pigot (Ed Carpenter Racing) 325; 15 Zach Veach (Andretti Autosport) 313; 16 Tony Kanaan (AJ Foyt Enterprises) 312; 17 Charlie Kimball (Carlin) 287; 18 Matheus Leist (AJ Foyt Enterprises) 253; 19 Max Chilton (Carlin) 223; 20 Gabby Chaves (Harding Racing) 187; 21 Ed Carpenter (Ed Carpenter Racing) 187; 22 Jordan King (Ed Carpenter Racing) 175; 23 Zachary Claman DeMelo (Dale Coyne Racing) 122; 24 Jack Harvey (Meyer Shank Racing with Schmidt Peterson) 103; 25 Carlos Munoz (Schmidt Peterson Motorsports) 95; 26 Pietro Fittipaldi (Dale Coyne Racing) 91; 27 Santino Ferrucci (Dale Coyne Racing) 66; 28 Rene Binder (Juncos Racing) 61; 29 Conor Daly (Harding Racing) 58; 30 Kyle Kaiser (Juncos Racing) 45; 31 Pato O'Ward (Harding Racing) 44; 32 Helio Castroneves (Team Penske) 40; 33 JR Hildebrand (Dreyer & Reinbold Racing) 38; 34 Stefan Wilson (Andretti Autosport) 31; 35 Oriol Servia (Scuderia Corsa with RLL) 27; 36 Alfonso Celis (Juncos Racing) 23; 37 Colton Herta (Harding) Racing) 20;38 Danica Patrick (Ed Carpenter Racing) 13;39 Jay Howard (SPM / AFS Racing) 12;40 Sage Karam (Dreyer & Reinbold Racing) 10;41 James Davison (AJ. Foyt Enterprises with Byrd-Hollinger-Belardi) 10.



NOT JUST BRITAIN'S FIRST F1 WORLD CHAMPION

Sixty years ago this week, Mike Hawthorn won the world championship.

It's a season often remembered for the title Stirling Moss lost,

but Hawthorn's personal story provides an alternative view

PAUL FEARNLEY

stirling Moss uncharacteristically went off at the deep end when told that his customary swapping of chassis and engines between practice sessions was unsettling to team-mates and would have to stop for 1958. His was a reaction indicative of the pressure he was feeling. Having finished thrice runner-up to world champion Juan Manuel Fangio — now all but retired — this prototype professional had no intention of finishing second again. So either Vanwall gave him what he wanted or the deal was off. Bluff called, gruff boss Tony Vandervell uncharacteristically relented.

Mike Hawthorn's worry was more fundamental. Though he could beat anybody on his day he could also appear insipid and uninspired. Unsurprising for a sportsman secretly suffering an incurable and ultimately fatal kidney disease. The 'Farnham Flyer' had not won a race of any sort since June 1956 and would have to marshal his resources, pick his fights, if that were to change in '58: he would start 21 races — all bar one for Scuderia Ferrari — to Moss's 43, spread across Aston Martin, Lister, Maserati and Porsche plus several privateers, as well as Vanwall.

Moss versus Hawthorn had been a British motorsport motif since the latter stole the thunder by signing for Ferrari — something the slighted Moss had vowed never to do — and beaten Fangio to win the 'Race of the Century', aka the French Grand Prix, at Reims in 1953. Chalk and cheese physically and psychologically, though friendly — perhaps more so in public than in private — they'd

Hawthorn won in France having seen Musso perish in his mirrors

never been team-mates: when Moss went foreign to see what he'd been missing, Hawthorn turned native in order to oversee his family's garage while continuing to race.

They'd swapped sides again for 1957. Hawthorn's spells with Vanwall (and BRM) in '55 and '56 had been short and sour and his second reunion with Ferrari brought reliability and consistency, if not race-winning speed. Moss in turn joined Vanwall just as it was bolting reliability to speed — and won three grands prix in the season's second half.

This updated British car was superior to Ferrari's new 1958 model, the 246 Dino, in terms of its spaceframe construction, suspension and (in theory) aerodynamics thanks to consultancy input from Colin Chapman and Frank Costin of (increasing)

Lotus fame. Goodyear discs gave it a braking edge and Dunlop's new R5, with revolutionary nylon-ply carcass, was stronger and yet more flexible and lighter, and capable of operating at higher temperatures and lower pressures than Ferrari's Engleberts.

Though the Vanwall was not easy to drive and its gearbox, with Porsche synchromesh, was heavy and vague, it would have been a clear favourite were it not for the new mandatory use of Avgas pump fuel rather than exotic alcohol brews. Its Rolls-Royce/Norton-derived four on Bosch injection had to reduce its compression ratio and, to cope with higher operating temperatures, squirt oil at its pistons undersides. Hopes of topping 300bhp dashed, 265-270 would be its 1958 norm.



INSIGHT MIKE HAWTHORN

Ferrari, as was its habit on such occasions, had gained a march in this regard. Its V6 - Formula 1's first - had been conceived in 1955 and raced with success during '57 in petrol-only 1.5-litre Formula 2 guise before incremental increases to 2417cc saw it impress in nonchampionship F1 races. Featuring four chain-driven camshafts, two valves and twinned spark plugs per cylinder, and breathing through triple-downdraught Weber carbs, its reported 5-10bhp advantage was accessed via a usefully smoother delivery. So proven in a car wrapped around reduced tankage for a more economical fuel over shorter race distances - albeit also featuring a throwback ladderframe chassis and drum brakes - Hawthorn was "convinced that a Ferrari driver would win the world championship".

So he got a shock - and wasn't alone - when Moss won January's opener in Buenos Aires in a stand-in two-litre Cooper: the first for an F1 car with its engine behind the driver. The reduction in proscribed distance from 500km to 300 (or two hours) had put GP success within reach of Britain's garagisti - and Moss, running non-stop, caught Ferrari napping. The writing was on the wall for the front-engined GP car. Not that everybody bothered to

"HAWTHORN WROTE TO ENZO FERRARI TO EXPLAIN HOW USELESS HIS CAR HAD BEEN"

read it immediately. Even though the same Cooper would win in Monaco in Maurice Trintignant's hands, these would for 1958 remain glitches rather than become a glut at the highest level.

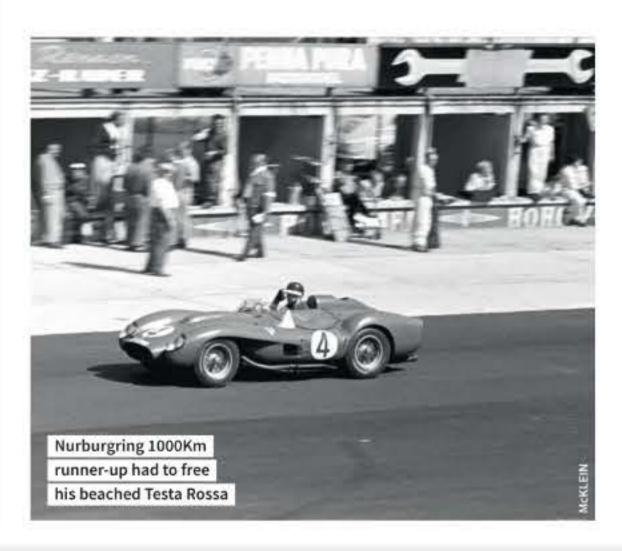
Hawthorn, delayed by a precautionary stop for oil, finished third in Argentina and was firm in the belief that team-mate Luigi Musso should have won, pooh-poohing (in private and later in print) his blaming poor pit signalling (by team-mate Peter Collins) for falling three seconds short of Moss. Hawthorn's Mon Ami, Mate-yness usually uproarious but occasionally tellingly tacit - with Collins was a formidable bulwark against the aspirations of a driver carrying his nation's hopes aboard its most glamorous sporting





product. Hawthorn was not anti-Musso but felt no compunction to convince the twitchy Roman of this. What tensions there were within more regimented Vanwall was a gentle simmer in comparison.

There was no designated number one at Ferrari and Hawthorn's fading appetite for endurance racing offset confidence-boosting victories in the (wet) first heat of the Formule Libre Buenos Aires GP and Goodwood's F1 Glover Trophy. He'd willingly stood down, ostensibly because of sunburn, from the Buenos Aires 1000km; been no match for Musso - whose "Italian blood was up" - at the Targa Florio, Hawthorn's least favourite event; and would finish runner-up in the Nurburgring 1000Km after levering his





Testa Rossa off a bank — clearly he wasn't as weak as a kitten. Moss won at the 'Ring for Aston Martin but had emptied his tank so completely that even 'Mr Movement is Tranquility' was questioning his all-or-nothing approach.

Monaco in May was a bust for both Brits, each surrendering the lead because of mechanical issues, though Hawthorn at least left with a point for fastest lap. (Hold that thought.) But whereas Moss dominated the Dutch GP around the sweeps of Zandvoort, Hawthorn could do no better than fifth. Wrote Moss: "I never thought Mike looked particularly relaxed behind the wheel but on this occasion he was really hunched up and looking as though he was having a real struggle." He was.

Hawthorn — with nothing to lose and yet everything to lose — wrote to Enzo Ferrari to explain how useless his car had been: a horrid mix of (mainly) understeer and oversteer and an apparently incurable engine vibration resulting in "the indignity of being lapped by a BRM". The surprisingly soothing reply promised better things for the Belgian GP at super-fast Spa.

His V6 happiest singing at maximum rpm, Hawthorn qualified on pole — though he'd not raced at Spa since 1955 — but botched a delayed start as he fretted about frying clutches. Meanwhile Tony Brooks, in the more slippery Vanwall (albeit with larger frontal area), made his escape when leader Moss missed a gear and wrecked his engine and Hawthorn was distracted by what he thought had been a huge accident for Collins; it was Musso, who had somehow survived it. Hawthorn's late bid for victory included a fastest lap that ended with a blown engine on the downhill run to the chequer and he parked next to the victorious Brooks, whose gearbox had begun to jam, on the approach to Eau Rouge.

Le Mans had, since his pyrrhic victory of 1955, been a race of conflicting emotions for Hawthorn — Moss had always chafed against its emphasis on reliability rather than speed — and on this occasion he was lost in wonder at victorious team-mate Phil Hill's commitment in the pouring rain (without goggles, in a cockpit funnelling muck and spray); the American was desperate to prove himself worthy of an F1 seat. Hawthorn and co-driver Collins retired after 11 hours because of clutch failure: "It would be hypocritical to say I was sorry that we were out."

Hawthorn would again marvel at Hill's — and Musso's — press-on attitude in the three-heat, 500-mile Race of Two Worlds versus America's Indycars on Monza's Pista di Alta Velocita. The 180mph pounding meted by its concrete bankings playing havoc with his constitution, Hawthorn pleaded to be held in reserve but was forced to drive "quite the most horrifying thing" — an early 1950s-type chassis fitted with a big-banger V12 — and played third fiddle in its finishing third.

Though Enzo sensed Hawthorn's reluctance, it was Collins — the winner in Buenos Aires and Sebring (both times co-driven by Hill) and of the International Trophy — whom he chose to chastise. Enzo preferred his drivers single rather than settled and Collins's marriage to American actress Louise King did not meet with his approval. Had not Hawthorn, himself courting model Jean Howarth, gone out on a limb for his mate, the winner for Ferrari of the 1956 French GP at Reims would this time have been restricted to its F2 support race.

Britain had suddenly found itself awash with talent, cut-andthrust 500cc Formula 3 and make-do-and-mend 750 Motor Club ingenuity on its repurposed Second World War airfields breeding the next-gen drivers, and it's little wonder that Musso felt alone at home. Reportedly heavily in debt to heavies, he was chasing the French GP's handsome payout when he cartwheeled to his death. Polesitter Hawthorn, who'd seen it all in his mirrors, won by a handsome margin — even though he backed off so as not to lap Fangio in what proved to be his final race — and was now level >>>



with Moss at the championship's mid-point thanks to yet another fastest lap, set despite his team's apparent disinterest; the inaugural constructors' contest took no account of this particular achievement.

After drinking several toasts to Musso's memory — "Maybe it wasn't the right thing to do but that is what we did" — Hawthorn's much-needed break' from motorsport prior to his home GP included helping a friend at Dunboyne's Leinster Trophy and testing a Jaguar prototype at the behest of friend, mentor and, since 1954, father figure 'Lofty' England.

Hawthorn fully expected a Vanwall to win at medium-speed (!)

"DID HE NOT GRASP HOW ILL HE WAS BEYOND THE DISCOMFORT AND BOUTS OF FATIGUE?"

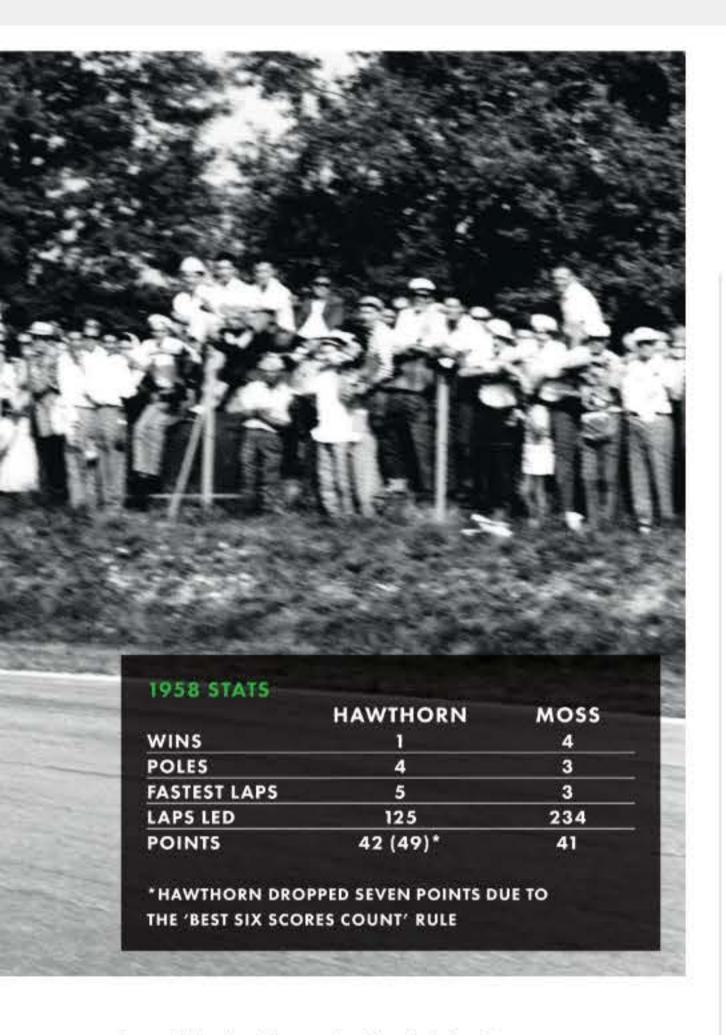
Silverstone — particularly after brief but enlightening runs on their Dunlops — and perhaps his tipping BRM's Jean Behra, on the third row, for victory was a little dig at Moss, on pole. But it was Collins, bursting from the second row on a promise to do all he could to help Hawthorn, who proved uncatchable on his day of days. Hawthorn, genuinely delighted for his friend, was second after a stop for oil, after which he set another fastest lap to put seven points on Moss, who had retired because of a broken conrod. Vanwall was on the back foot and the Nurburgring, reckoned a likely Ferrari circuit, was next.

But GP racing of the 1950s could be gruesomely cruel. Having been hunted down by Brooks — Moss having again retired from the lead — Collins and polesitter Hawthorn were attempting to repass the Vanwall when Collins got it fractionally wrong after Pflanzgarten and paid the ultimate price. Hawthorn, whose cooked clutch finally failed on the next lap, had had the worst seat in the house. The three weeks between GPs would be dark indeed.

Hawthorn reckoned he drove with more restraint at Oporto's Portuguese GP yet he qualified just 0.05s slower than pacesetter Moss. He led, too, but only until a drying circuit allowed Moss to squeeze more from his disc brakes, more in terms of longevity and consistency rather than outright stopping power. Pitting to have his drums readjusted, Hawthorn set fastest lap in retaking second place from Behra — he would still stick his neck out when he deemed it necessary — but would end the race in a red funk.

Not only had Moss misinterpreted signals warning him of yet another fastest lap for Hawthorn, but also the brake-less Hawthorn, in attempting to complete the last lap after Moss had refrained from lapping him, spun and stalled. Though he pushed away a well-meaning spectator, he was disqualified from second place for bump-starting against traffic — until Moss vouched for him at the appeal hearing. No doubt Moss, who relished a scrap against the odds, was optimistic of bridging the resultant four-point (net) gap in the remaining two rounds — his consistent rival was having to drop scores already — but this chivalric gesture verged on monastic purge.

It was now that Enzo got fully behind his de facto number one
— as opposed to complying with Hawthorn's quirkier demands:
for a four-spoke steering wheel and an aero-screen behind the
Perspex wraparound. Enzo acquiesced to Hawthorn's insistence
on discs — Dunlop's in Ferrari's case — and stoked almost 300bhp
from a stroked V6; Monza was always a spur. He also finally allowed
Hill his F1 head — and the American did a Collins to lead, albeit
briefly, from the second row. Hawthorn meanwhile had again



burned his clutch in another chaotic delayed start.

Moss had been quickest in practice but the Dino maintained its edge in top speed and Hawthorn had been able to break the tow moments before the Vanwall's gearbox failed. That clutch - and Brooks - returned to haunt him, however, and but for some frantic waving he would have lost second place to team-mate Hill too.

The tension was becoming unbearable - Hawthorn had witnessed tightly wound team-mate Wolfgang von Trips being flung from his tumbling car on the opening lap - and it was an even paler Mike who almost missed the Monday BEA bus to Malpensa: "Stirling's approach to motor racing is no doubt



the right one but mine is more fun."

The fun, however, had felt increasingly forced since Collins's death. "One tends to get a little bored with the travelling that is inseparable from big-time motor racing," wrote Hawthorn in Champion Year. "It must sound glamorous but I no longer find it so. I am not a traveller in the sense of enjoying new places."

The five-week wait for, and long flight to, the title decider in Morocco hardly filled him with glee and the moral support provided by 'Lofty', who just happened to be in Casablanca (!), was much appreciated. Hill, too, would again prove the ideal wingman.

Moss needed to win and set fastest lap; Hawthorn needed to finish second and so made a cautious start from pole while Hill snapped at Moss's heels, until he overestimated his drums' effectiveness and skittered down an escape road. Moss, of course, had Brooks in his corner and Hawthorn had his hands full with him until the Vanwall blew its engine. Whereupon Hill, waved past earlier by Hawthorn, steered dutifully aside. And Moss continued to pour it on to no avail.

Hawthorn became Britain's first world champion by a single (net) point having scored points in every GP bar the German, the tragic race that convinced him to retire at the season's end as world champion, as much for Pete's sake as his own. Yes, he had won just one GP to Moss's four - but he'd chipped away in a car held back by the tyres underneath it; outqualified Moss 6:4 with an average grid position of 2.7 to Moss's 3.4; recorded the first four poles of his GP career; played the system - five points for five laps of calculated risk; battled his demons; and avoided incident - even Morocco was blighted by the accident that claimed, agonisingly, the life of Vanwall's Stuart Lewis-Evans to again steal the thunder from the best in the business.

And by God, he'd earned it - and paid for it. Howarth knew of one blackout, post-season. Had the secretive Hawthorn suffered any during the season? Would another contribute to his fatal road accident the following January? Had doctors warned him that probably he'd be dead by 30, ie by 1959, or did he not grasp how ill he was beyond the discomfort and bouts of fatigue? Whatever the unknowable truths, his was undoubtedly an incredible - yes, verging on foolhardy - achievement for one who probably shouldn't have been racing on, or at, any level.

There have been several better world champions but surely few so spent, physically and emotionally, and none more miraculous. *



CUP TALLADEGA NASCAR MANS PETI DTM HOCKENHEIM IMSA STERING S EUROPEAN F3 HOCKENH WORLD RALLYCRO WEC FUJI





RACE CENTRE FUJI 6 HOURS

A

nother Toyota one-two and another four-lap winning margin, yet the events of Fuji last weekend were different in the detail to those of the

Silverstone World Endurance Championship round in August. The Japanese cars survived the rigours of post-race scrutineering, the #7 car shared by Kamui Kobayashi, Mike Conway and Jose Maria Lopez finally chalked up a victory, and the LMP1 privateers were closer to the pace.

The Japanese cars pretty much dominated on home ground despite changes to the Equivalence of Technology designed to bring the privateers closer. So that made it another two-horse race between the pair of Toyota TSo50 HYBRIDs and it was once again most definitely a race, one that turned against Fernando Alonso, Sebastien Buemi and Kazuki Nakajima courtesy of a tactical quirk early in the six hours.

Kobayashi had to start from eighth, at the back of the LMP1 field, after Lopez had his qualifying time scrubbed out for a pitlane speeding infringement. The Japanese driver opted to line up in the rainy conditions that had descended over the Fuji Speedway on what is known as the cut Michelin wet.

It is what it says: a wet tyre with additional hand-cut grooves that gets up to temperature quicker than a conventional wet. That explained why Kobayashi thought it might be the better option for the task of scything through the privateer P1 pack.

He'd realised the error of his ways "after two or three corners", which explains why he was in the pits after just 10 laps for a set of the same conventional wet-weather Michelins on which Nakajima had started.

It didn't look good for the crew of the #7
car at this point as they pursued a first WEC
victory together. Yet they came through to
take the spoils thanks to a first-hour safety
car, a split strategy from Toyota as it hedged
its bets as the weather improved and, it must
be said, a definite if narrow edge on pace.

Nakajima was brought into the pits for a set of intermediates during what turned out to be a protracted period of yellow flags after Gustavo Menezes looped his Rebellion-Gibson R-13 into the barriers behind the safety car.



Kobayashi went straight to slicks when he stopped shortly after the one-hour mark. The time he gained over the next four laps before Nakajima had to come in to swap over from his intermediates gave the #7 car an edge it would hold to the end.

It started off as a narrow advantage: Kobayashi found himself with four and a bit seconds over Nakajima. That margin would fluctuate over the remainder of the race, though there was an upward trend in favour of the #7 car.

Kobayashi was 11s up on Nakajima when Buemi took over the #8 Toyota. The Swiss driver brought it down to under a second before Conway climbed behind the wheel of the winning car. He took the gap back into double figures and continued to extend the margin when he went up against Alonso.

Lopez held his own against the two-time Formula 1 World Champion and climbed out having increased the gap to more than 20s. A set-up tweak for the #8 car — it was given a new rear deck when Nakajima took back the controls — failed to have the desired effect. He could do nothing about that 20s margin, though Kobayashi finished only 11s up after backing off over the final couple of laps.

"We went for a risky strategy and realised immediately that it was a mistake," said Kobayashi. "It was a bit late to go onto inters, so we went straight to slicks and gained a lot of time and positions. After that we kept the momentum."

Buemi pointed out that it might have been different but for the safety car. "We had a one-minute advantage and then they found themselves in the lead," he said. "They were quicker than us, but not by so much."

It was about time too for the #7 Toyota, which ended a winless drought stretching back exactly two years to this fixture in 2016 when the 'second' Toyota entry bore the number 6 and Stephane Sarrazin shared with Kobayashi and Conway. They had to play second fiddle to the drivers of the sister car last year as Toyota tried to prevent Porsche from sweeping to yet another WEC title, and have been more or less a match for the #8 crew so far in the 2018-19 season.

"It was great to get a win because we've been banging on the door all year," said Lopez, who notched up a maiden WEC victory to go with his 29 in the World Touring Car Championship. "To do it here at Toyota's home race is great."

Four laps behind came the only privateer LMP1 to run cleanly throughout. Had there been any opposition for Andre Lotterer, Neel Jani and Bruno Senna in the best of the Rebellions they probably wouldn't have been quite so far behind the Toyotas. Three laps was probably a more realistic deficit.

The EoT changes conceded by Toyota had an effect, but not quite the desired one. The 26kg increase in the minimum weight of the TSo5os, a removal of their two-lap advantage in stint length and a reduction in the seconds they gain in the pits definitely edged the independents closer, but by how much depended on who was talking.

Toyota Motorsport GmbH technical





director Pascal Vasselon pointed out that Jenson Button, in particular, had turned competitive times in the wet at the beginning, and at the end after an 11-minute stop to replace an alternator belt on the SMP Racing BR Engineering BR1 he shared with Vitaly Petrov and Mikhail Aleshin.

"Jenson was able to be within tenths of our cars," explained Vasselon. "Not just for one lap, but for a whole stint."

That may have been the case, but there was still disquiet in the privateer camp. The consensus was that although they gained with the gifts from Toyota, they had also lost out under the Fuji EoT.

The fuel allocation given to the indies at Silverstone meant there was no need for them to back off — or lift and coast — but at Fuji it was a necessity if they were to hit their fuel numbers and avoid penalties. Rebellion Racing reckoned this came with a loss of somewhere between three and four tenths per lap.

The privateers were also losing more than the two seconds that Toyota is meant to have in hand on refuelling time, down from the five at the start of the season. The Rebellion R-13s were seeing around five seconds disappear at each stop and SMP's AER-engined BR1s probably double that.

One thing Vasselon said that could not be disputed was that the independents, Rebellion aside with one car, failed to put together a clean race. Button's BR1 had its alternator issues, Menezes had his crash and the second SMP entry lost a wheel and then went out with fuel-system issues, and the ByKolles ENSO CLM ran with reduced turbo boost for nearly the whole race.

"The privateers have the potential, but they are struggling to put everything together," he said. "The ingredients are all there."

That might be the case, but the EoT recipe may need tweaking again before Toyota starts having to look over its shoulder.

LMP2: JACKIE CHAN PAIR KICK ON



The Jota-run Jackie Chan DC Racing squad dominated LMP2 on the way to a one-two victory for its pair of ORECA-Gibson 07s. The Anglo-Chinese team executed the race to perfection as Jazeman Jaafar, Nabil Jeffri and Weiron Tan claimed a maiden victory on a day when Jota's rivals got it very wrong.

The all-Malaysian crew had the edge on team-mates Ho-Pin Tung, Stephane Richelmi and Gabriel Aubry all weekend on the way to a 26-second victory.

Jaafar had the better of Tung early on, and then Tan cemented the car's position at the front of the class when he went silver versus silver against Aubry. The Frenchman also lost time when he was tagged by a Ferrari.

The race briefly came alive at the penultimate round of pitstops. Tung took over from Richelmi two laps before Jaafar replaced Jeffri, and used the fresh rubber to reduce a deficit of 16s to just four. That's as close as he got, however.

"We went into the race with slightly different set-ups," said Tung of his team-mates in the other Chan entry. "I think they just had a little bit on us today. I pushed really hard when I got in the car and closed the gap, but then I ran into traffic and got a lot of pick-up and that was that."

The Signatech Alpine squad, which was awarded its Le Mans 24 Hours trophy on the Friday after the confirmation of the exclusion of the G-Drive Racing ORECA, ended up third. Nicolas Lapierre, Andre Negrao and Pierre Thiriet were only 44s behind at the chequered flag – a margin that was much less than the Alpinebadged ORECA had lost early in the race.

Signatech opted to leave Lapierre out on the Dunlop intermediate tyres through the safety-car period. It turned out to be an error that was compounded when Lapierre had a time-consuming spin while still on the grooved rubber and left the car a genuine lap in arrears.

"Our strategy and my mistake cost us the win for sure," was how Lapierre summed up the blunder after the race. "We definitely had the pace."

The story of the race for the TDS Racing crew of Matthieu Vaxiviere, Jean-Eric Vergne (standing in for Loic Duval) and Francois Perrodo was more or less the same. It kept Vaxiviere out on inters for too long and he also had a spin before he got out of the car for the first time.

TDS still easily claimed fourth place, albeit a lap behind the podium finishers. It might have been different if Pastor Maldonado hadn't needed to bring DragonSpeed's ORECA into the pits for a 17-minute stop for repairs after he was hit by Davide Rigon's Ferrari.

The Michelin tyres on which the US entrant runs undoubtedly played a part in the pole position claimed by Anthony Davidson and Roberto Gonzalez, but they also explained its rapid descent after the start. The French company's wets weren't a match for the Dunlop inters on which its rivals began the race.





GTE Pro: RSR breaks its six-hour duck

Porsche took the GTE Pro victory at the Le Mans 24 Hours in June, but the German manufacturer had yet to notch up a first victory in a six-hour race since the introduction of the mid-engined 911 RSR at the start of 2017. It put that right at Fuji.

Kevin Estre and Michael Christensen didn't look like winners at the beginning of the race. They didn't call the conditions right and made an incorrect choice of tyres, which explained why Estre was struggling around at the back of the GTE Pro field.

But Porsche turned its day around with the right tactical call during the safety car, although it needed two stabs at it. Estre was sent out on a set of intermediate Michelins, whereas team-mate Richard Lietz was given a set of slicks.

"Richie was on slicks ahead of me as we were pushing to catch up the queue and it was clear that we'd made the wrong choice, so I came back in for slicks," explained Estre. "It was definitely the right call."

The battle for the class victory came

down to a straight fight between the Estre/Christensen Porsche and the BMW M8 GTE driven by Tom Blomqvist and Antonio Felix da Costa.

Blomqvist trailed Christensen right through the penultimate hour by three or so seconds. Both had been given a new set of Michelins on the four-hour mark. But when each was given two new tyres only for the final stint, the Porsche with Estre back at the wheel had a clear advantage and stretched the lead into an eventual 12s winning margin.

"They had the better pace on used tyres," said Blomqvist, who set fastest race lap for the class. "That's definitely an area in which we've got to improve."

Blomqvist admitted that BMW had high hopes for the weekend after its double Balance of Performance break ahead of Fuji: "We thought we could fight for something, but probably not the win, so we'll take this."

Ferrari definitely wouldn't take the hand it was dealt in Japan. The two factory AF Corse 488 GTEs were the fastest cars over a stint and either could have won.

Sam Bird and Davide Rigon were in a dominant position in the #71 AF car late in the fourth hour. The Ferrari was more than a dozen seconds up on the Porsche and pulling away when Rigon hit Pastor Maldonado in the DragonSpeed ORECA at the tight Turn 15 right-hander.

The car needed a new brake disc as a result. Ferrari couldn't be sure whether the brake issue was a cause or effect of the incident, though Rigon admitted to losing the rear end of the car.

James Calado and Alessandro Pier Guidi also had the pace to win this race in the sister AF car, but the delay that prevented them from doing so came in the opening hour. Calado picked up a puncture and came into the pits, at which point he was given a set of slicks. It would have been a timely call had he not be held by the red light at the end of the pitlane, which put him a lap down on the class leaders.

Calado and his team-mate came back to finish fourth behind the Ganassi Ford GT shared by Andy Priaulx and Harry Tincknell, and only 50s down on the winning Porsche. That was a clear indication of the pace of the Ferrari last weekend.

Priaulx and Tincknell appeared to have a chance of victory in the closing stages, but the new set of rubber that the team had kept back for Priaulx to use during the final stint became overpressured at the rear and didn't give him the advantage. **





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POS	DRIVERS	TEAM	CAR	CLASS	TIME
1	Kamui Kobayashi (J) Mike Conway (GB) Jose Maria Lopez (RA)	Toyota Gazoo Racing	Toyota TS050 HYBRID	LMP1	6h00m21.800s
2	Kazuki Nakajima (J) Sebastien Buemi (CH) Fernando Alonso (E)	Toyota Gazoo Racing	Toyota TS050 HYBRID	LMP1	+11.440
3	Andre Lotterer (D) Neel Jani (CH) Bruno Senna (BR)	Rebellion Racing	Rebellion-Gibson R-13	LMP1	-4 laps
4	Jenson Button (GB) Mikhail Aleshin (RUS) Vitaly Petrov (RUS)	SMP Racing (ART)	BRE-AERBR1	LMP1	-11 laps
5	Tom Dillmann (F) Oliver Webb (GB) James Rossiter (GB)	ByKOLLES Racing Team	ENSO CLM-Nissan P1/01	LMP1	-11 laps
6	Jazeman Jaafar (MAL) Weiron Tan (MAL) Nabil Jeffri (MAL)	Jackie Chan DC Racing (Jota)	ORECA-Gibson 07	LMP2	-13 lap
7	Ho-Pin Tung (NL) Gabriel Aubry (F) Stephane Richelmi (MC)	Jackie Chan DC Racing (Jota)	ORECA-Gibson 07	LMP2	-13 lap
8	Nicolas Lapierre (F) Andre Negrao (BR) Pierre Thiriet (F)	Signatech Alpine Matmut	ORECA-Gibson 07	LMP2	-13 laps
9	Matthieu Vaxiviere (F) Francois Perrodo (F) Jean-Eric Vergne (F)	TDSRacing	ORECA-Gibson 07	LMP2	-14 laps
10	Romano Ricci (F) Erwin Creed (F) Keiko Ihara (J)	Larbre Competition	Ligier-Gibson JSP217	LMP2	-19 laps
11	Kevin Estre (F) Michael Christensen (DK)	Porsche GT Team (Manthey)	Porsche911RSR	GTEPro	-23 laps
12	Antonio Felix da Costa (P) Tom Blomqvist (GB)	BMW Team MTEK	BMW M8 GTE	GTE Pro	-23 laps
13	Harry Tincknell (GB) Andy Priaulx (GB)	Ford Chip Ganassi Team UK	Ford GT	GTE Pro	-23 lap
14	James Calado (GB) Alessandro Pier Guidi (I)	AFCorse	Ferrari 488 GTE 'evo'	GTE Pro	-23 lap
15	Richard Lietz (A) Gianmaria Bruni (I)	Porsche GT Team (Manthey)	Porsche911RSR	GTEPro	-23 lap
16	Nicki Thiim (DK) Marco Sorensen (DK)	cki Thiim (DK) Marco Sorensen (DK) Aston Martin Racing (Prodrive) As		GTE Pro	-24 laps
17	Martin Tomczyk (D) Nicky Catsburg (NL)	BMW Team MTEK	BMW M8 GTE	GTE Pro	-24 lap
18	Stefan Mucke (D) Olivier Pla (F)	Ford Chip Ganassi Team UK	Ford GT	GTE Pro	-24 laps
19	Maxime Martin (B) Alex Lynn (GB)	Aston Martin Racing (Prodrive)	Aston Martin Vantage GTE	GTE Pro	-24 lap
20	Anthony Davidson (GB) Roberto Gonzalez (MEX) Pastor Maldonado (YV)	DragonSpeed	ORECA-Gibson 07	LMP2	-25 laps
21	Frits van Eerd (NL) Giedo van der Garde (NL) Nyck de Vries (NL)	Racing Team Nederland	Dallara-Gibson P217	LMP2	-26 laps
22	Davide Rigon (I) Sam Bird (GB)	AF Corse	Ferrari 488 GTE 'evo'	GTE Pro	-28 laps
23	Egidio Perfetti (N) Jorg Bergmeister (D) Patrick Lindsey (USA)	Team Project 1	Porsche911RSR	GTEAm	-29 laps
24	Charlie Eastwood (GB) Salih Yoluc (TR) Jonny Adam (GB)	TFSport	Aston Martin Vantage GTE	GTEAm	-29 laps
25	Paul Dalla Lana (CDN) Pedro Lamy (P) Mathias Lauda (A)	Aston Martin Racing (Prodrive)	Aston Martin Vantage GTE	GTEAm	-29 laps
26	Ben Barker (GB) Mike Wainwright (GB) Thomas Preining (A)	GulfRacing	Porsche911RSR	GTEAm	-29 laps
27	Satoshi Hoshino (J) Giorgio Roda (I) Matteo Cairoli (I)	Dempsey-Proton Racing	Porsche911RSR	GTEAm	-29 laps
28	Francesco Castellacci (I) Thomas Flohr (CH) Giancarlo Fisichella (I)	Spirit of Race	Ferrari 488 GTE	GTEAm	-30 laps
29	Keita Sawa (J) Mok Weng Sun (MAL) Matt Griffin (IRL)	Clearwater Racing	Ferrari 488 GTE	GTEAm	-30 laps
30	Christian Ried (D) Julien Andlauer (F) Matt Campbell (AUS)	Dempsey-Proton Racing	Porsche 911 RSR	GTEAm	-54 laps
R	Ben Hanley (GB) James Allen (AUS)	DragonSpeed	BRE-Gibson BR1	LMP1	179 laps-gearbox
R	Stephane Sarrazin (F) Egor Orudzhev (RUS) Matevos Isaakyan (RUS)	SMP Racing (ART)	BRE-AERBR1	LMP1	132 laps-fuel system
R	Gustavo Menezes (USA) Mathias Beche (CH) Thomas Laurent (F)	Rebellion Racing	Rebellion-Gibson R-13	LMP1	23 laps-acciden
R	Motoaki Ishikawa (J) Olivier Beretta (MC) Eddie Cheever (I)	MR Racing (AF)	Ferrari 488 GTE	GTEAm	14 laps-puncture

Winners' average speed 108.577mph. Fastest lap Lopez 1m25.603s, 119.238mph. In each car, first-named driver started the race.

LMP2 Davidson 1m30.557s, 112.715mph. GTE Pro Blomqvist 1m37.392s, 104.804mph. GTE Am Campbell 1m38.420s, 103.710mph.

QUALIFYING

1 Alonso/Buemi 1m23.648s; 2 Lotterer/ Jani 1m24.359s; 3 Laurent/Menezes 1m24.533s; 4 Orudzhev/Sarrazin 1m24.744s; 5 Button/Petrov 1m25.146s; 6 Dillmann/Rossiter 1m26.579s; 7 Hanley/Allen 1m28.207s; 8 Davidson/ Gonzalez 1m28.906s; 9 Jaafar/Jeffri 1m29.203s; 10 Richelmi/Aubry 1m29.294s; 11 Negrao/Thiriet 1m29.432s; 12 Vaxiviere/Perrodo 1m30.795s; 13 de Vries/van Eerd 1m31.440s; 14 Ricci/ Ihara 1m32.677s; 15 Thiim/Sorensen 1m36.093s; 16 Blomqvist/da Costa 1m36.275s; 17 Martin/Lynn 1m36.362s; 18 Priaulx/Tincknell 1m36.453s; 19 Rigon/Bird 1m36.542s; 20 Calado/Pier Guidi 1m36.544s; 21 Tomczyk/Catsburg

1m36.737s; 22 Bruni/Lietz 1m36.776s;
23 Mucke/Pla 1m36.967s; 24 Christensen/
Estre 1m37.109s; 25 Cairoli/Hoshino
1m38.336s; 26 Lamy/Dalla Lana
1m38.400s; 27 Campbell/Ried 1m38.524s;
28 Bergmeister/Perfetti 1m38.578s; 29
Adam/Yoluc 1m38.598s; 30 Sawa/Mok
1m39.330s; 31 Barker/Wainwright
1m39.355s; 32 Fisichella/Flohr
1m39.371s; 33 Beretta/Ishikawa
1m39.885s; 34 Lopez/Kobayashi
1m23.678s*. *excluded.

Fastest in each class:

LMP1 Alonso 1m23.203s; LMP2 Davidson 1m28.011s; GTEPro Thiim 1m35.884s; GTEAm Campbell 1m36.992s.

CHAMPIONSHIP

LMP drivers

1 Alonso/Nakajima/Buemi 84; 2 Lopez/ Kobayashi/Conway 71; 3 Menezes/ Beche/Laurent 63; 4 Lotterer/Jani 51; 5 Jaafar/Jeffri/Tan 34; 6 Senna 33.

LMP1manufacturers

1 Toyota Gazoo Racing 92; 2 Rebellion Racing 78; 3 SMP Racing 37; 4 ByKOLLES Racing Team 22; 5 CEFC TRSM Racing 1; 6 Dragon Speed 0.5.

LMP2 drivers

1 Negrao/Lapierre/Thiriet 87; 2 Aubry/ Tung/Richelmi 86; 3 Jaafar/Jeffri/Tan 86; 4 Maldonado/Gonzalez 55.

GTE drivers

1 Estre/Christensen 96; 2 Pla/Mucke 61; 3 Pier Guidi/Calado 55.5; 4 Bruni/Lietz 50;



 $5\,\textbf{Billy Johnson}\,48; 6\,\textbf{Laurens Vanthoor}\,38.$

GTE manufacturers

1 Porsche 152; 2 Ford 96; 3 Ferrari 84; 4 Aston Martin 57; 5 BMW 51.

GTEAm drivers

1 Ried/Andlauer/Campbell 80; 2 Perfetti/ Bergmeister/Lindsey 66; 3 Eastwood/ Yoluc 54; 4 Lauda/Dalla Lana/Lamy 52.



Schumacher does enough for the title

EUROPEAN FORMULA 3 HOCKENHEIM (D) OCTOBER 13-14 ROUND 10/10

Mick Schumacher became the final Formula 3 European champion at Hockenheim as a flourishing series in perfectly good health held its unnecessary requiem. But he wasn't one of the three winners in Baden-Wurttemberg: in fact, it was a nervy performance as he belatedly did enough to put the crown beyond reach of closest rival Dan Ticktum in the second race.

Schumacher's second place behind the superb Juri Vips was enough to do a job that should have been completed in race one. Once again Prema Powerteam was strong, although not to the field-blitzing extent it had enjoyed over the previous two weeks at the Nurburgring and Red Bull Ring. But while Prema team-mate Guan Yu Zhou bounced back from an inconsistent recent

run to grab pole for the opener, Schumacher took seventh on the grid after missing the very narrow peak of his tyres — conditions were blistering — when he got stuck in traffic. Ticktum was ninth: "I screwed up to be honest — I tried to squeeze absolutely everything out of it." And Schumacher only needed to beat Ticktum to a points-scoring position to become champion.

His hamfisted clatter into the back of team-mate Marcus Armstrong on the first lap destroyed both their races, and his attempt to get back to the pits with a damaged front wing involved a swerve that forced Ticktum off the track — and would have given Damon Hill nightmares — for which Schumacher was given a reprimand. Schumacher, who had the wing changed and caught the field under the safety car, couldn't quite recover to the points, while Motopark driver Ticktum took fifth — despite a further assault from Sacha Fenestraz — to keep the crown at least

mathematically up for grabs.

Up front, Zhou did a tidy job to beat the sister Prema car of Robert Shwartzman, who had Motopark's rookie star Vips swarming all over him. Vips had a dive into Spitzkehre on what he thought was the penultimate lap, but ran wide and Shwartzman easily repassed him. "It was quite a desperate move which didn't work out, but I had to do it — that's just me!" quipped Vips. It was actually the final lap, because the chequered flag flew early, a bungle for which the clerk of the course was issued with a written reprimand!

Ticktum's qualifying travails were even worse in the second session: 15th quickest, and only fifth of the Motopark drivers, was proof that he wasn't getting it right. Team-mate Vips, meanwhile, missed the peak of his tyres when he got too close on track to Ticktum, but still planted himself on pole with a last-lap mega-effort that beat Schumacher by 0.118 seconds.

Vips fought off Schumacher in what turned out to be a question of who made fewest mistakes on a slippery track that was so hot that the tyre pick-up was extreme. It was Schumacher who cracked, snapping sideways at Turn 1 and jolting his shoulder. While Vips moved himself out of range, Schumacher did enough to fend off the sister Prema car of Ralf Aron for second — and the title. "I had quite a lot of pick-up," said Schumacher, "probably due to the tyre temperatures, and never really got the tyres cleaned until mid-race. Once I got into the rhythm I was able to get consistently the lap times. So I'm happy about that; the







mistakes I did I'm quite unhappy about."

Ticktum raced really well all weekend and made up eight places to finish seventh, but now his second position in the points was under real threat from Vips. In turn, Vips's third place was vulnerable from Shwartzman, who had lost fourth to Carlin's rapid-all-weekend Jehan Daruvala in the second race.

This turned out to be the story of the finale, for which Shwartzman was on pole from Schumacher and Vips. Schumacher got a better start, but Shwartzman "just kept it flat at Turn 1" to hold his advantage, as it all kicked off behind... Aron was fighting Alex Palou (the Hitech driver back on form this weekend to take a front-row slot for race one) for fourth as they raced down to the hairpin. It was tight, and Aron, while battling Palou, tapped Vips into a spin Fenestraz was the collateral damage as he rode over the rear of Aron.

While Aron continued in fourth, and mounted a series of bids to prise the final podium spot of the season from Palou, Vips - despite a bent pushrod - put in an astonishing charge from 22nd to 10th, lapping 0.3s quicker than the leaders. Afterwards Aron was penalised out of the points for the move, and Vips declared that he was told before the race that Aron would take him out, to enable Shwartzman to move up to third in the points... Arguably it denied him second - such was his pace that he could have leapfrogged fifth-placed Ticktum.

Now their successors will be trained in an inferior car. RIP to Euro F3; gone too soon.

MARCUS SIMMONS

OS	DRIVER	TEAM/CAR	TIME
1	Guan Yu Zhou (PRC)	Prema Powerteam / Dallara-Mercedes F315	32m19.369s
2	Robert Shwartzman(RUS)	Prema Powerteam/Dallara-Mercedes F314	+2.075s
3	Juri Vips (EST)	Motopark/Dallara-Volkswagen F315	+2.765s
4	Alex Palou (E)	Hitech GP/Dallara-Mercedes F316	+5.107s
5	Dan Ticktum (GB)	Motopark/Dallara-Volkswagen F318	+5.629s
6	RalfAron(EST)	Prema Powerteam/Dallara-Mercedes F317	+8.286s
7	Sacha Fenestraz (F)	Carlin/Dallara-Volkswagen F317	+8.977s
8	Nikita Troitskiy (RUS)	Carlin/Dallara-Volkswagen F315	+13.032s
9	EnaamAhmed (GB)	Hitech GP/Dallara-Mercedes F315	+13.754s
10	Frederik Vesti (DK)	Van Amersfoort Racing/Dallara-Mercedes F316	+14.623s
11	Julian Hanses (D)	Carlin/Dallara-Volkswagen F312	+15.734s
12	Mick Schumacher (D)	Prema Powerteam/Dallara-Mercedes F318	+16.630s
13	Artem Petrov (RUS)	Van Amersfoort Racing/Dallara-Mercedes F316	+17.380s
14	Ben Hingeley (GB)	Hitech GP/Dallara-Mercedes F315	+19.031s
15	Sophia Florsch (D)	Van Amersfoort Racing/Dallara-Mercedes F316	+20.012s
16	Jonathan Aberdein (ZA)	Motopark/Dallara-Volkswagen F315	+20.903s
17	Keyvan Andres (D)	Van Amersfoort Racing/Dallara-Mercedes F317	+21.809s
18	$\textbf{SebastianFernandez}(\forall\forall)$	Motopark/Dallara-Volkswagen F318	+22.283s
19	Marino Sato (J)	Motopark/Dallara-Volkswagen F314	+23.502s
20	${\bf Ameya Vaidyanathan} ({\tt IND})$	Carlin/Dallara-Volkswagen F312	+24.4745
R	Ferdinand Habsburg (A)	Carlin/Dallara-Volkswagen F317	5laps-accident
R	Fabio Scherer (CH)	Motopark/Dallara-Volkswagen F316	5laps-accident
R	Marcus Armstrong (NZ)	Prema Powerteam/Dallara-Mercedes F317	5laps-accidentdamage
R	Jehan Daruvala (IND)	Carlin/Dallara-Volkswagen F312	0laps-accident

Winner's average speed 94.964mph. Fastest lap Zhou 1m33.072s, 109.933mph.

QUALIFYING1

1 Zhou 1m32.335s; 2 Palou 1m32.355s; 3 Shwartzman 1m32.370s; 4Daruvala 1m32.373s; 5Vips 1m32.450s; 6Armstrong1m32.481s;7Schumacher1m32.505s; 8 Vesti 1m32.581s; 9 Ticktum 1m32.594s; 10 Fenestraz 1m32.598s; 11 Petrov 1m32.642s; 12 Aron 1m32.643s; 13Habsburg 1m32.698s; 14Ahmed 1m32.772s; 15Scherer1m32.804s;16Troitskiy1m32.878s; 17 Hanses 1m32.923s; 18 Florsch 1m32.925s; 19 Hingeley 1m32.989s; 20 Andres 1m33.011s; 21 Sato 1m33.112s; 22 Fernandez 1m33.789s; 23 Aberdein 1m34.010s; 24 Vaidyanathan 1m33.457s*.

RACE2 (21 LAPS - 59.685 MILES)

1Vips 35m34.771s; 2Schumacher + 3.472s; 3Aron +6.299s;4Daruvala+7.775s;5Shwartzman+9.021s; 6Scherer+10.179s;7Ticktum+10.925s;8Palou +14.618s;9Troitskiy+21.752s;10Zhou+22.548s; 11 Aberdein +22.794s; 12 Habsburg +25.226s; 13Hingeley+30.297s; 14Sato+30.952s; 15Fernandez +31.353s; 16 Petrov +31.675s; 17 Andres +33.657s; 18Vaidyanathan+35.129s; 19Florsch+37.704s; 20Vesti +1m19.269s; RArmstrong 16 laps-accident damage; RAhmed 7 laps-accident damage; RHanses 0 lapsaccident; RFenestraz 0 laps-accident. Winner's average speed 100.650mph. Fastest lap Vips 1m34.088s, 108.746mph.

QUALIFYING2

1Vips 1m32.284s; 2Schumacher 1m32.402s; 3Shwartzman 1m32,406s; 4Daruvala 1m32,408s; 5 Palou 1m32.489s; 6 Hanses 1m32.630s; 7 Fenestraz 1m32.636s;8Aron1m32.650s;9Ahmed1m32.666s; 10 Sato 1m32.683s; 11 Zhou 1m32.715s; 12 Scherer

1m32.665s*;13Aberdein1m32.725s;14Armstrong 1m32.726s; 15 Ticktum 1m32.748s; 16 Habsburg 1m32.783s; 17 Florsch 1m32.910s; 18 Hingeley 1m32,966s; 19 Fernandez 1m33,140s; 20 Petrov 1m33.174s; 21 Vesti 1m33.196s; 22 Troitskiy 1m33.256s; 23 Andres 1m33.357s; 24 Vaidyanathan 1m33.366s.

RACE3 (22 LAPS-62.527 MILES)

1Shwartzman34m34.214s; 2Schumacher+10.511s; 3Palou+11.585s; 4Ticktum+12.726s; 5Zhou+13.181s; 6Habsburg+13.552s;7Aberdein+14.834s;8Ahmed +16.731s;9Vips+17.950s;10Petrov+21.762s;11 Scherer+27.044s; 12Fernandez+27.412s; 13Hanses +27.741s; 14Vesti+28.280s; 15Aron+32.016s; 16Sato +32,236s;17Vaidyanathan+33,151s;18Florsch +40.754s; 19 Hingeley +48.698s; 20 Andres +49.745s; 21 Troitskiy+1m10.951s; R Daruvala 6 laps-accident damage; RArmstrong 6 laps-accident damage; RFenestraz1lap-accident damage. Winner's average speed 108.522mph. Fastest lap Vips 1m33.421s, 109.522mph.

GRIDFORRACE3

1Shwartzman; 2Schumacher; 3Vips; 4Palou; 5Aron; 6Daruvala;7Fenestraz;8Zhou;9Ahmed;10Ticktum; 11 Habsburg; 12 Aberdein; 13 Sato; 14 Scherer; 15 Hanses; 16 Florsch; 17 Armstrong*; 18 Hingeley; 19 Vesti; 20 Fernandez; 21 Petrov; 22 Troitskiy; 23Andres; 24Vaidyanathan. * grid penalty.

CHAMPIONSHIP

1 Schumacher 365; 2 Ticktum 308; 3 Shwartzman 294; 4Vips 284; 5Armstrong 260; 6Aron 242.5; 7Palou 204; 8Zhou 203; 9Ahmed 174; 10 Daruvala 136.5.



Champion Paffett earns a big hand

DTM HOCKENHEIM (D) OCTOBER 13-14 **ROUND 10/10**

Thirteen years on from his first DTM title, Mercedes veteran Gary Paffett finally made it a second at Hockenheim last weekend. But with this being Merc's DTM swansong, he likely would never have taken that second crown had the season gone on for one more race. Audi magician Rene Rast continued his extraordinary winning streak to what the Germans amusingly described as 'sechs-ina-row' as his late-season bid for a second successive title fell short by just four points.

While Rast has been incredible, he has also had the rub of the green recently when it comes to fortuitously timed safety cars. This time a door fell off the BMW of Augusto Farfus while Rast and Paffett were enjoying a fabulous battle for the lead in the second half of Saturday's race. With

Mercedes struggling relative to its opposition to keep the tyres alive on race runs, this caution prevented what would have been at least a second place for Paffett.

That seven-lap sprint to the finish instead resulted in Paffett dropping to fourth as Audi's Robin Frijns, who had been among the last to take on new tyres, and BMW's Timo Glock, who had pitted only two laps after Paffett, came through to take the podium spots behind Rast. And it also hampered pre-race points leader Paul di Resta. Furious with Frijns for an early clash that dislodged his front bumper, di Resta also had a hairy bounce over the grass on the back straight on the restart lap as he fell to an eventual eighth. Now Paffett was ahead in the championship.

Di Resta qualified his Mercedes 11th for Sunday's race, while Paffett – his first pole attempt disallowed for track limits - drove what he estimated as his best lap of all time to take third on the grid despite a massive slide at Turn 1. That looked to have put di

Resta out of the title picture, and now all Paffett had to do was finish in the top four to keep the title out of Rast's reach.

This race wasn't as exciting as its predecessor, but the title dimension made it tense. Marco Wittmann had bounced back from a free-practice shunt - which ruled him out of qualifying on Saturday — to grab pole in his BMW, but clutch problems at the start allowed Rast to get ahead of him. Rast took several laps to get out of DRS range, but once he'd done that there was never any doubt over the destiny of the race win, and Wittmann was equally secure in second.

Paffett remained close to this duo for a few laps, but found his pace dropping off as the stint went on. Still, with a huge gap to fourth, he looked secure for the title. As long as there wasn't going to be a pesky safety car in the second half of the race...

Rast's back-up from his Audi cohorts was pretty weak in qualifying - Nico Muller was the best on the grid, in ninth. But come the race they redeemed themselves. Muller and Frijns made late pitstops deep into the second half of the race, and Muller rejoined in a net seventh place; Frijns 12th. Both went on a charge through the squadron of BMWs and wilting Mercs as they zeroed in on Paffett. "At certain points of the track I could see them coming, and then I saw them start to appear in my mirrors with four or five laps to go," said Paffett. "But I knew they weren't close enough to catch me."

Muller fell 1.4s short of Paffett, with Frijns a further 1.7s in arrears. Audi hadn't quite completed its miracle, and Paffett bows out of the DTM as its king. But at this rate the 2019 title may as well be given to Rast.

MARCUS SIMMONS



Almirola converts SHR domination

NASCAR CUP
TALLADEGA (USA)
OCTOBER 14
ROUND 31/36

Practice and qualifying hinted that Stewart-Haas Racing held a significant pace advantage over the rest of the NASCAR Cup field at Alabama's Talladega superspeedway.

Of the team's top-four qualifying lockout, it was fourth-starting Aric Almirola who claimed the spoils. He capitalised on the strategy woes of his team-mates to secure his second Cup career win and a ticket to the next round of the playoffs.

It may be the oldest design on the grid, but the Ford Fusion's turn of speed wasn't unexpected. Blue Ovals had claimed victory in eight out of the past 10 restrictor-plate races, including leading 61% of the total number of laps raced in the previous five.

When Kurt Busch took his first-ever pole position in plate conditions, after nearly 20 years of trying, there was an air of certainty about what would happen on race day.

For 185 laps of the scheduled 188, the race went the way of the form book. Busch and Kevin Harvick took stages one and two



respectively, with Clint Bowyer and Almirola slotting in behind for almost continuous SHR occupation of the top four.

But then contact between Alex Bowman and Erik Jones blew the race, and the playoffs, wide open.

Long-time race leader Busch found his fuel-managing efforts insufficient as he ran dry on the final lap of overtime to slide down to 14th. Third-starting Harvick was subjected to a similar fate, finally winding up in 28th.

Both Harvick and Kyle Busch, who finished 26th, are almost certainly secure with their spots in the 'Round of Eight', and so attention switched to who would join them. Bowyer's second-place finish, coupled with the points that Kurt Busch accrued in the stages, leaves all four SHR drivers either through, or on the verge of making it.

The tightest battle is currently between reigning Cup champion Martin Truex Jr (Furniture Row Racing) and Team Penske's Brad Keselowski.

The advantage currently lies with Truex, 18 points to the good, as Keselowski is 18 below the bubble.

JAKE NICHOL

WEEKEND WINNERS

DTM HOCKENHEIM

Race 1 Rene Rast

Team Rosberg Audi RS5 DTM

Race 2 Rene Rast

Team Rosberg Audi RS5 DTM

WRX ESTERING

Johan Kristoffersson

PSRX Volkswagen Sweden Volkswagen Polo R

NASCAR CUP TALLADEGA Aric Almirola

Stewart-Haas Racing Ford Fusion

NASCAR TRUCK SERIES TALLADEGA Timothy Peters

GMS Racing Chevrolet Silverado

For full results visit: motorsportstats.com

Swede in the lead again

WORLD RALLYCROSS ESTERING (D) OCTOBER 13-14 ROUND 11/12

On his way to securing this season's World Rallycross title, Johan Kristoffersson claimed victory at the calendar's two newest destinations, Silverstone and Austin, Texas.

But he had yet to yield a podium from Estering in Germany, which has been on the schedule since the championship's 2014 inception. Keen to put that right, now-



double champion Kristoffersson worked hard in the build-up to the round to "do [his] homework". Most notably, he focused on the low-grip first corner where circuit-racing precision doesn't apply. That preparation paid dividends.

Kristoffersson was top on day one, headed qualifying and his semi-final, and then led the final throughout from pole to score his 10th win in 11 rounds.

His PSRX Volkswagen Polo survived any threat from Andreas Bakkerud when the final had to be restarted after Kevin Hansen crashed out on lap four. The Peugeot driver was taken to hospital overnight as a precaution. Mattias Ekstrom was second ahead of Bakkerud in an EKS Audi double podium, and Niclas Gronholm (Hyundai i20) finished fourth.

Petter Solberg ran fifth in the final before retiring with engine failure, but his PSRX Volkswagen Sweden squad sealed the teams' title with a round to go.

HAL RIDGE



PETIT LE MANS ROAD ATLANTA (USA) OCTOBER 13 IMSA ROUND 12/12

The 20th-anniversary Petit Le Mans was truly an endurance classic, decided only when a fuel-strategy gamble failed to pay off and the Wayne Taylor Racing Cadillac of Renger van der Zande swept past the similar Action Express car of Filipe Albuquerque with just two corners remaining.

It was a suitably dramatic conclusion to an event that has unfailingly delivered great spectacle since it was launched in 1998 by Don Panoz, who passed away last month.

The enthralling 10-hour race unfolded in picture-perfect conditions at Road Atlanta,

which remains one of the world's most challenging (and unspoiled) race tracks. Eight of the 14 Prototype cars spent time in the lead, and all four DPi manufacturers — Nissan, Mazda, Acura and Cadillac — looked strong at one stage or another. Similarly, all nine GTLM cars took a turn in the lead and no fewer than 10 of the 14 GTD entries ran at the head of their class. Panoz would have been immensely proud.

The tone was set on lap two when Mazda Team Joest driver Jonathan Bomarito eclipsed the lap record of 1m12.563s (set last year by Pipo Derani at an average speed of 126.014mph) while running third. On lap 11, Bomarito went even faster to set the race's and circuit's new standard at 1m11.490s (127.906mph) as he chased Derani's pole-sitting Nissan DPi and Oliver Jarvis aboard the sister Mazda.

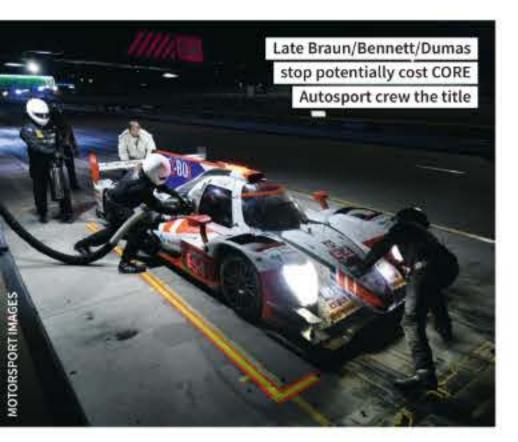
After Derani relinquished his lead owing to a puncture on lap 20, the pair of Mazdas led convincingly until the first round of pitstops. Ricky Taylor's Team Penske Acura gave chase, then took over at the front after another sequence of stops had been triggered — though this was a mixed blessing, since it was set in motion by Juan Pablo Montoya spearing off the track at Turn 3 in the other Penske Acura.

Taylor, Helio Castroneves and Graham
Rahal remained firmly in contention,
despite excessive tyre degradation, until
Castroneves was given a drivethrough
penalty for inadvertently overtaking under
yellows with around 140 minutes remaining.

The Cadillacs and Mazdas seemed best placed as day turned to night although Derani, joined by Johannes van Overbeek and Timo Bernhard, was also a major player. He edged away with an hour remaining but, crucially, was among the first to pit for fuel in the closing stages and required an extra splash with less than five minutes remaining. The Nissan fell to sixth.

Also dropping was the CORE Autosport Ligier-Gibson of Colin Braun/Jon Bennett/ Romain Dumas. The P2 cars were unable to match the fuel economy of the DPis under the current Balance of Performance. Their late stop prevented them from snatching the championship away from the Action Express Cadillac of Felipe Nasr/Eric Curran/







Gabby Chaves, who virtually coasted home in eighth. It was a frustrating finish for Nasr but the IMSA championship crown for him and Curran was a well-earned distraction.

Team-mate Albuquerque, who shared with Tristan Vautier and Christian Fittipaldi, led 23 of the final 24 laps, but his final stop with 43 minutes remaining proved to be just a few moments too soon: his car spluttered, out of fuel, through the chicane on the final lap. A gleeful van der Zande, who had stopped two laps later, sped on to the chequered flag chased by the pair of Mazdas as the bitterly disappointed Albuquerque coaxed his Cadillac home fourth. Winners van der Zande, Jordan Taylor and Ryan Hunter-Reay completed 443 laps - 31 more than the old record set in 2016.

Nick Tandy/Patrick Pilet/Fred Makowiecki (Porsche 911 RSR) took GTLM honors after another titanic battle, while Jan Magnussen/Antonio Garcia (Chevrolet Corvette C7.R) narrowly won the championship despite an embarrassing crash for the usually ultra-dependable Garcia while exiting the pits after 305 laps.

GTD also was a nailbiter. Daniel Serra/ Cooper MacNeil/Gunnar Jeannette (Ferrari 488 GT3) edged out the Acura NSX of Katherine Legge/Alvaro Parente/Trent Hindman by less than a second. Regardless, third place was enough to secure the title for Lamborghini Huracan pair Bryan Sellers and Madison Snow, aided by Corey Lewis.

JEREMY SHAW



POS	DRIVERS	CAR	TIME
PROT	ОТУРЕ		
1	Renger van der Zande/Jordan Taylor/Ryan Hunter-Reay	Cadillac DPi-V.R	10h00m29.165s
2	Oliver Jarvis/Tristan Nunez/Lucas di Grassi	Mazda RT24-P	+5.306s
3	Jonathan Bomarito/Marino Franchitti/Spencer Pigot	Mazda RT24-P	+7.605s
4	Filipe Albuquerque/Christian Fittipaldi/Tristan Vautier	Cadillac DPi-V.R	+9.458s
5	Helio Castroneves/Ricky Taylor/Graham Rahal	Acura ARX-05	+30.450s
6	Johannes van Overbeek/Pipo Derani/Timo Bernhard	Nissan Onroak DPi	+45.065s
7	Jon Bennett/Colin Braun/Romain Dumas	ORECA-Gibson 07	+56.543s
8	Felipe Nasr/Eric Curran/Gabby Chaves	Cadillac DPi-V.R	-1lap
9	Simon Trummer/Robert Alon/Devlin DeFrancesco	ORECA-Gibson 07	-2 laps
10	Chris Miller/Stephen Simpson/Mikhail Goikhberg	ORECA-Gibson 07	-8 laps
GTLM			
1	Patrick Pilet/Nick Tandy/Frederic Makowiecki	Porsche911RSR	10h00m50.045s
2	Oliver Gavin/Tommy Milner/Marcel Fassler	Chevrolet Corvette C7.R	+11.443s
3	Jesse Krohn/John Edwards/Chaz Mostert	BMW M8 GTE	+15.257s
GTD			
1	Cooper MacNeil/Daniel Serra/Gunnar Jeannette	Ferrari 488 GT3	10h01m46.319s
2	Katherine Legge/Alvaro Parente/Trent Hindman	Acura NSX GT3	+0.876s



Bryan Sellers/Madison Snow/Corey Lewis



Lamborghini Huracan G13

AWNINGS



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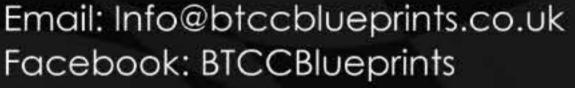
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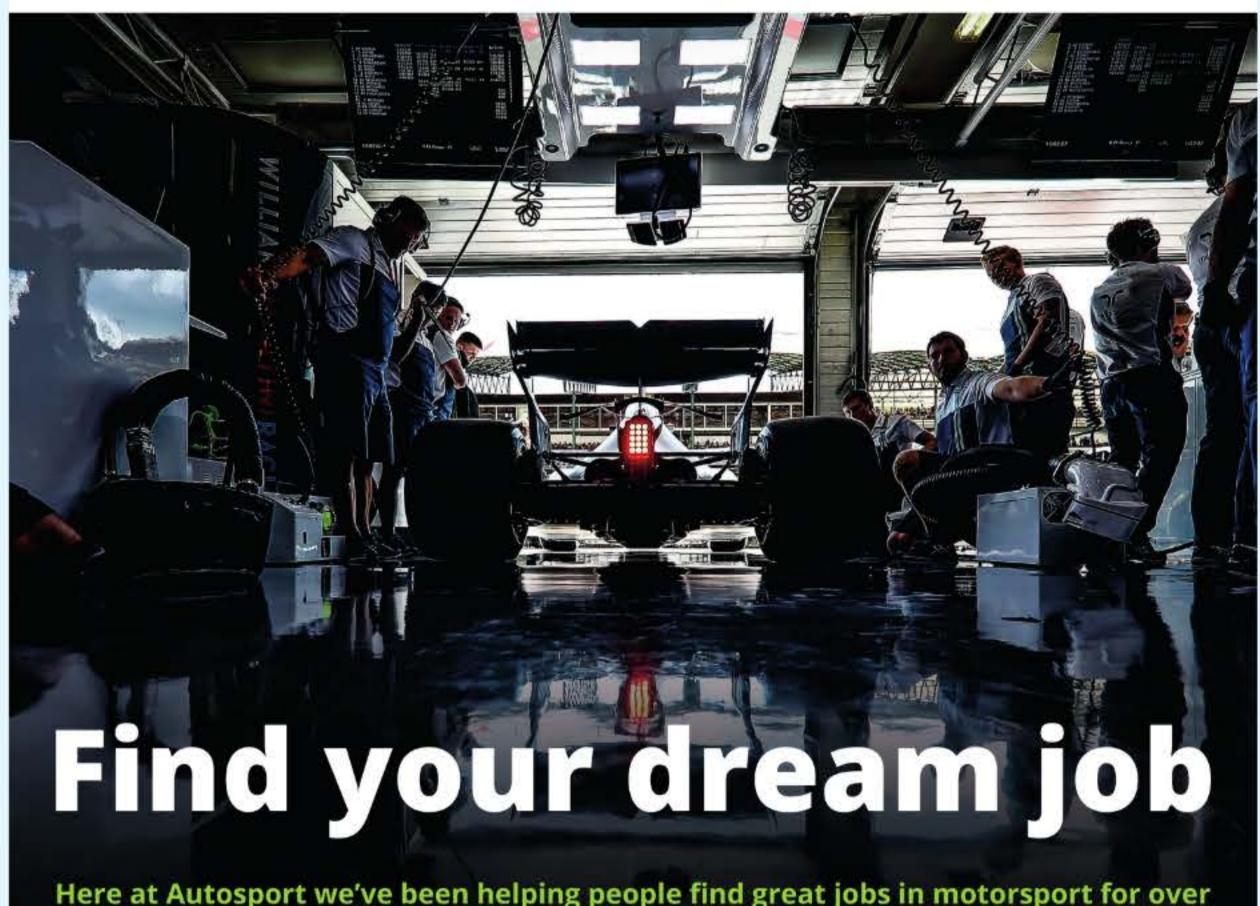


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DEMPSEY RETURNS FOR FORMULA FORD FESTIVAL AT BRANDS

FORMULA FORD FESTIVAL

Three-time Walter Hayes Trophy winner Peter Dempsey will make a surprise return to the Formula Ford Festival at Brands Hatch this weekend. The Irishman, now based in the US, last contested the Festival in 2010 in the Duratec era. His most recent UK outing was in the 2015 Walter Hayes Trophy at Silverstone, where he finished second in the final before being excluded for wearing

Foster switches to Firman

FORMULA FORD FESTIVAL

Last year's Formula Ford Festival winner Joey Foster will switch to a Firman chassis for this weekend's event at Brands Hatch.

Foster claimed his third Festival success with a sensational around-the-outside move at Paddock Hill Bend in his Don Hardman-run Ray GRo8 in 2017, and has campaigned the car for a full season in the National championship this year, winning the opening round at Silverstone.

He will now swap to the Firman chassis that won the 2017 National championship in the hands of Luke Williams for the end-of-season classics at Brands and Silverstone's Walter Hayes Trophy.

"I thought, 'Right, here's a new challenge," said Foster. "We've won with the Ray last year; I'd love to be able to go out there and put on a good show in Ralph [Firman]'s car as well."

Foster, who helped develop Firman's BRDC Formula 4 machine, as well as Formula 2000 and Formula 1000 chassis for the US market, added: "I've done so much work for him in the past, it would be good to actually go out there and do a race in one of his cars.

"I haven't tested it yet so it's going to be interesting. I'll try to get out at the Festival first thing on Wednesday morning [for testing] to try to understand the car and work our magic with it."

Renault UK Clio Cup Junior graduate
 Max Marzorati will also have a change of
 cars at the Festival. Marzorati, who has raced
 a Firman chassis run by Enigma Motorsport
 at Silverstone in July and then Team Dolan at
 Donington, will join the Swift Cooper team.

MARK PAULSON





an incorrect frontal head restraint.

Dempsey, who won the Hayes in 2006, '07 and '10, will drive a new Ray run by his father Cliff. "I was keen to do it this year as I haven't done much racing in the past few years," he said. "Every year goes by and I'm watching the Festival live timing from 3000 miles away. I've been keeping track of what's going on but I was missing it -Formula Ford is the best racing in the world!

"Dad had a car available so I thought it would be a bit of fun. I will be driving a 2018 Ray that hasn't been raced yet. It's a brand-new car that was just shaken down last week by James Clarke. Everything is good to go. I'll have to shake off the rust and Team USA Scholarship winners Jake Craig

will be doing two and a half days of testing.

"Obviously you want to be competitive, but I'm just going to have a bit of fun."

Dempsey has not ruled out also competing in the Hayes next month, but says it depends on whether he can fit it around his work schedule.

Dempsey has set up his own team, Turn 3 Motorsport, running Pro Mazda cars in the US. The 2017 champion Victor Franzoni set the fastest time for the squad in the series' first official post-season test last month at Indianapolis, with Dempsey saying he is encouraged by progress.

Meanwhile, Cliff Dempsey Racing's

and Colin Mullan enjoyed successful Formula Ford debuts at Donington Park last weekend. Craig, who has raced in Canadian F1600, finished second on his wet-race debut on Sunday, having twice finished fifth the day before, while IMSA Mini JCW racer Mullan managed a best finish of sixth.

The California-based pair will now tackle this weekend's Festival and next month's Walter Hayes Trophy with the team. They secured their places on the annual scholarship scheme run by long-time Autosport contributor Jeremy Shaw following a shootout at Mid-Ohio.

STEPHEN LICKORISH & MARK PAULSON





Donegan eyes one better

FORMULA FORD FESTIVAL

Mazda Road to Indy Shootout winner Keith Donegan, who finished runner-up on his Formula Ford Festival debut last year, will be back in action at Brands Hatch this weekend.

Donegan almost pipped Joey Foster to the win 12 months ago, securing a Mazda Road to Indy Shootout ticket, available to the highest-placed driver under the age of 25. He won the \$200,000 scholarship in last December's shootout in Arizona and has spent 2018 competing in the IndyCar-supporting USF2000 series.

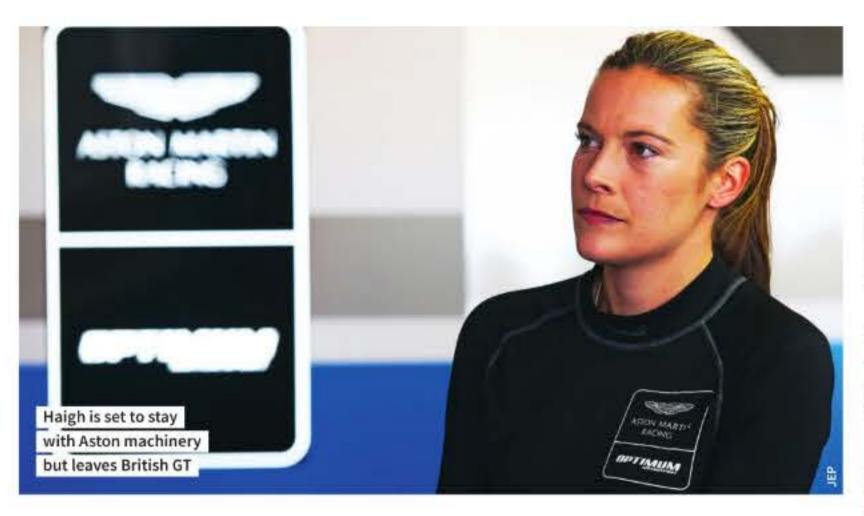
"I obviously want to win and I know we're probably going to be

competitive," said Donegan, who will race a Van Diemen JL13K. "The car hasn't moved since the Walter Hayes Trophy last year and lots of guys offered to buy it from me, but there was no chance."

 Chris Middlehurst is confident of battling for Festival glory after finding a car fix. "I was third two years ago and the car is going to be better than then," he said. "We've got a good chance, but it's not going to be easy."

Van Diemen JL10 driver Middlehurst has switched to Bernard Dolan's team for the event alongside 2016 winner Niall Murray, Matthew Cowley and Matt Round-Garrido.

STEFAN MACKLEY & JACK BENYON



Haigh to Europe, won't defend British GT title

BRITISH GT

British GT champion Flick Haigh will not defend her title next year and will instead return to racing in Europe.

In her first season of British GT after switching from the Michelin Le Mans Cup, the 34-year-old claimed the title alongside Jonny Adam after scoring two wins with Optimum Motorsport's Aston Martin V12 Vantage GT3 at Oulton Park

and Brands Hatch. Haigh admitted that she would probably have returned if she and Adam had missed out on the title, but will now focus her attentions on climbing the ladder towards the Le Mans 24 Hours. The Blancpain GT Series Endurance Cup and European Le Mans Series are possible destinations.

"I've ticked a really big box in my racing career," Haigh told Autosport. "I don't think that I could top this year with that car

and the people I had around me. I'd like to keep that in a little box and just remember it. For anybody that has won that championship and come back, there is a lot of pressure and sometimes it's harder to perform from the beginning of the year with that on your shoulders."

Haigh confirmed that she plans to stay with Aston Martin machinery next year, and that the option to convert the marque's new Vantage GT3 into GTE spec for ELMS is an attractive selling point.

It follows the decisions of 2016 champion Derek Johnston and '17 champion Rick Parfitt Jr to call time on their British GT careers, Johnston following the sale of his business and Parfitt to focus on his band.

Meanwhile, GT4 race winner David Pattison has confirmed that he will retire from motorsport after four years in British GT. The 62-year-old won two races in GT4, his last coming at Snetterton this year with Joe Osborne in Tolman Motorsport's McLaren.

 Mark Farmer is the first driver to be announced for next year's British GT championship, remaining with TF Sport for a fourth year in the new Aston Martin Vantage GT3. His teammate has yet to be confirmed, although it is expected to be an Aston Martin Racing factory driver again.

JAMES NEWBOLD

Price targets TCR after UK victory

TCR UK

Josh Price made a winning return to TCR UK at Donington Park last weekend and is considering a full campaign in the championship in 2019.

Price won race two from the front row of the reversed grid in a Honda Civic FK2 run under his own banner with support from Pyro Motorsport.

He had contested rounds at Knockhill and Brands

Hatch earlier this year, but sat out the next three events following his split with British Touring Car Championship Subaru squad Team BMR.

"We could have [returned sooner] but I couldn't see the point," he said. "The way the FK2's been hit BOP-wise [Balance of Performance], when I last raced at Brands it was hit quite hard, so we came away from it. It looked like the BOP was

right at Croft so we entered this weekend hoping it was going to be right, and then it's been hit with a load more weight.

"We're going to have to have a chat, me and my dad, to see what series we want to do, but it wouldn't be a bad shout to do TCR.

"TCR Europe [is appealing] just because it's something I haven't done before in cars - I haven't been abroad at all."

MARK PAULSON



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Jewiss, Hoggard test F3

BRDC BRITISH F3

British Formula 4 champion Kiern Jewiss and fellow frontrunner Johnathan Hoggard sampled BRDC British Formula 3 machinery for the first time last week.

Jewiss, who claimed the F4 title last month and is a finalist in this year's McLaren Autosport BRDC Award, tested for Douglas Motorsport while Hoggard was out with Fortec Motorsports.

Hoggard - who also competed with Fortec in F4 – topped one of the four sessions on Friday in wet conditions. Fortec team principal Richard Dutton had attempted to get him on the grid for the final round of the British F3 season, but failed to get permission to run a fourth car.

"We wanted to run him this weekend but they [series organiser MotorSport

Vision] wouldn't let me run a fourth car," Dutton said.

"Hopefully we'll look to have him in British F3 next season - we just need to try and find a budget. We knew that he would be good because his driving style would suit this car. He's very smooth."

All F3 teams are only allowed to enter three cars per round but Carlin was given special permission by MSV to run a fourth for Billy Monger, who made his racing return this season having lost both legs in his Donington Park accident in 2017.

Both Jewiss and Hoggard are unsure of their plans for next season; Jewiss is likely to await the outcome of MABA before deciding. Hoggard has momentum after dominating the second half of the British F4 season.

STEFAN MACKLEY

First JCW man is Galer

MINI CHALLENGE JCW

Karter Lewis Galer is the first driver to sign up for the 2019 Mini Challenge JCW Championship.

Fifteen-year-old Galer finished as runner-up in the 2017 Ginetta Junior Scholarship, which had 65 entries.

Now Galer has switched his attentions to Minis and will race with the Excler8 squad, having already tested both Cooper Class and JCW machinery.

"I went to see a test day at Snetterton and saw a few JCWs running around

and instantly fell in love with them," said Galer. "It's an amazing machine to drive. Next year will be a big learning curve; it's a high level to be going in at. I have my eyes on the Rookie Cup title, which I feel is a realistic goal."

British Touring Car Championship race winner Paul O'Neill recently coached Galer at Donington Park and was impressed: "He's definitely one to watch and I'll put my neck on the line here and tell you that he's one of the best kids I've ever sat next to."

ROB LADBROOK

IN THE HEADLINES

GINETTA SCHOLARSHIP

Mike Kidson, 31, has won the want2race competition and has secured a fully funded season in the Ginetta Racing Drivers' Club series next year. Kidson emerged the winner from over 200 entries after impressing at Blyton Park last week. "Ever since I was three years old pushing toy cars along the carpet I have had a dream to become a professional racing driver," he said.

CHINA WIN FOR DEMPSEY

Jordan Dempsey has won the Chinese Formula 4 title after taking his eighth victory of the season at the Ningbo International Circuit last weekend. The teenager, who won Motorsport Ireland's 2017 Young Racing Driver of the Year award, races with Pinnacle Motorsport and started the season in the US F4 Championship.

LEANEY RAINED OFF

Reigning 750MC Bikesports champion Stefano Leaney took a break from his Dutch Supercar Challenge campaign last weekend by swapping his Norma for a Dallara- Mercedes F312 in the F3 Cup at Silverstone. His single-seater race debut will have to wait, though, since both races were rained off. "I was quick in the wet and the dry and set a pole time, which they took off me for track limits," he said.

HISTORIC F1 AT DIJON

Matteo Ferrer-Aza (Ligier JS11) and Mike Cantillon (Williams FW07) won the final rounds of the FIA Masters Historic F1 Championship at HVM Racing's Dijon Motors Cup event last weekend. Steve Boultbee Brooks (Lotus 81) and Jamie Constable (Tyrrell 011) finished second and third in both races.

EX-JEDI MAN RETURNS

Ex-Formula Jedi champion Andrew Dunn will make a return to the series, now called F1000, at Donington Park this weekend. Dunn, the 2010 champion, has not raced in the category since '16. His return means there will be three previous champions on the grid; the others are '17 and '13 winners Michael Watton and Lee Morgan.





HRDC ALLSTARS Andy 'Ace' Harrison raced his Barrie 'Whizzo' Williams tribute Morris Mini Cooper S at Donington Park last weekend, taking 13th in the 32-car HRDC Allstars field. "We built a car," said Harrison, "and then when his untimely passing came [last month] we decided to run it permanently in his name – the car is named Whiz." Photograph by Mick Walker

Donington museum shuts

DONINGTON PARK

The Donington Grand Prix Collection, once the most outstanding assembly of racing cars in the world, will close its doors on November 5.

Kevin Wheatcroft, son of the late former Donington owner Tom, cited personal reasons for the decision. "Closing the museum after 45 years has been a really difficult decision, but family responsibilities simply make it the right thing to do," he said.

Wheatcroft Sr started buying grand prix cars in the 1960s. In '71

he bought the site of the former Donington Park circuit, opening his purpose-built museum two years later.

In 2007, the ill-fated bid to bring Formula 1 back to Donington pitched the venue into turmoil and the track was closed for months. Cars from the collection were sold to help fund restoration work.

Now, with the circuit being operated by Motor Sport Vision, the Donington Collection is considered unsustainable. The remaining exhibits are being returned to owners or sold.

PAUL LAWRENCE

Mitchell wins on F2 debut at Dijon

HSCC HISTORIC F2

Historic Sports Car Club Historic F2 debutant Ben Mitchell won both legs of the 26-strong season finale at Dijon-Prenois in France last weekend.

Despite not having previously driven the Matthew Watts-owned, ex-Stephen South March 782, Mitchell was quickest in both free practice and qualifying on his second visit to the historic circuit.

"It was fantastic — the March [powered by a BMW M12/7 engine, not the original Hart 420R] was brilliant, super-stable in the fast corners, so confidence-inspiring," said Mitchell, who beat car owner Watts driving a March-BMW 772 — on both days.

"Matt had pole until the last lap, but I managed to carry more speed through the last corner in fourth gear.

"I did work experience at Retro Track & Air [the Watts family's concern] a few years ago, so it was nice to be asked to drive the 782, which Matt had prepared for sale. But the icing on the cake was a call from Stephen South afterwards to say 'well done."

Buoyed by this success, Mitchell now turns his attention to the tough task of wresting the HSCC Historic FF1600 title from the grasp of narrow points leader Cameron Jackson over its final doubleheader at Silverstone this weekend.

MARCUS PYE

 Autosport would like to issue a correction: the picture accompanying the Ben Mitchell
 F2 story in last week's issue was a Ralt RT1, and not the March 782 as intended.

New Silverstone 24H race

C1 CHALLENGE

A 24-hour Citroen C1 race will be held on the Silverstone Grand Prix layout next year, taking the place of Rockingham on the series' calendar.

A total of 110 spaces are available for the race on April 27-28. Entries are expected from Belgium, Portugal, Germany, Hong Kong and the US.

Two round-the-clock races were held this year by the popular series at Rockingham, but that circuit is closing at the end of 2018.

C1 Racing Club chairman
Meyrick Cox said: "We are
tremendously excited that the
C1 Club will be holding a 24-hour
race at Silverstone, which is
one of the world's iconic and
most historic circuits.

"With 110 spaces on the grid, which we expect to be full, this should be the largest race ever held in the UK."

STEFAN MACKLEY





MISSING THE POINT

The divisive W Series has overlooked the success of one programme that repeatedly demonstrated how to build sustainable careers for young drivers

TOM ERRINGTON

ast week, a promising development in motorsport
for female racing drivers came to light — only it
wasn't the launch of the W Series.
Heinricher Racing announced that it is going
to enter the Daytona 24 Hours and full IMSA
SportsCar Championship next year with an all-female racing
team led by drivers Simona de Silvestro and Katherine Legge.

Racing in a growing international series in a competitive car (the Acura NSX GT3), complete with backing from a global sponsor, is a promising platform for females who have far too often hit trouble trying to source and combine these essential ingredients.

The Tatuus Formula 3 car-based W Series, which launched last week amid a whirlwind of social-media kneejerk reactions, reckons it can change that trend too. Offering £1.1 million in prize money, the free-to-enter championship for female drivers promises the champion around £380,000 to move on from the category towards the W Series goal of "contention for potential Formula 1 drives in the future".

If the W Series thinks that level of money can lead to a sustainable F1 future, it's wrong — given that a seat on the 2018 European F3 grid cost an estimated €800,000.

"IF THE W SERIES THINKS THAT LEVEL OF MONEY CAN LEAD TO AN F1 FUTURE, IT'S WRONG"

But British GT4 title winner and BRDC British F3 racer Jamie Chadwick says people are missing the point. Certainly, those on social media who have asked questions such as "where is the championship for men?" are absolutely misguided, since they are falling into the classic logical trap of false equivalence (not to mention the very modern business of 'whataboutery').

"I think the point isn't to segregate us and for it to be a longterm thing," explains Chadwick. "I understand why people are aggravated, but I think if you look at the positives then it's a really exciting time for a lot of young drivers."

But W Series sits at international F3 level. The junior categories on the F1 ladder feature so few female drivers that they can be counted on one hand. How can W Series create a grid with both quality and quantity when so few are reaching the level it targets?

"It's a numbers game," adds ex-British GT racer and 2014 Mazda MX-5 Supercup champion Abbie Eaton. "The percentage of women in motorsport, the likelihood of having one with the talent and a billionaire family, the chances are very small."

Instead of picking from a shallow pool and expecting the W Series to resolve problems with a narrow-minded goal of F1, where even the most talented can be without a seat overnight (read: Esteban Ocon), look at the bigger picture of motorsport.

Graham Sharp funded the Racing Steps Foundation that lasted 10 years and took the likes of James Calado and Jake Dennis into professional factory GT racing careers — Dennis even had Red Bull F1 tests. Others such as Oliver Turvey and Jack Harvey have reached Formula E and IndyCar respectively.

That's an incredible track record. Imagine if a female version of RSF managed even some of that success... A targeted approach searching for talent and not gender would have a much better chance of launching that future star.

"At a grass roots level, something like this would be fantastic," says Indianapolis 500 racer Pippa Mann. "At the level this [W] series wants to interject itself, given the type of cars, and amount of money they wish to spend, this should be spent helping further the careers of female racers.

"By creating a scholarship, academy, or Racing Steps-type programme to help support and sponsor some of the brightest female talents, they can continue racing with full-time rides, with proper teams, in real championships."

If it were to achieve a similar record for female racing drivers, then such a programme would have a seismic impact. It could inspire women or young girls who have seen the glass ceiling or been put off by motorsport's long-held masculine dominance, and challenge the sexism that is inescapably still prevalent.

The W Series could potentially harm future growth. As Eaton contends: "Ultimately they [the W Series] are asking people like Jamie Chadwick [to race]. Segregating her into that championship, which is probably going to be of lesser-ability drivers, she's not going to be dragged along by the quicker drivers in F3 that she might be currently against.

"Let's say she wins it and gets the money. If they then put her back into the next step up she will struggle. Anyone will."

Several female racing drivers pointed out that their 'novelty' does not help in the world of cautious sponsors.

"The funding is a big part of the puzzle that's incredibly tough to solve," adds Mann. "That's why it's sad to see money that could be used to make a real difference being spent [by the W Series] in such an irresponsible, patronising and demeaning manner."

That problem alone, the limitation of money, shows exactly why a scheme like RSF is needed so that sustainable careers can lead to a snowball effect. That's likely to be more than the W Series can expect to achieve. **



Lundqvist nails the title with a day to spare

SILVERSTONE MSVR OCTOBER 13-14

Linus Lundqvist has been the dominant driver in BRDC British Formula 3 this season but it took until the final round for him to clinch the title, which he did in emphatic style with a lights-to-flag victory at Silverstone.

The Swede came into the event needing to regain momentum after the previous round at Donington Park. There, as

Lundqvist endured a weekend to forget, Nicolai Kjaergaard put himself back into contention, reducing the deficit to 50 points. With 107 points available last weekend, the title was still very much up for grabs.

Qualifying was held in the wet and as the session drew to a close, and conditions improved on the Grand Prix layout, Double R Racing ace Lundqvist found himself exchanging fastest times with Carlin's Billy Monger and Fortec Motorsport's Tom Gamble for the top spot.

But Lundqvist did enough, securing pole

by 0.387s from Monger, Gamble and Kjaergaard. If Lundqvist were to win race one, then Carlin racer Kjaergaard would have to finish at least seventh to carry his championship hopes forward to Sunday.

Unbeknown to most people in the paddock, though, Kjaergaard was nursing an injured left hand. He'd suffered a knock during the final test session on Friday when he'd collided with an F3 Cup competitor. Would the hand - bandaged, swollen and unable to grip the wheel properly - be able to perform for the duration of the race

JACKSON THRIVES FOR RADICAL CROWN

Dominik Jackson was crowned Radical Challenge champion after heavy rain caused the Silverstone finale to be abandoned after only one of the three races had run to completion.

Title rivals Jackson and Steve Burgess qualified first and second for Saturday's first race, which began behind the safety car after a cloudburst doused the track. The action was green-flagged after one neutralised lap as the clouds parted, and as the duo disputed the lead a dry line began to form and Burgess's rain tyres soon went off. That left Jackson seven seconds clear of Jerome de Sadeleer at the pitstop window, with Burgess and Brian Caudwell contesting third.

Jackson opted to stay on wets, and that proved to be a mistake as the now slick-shod Burgess soon reeled him in to take a dominant victory.

De Sadeleer got second, while Caudwell took third on the road before a penalty for pitlane speeding dropped him to eighth. Kristian Jeffrey completed the podium, having beaten Jackson out of Woodcote on the last lap, but fourth place was enough for Jackson to take the title.

Paul Gibson's McLaren 650S and the Mosler MT900 of Gareth Downing took a win apiece in the GT Cup sprint races. Gibson led through Copse on the opening lap of the first race and then went clear to win by 26 seconds.

Kevin Riley - sharing the polesitting Mosler with Downing - made contact with Bob Berridge's Volvo S60 at the first turn. Paul Bailey (Ferrari 488 Challenge) took advantage of the confusion to claim second, only to be demoted by John Seale's similar car on the fourth lap. Berridge passed

Bailey for third three laps later before closing in on and passing Seale, but on the final lap he ran wide on the still-damp surface at Brooklands, enabling Seale to reclaim second.

The Lamborghini Huracans of Chris Yarwood and Tim Richards completed the top six behind fourth-placed Bailey, after Riley and Pantelis Christoforou (Ferrari 488 Challenge) outbraked each other at Brooklands two laps from home.

Although Gibson got away first in race two, Downing led from the second lap as darkness fell. Gibson retained second but had Berridge as a constant shadow. Behind the lead trio a fivecar battle for fourth raged for most of the race. Seale came out on top of the tussle from Richards, Christoforou, Yarwood and Bailey. A late surge from Christoforou netted him fourth with a lap to

NATIONAL REPORTS CLUB AUTOSPORT

SILVERSTONE WEEKEND WINNERS

BRDC BRITISH FORMULA 3

Race 1 (10 laps) 1 Linus Lundqvist (Double R Racing); 2 Tom Gamble (Fortec Motorsport) +3.097s; 3 Billy Monger (Carlin); 4 Manuel Maldonado (Fortec); 5 Ayrton Simmons (Chris Dittmann Racing); 6 Krish Mahadik (Double R). Fastest lap Lundqvist 1m58.879s (110.85mph). Pole Lundqvist. Starters 18.

Race 2 (2 laps) 1 Josh Mason (Lanan Racing); 2 Ben Hurst (Hillspeed) +0.777s; 3 Arvin Esmaeili (Douglas Motorsport); 4 Clement Novalak (Carlin); 5 Sun Yue Yang (Carlin); 6 Kush Maini (Lanan). FL Gamble 3m29.565s (62.88mph). P Mason. S 18. Points 1 Lundqvist 531; 2 Kjaergaard 446; 3 Maini 366; 4 Mahadik 358; 5 Gamble 346; 6 Monger 301.

RADICAL CHALLENGE

Steve Burgess

GT CUP

Race 1 Paul Gibson (McLaren 650S)
Race 2 Gareth Downing (Mosler MT900)

LMP3 CUP

Duncan Williams/Bradley Smith (Norma M30)

MONOPOSTO

Alex Fores (Dallara F301)

For full results visit: www.tsl-timing.com

on a track that was now dry?

The question was rendered academic by the end of the first lap, as Kjaergaard gyrated into the gravel at Farm. "I was behind Billy," explained Kjaergaard, "and he was off through Abbey and then came back on and had a snap of oversteer. I went around the outside [through Farm] and also had a snap of oversteer. I caught it but was going through the gravel."

With Kjaergaard out, Lundqvist only needed to finish third to seal the title.





Unware of his rival's retirement, he pulled almost 3.5 seconds clear of Gamble by half-distance and maintained a lead he was never to lose on his way to the crown.

"I didn't know that Nicolai had gone off—
it was very clever of them [Double R] not
to tell me," said Lundqvist. "As I won I saw
my pitboard said 'P1 2018' and that's not
usually what it says. So on the in-lap I was
wondering what they meant. But when
I came into the pits I put one and one
together. I didn't really think that I was
going to win it today— I was pretty sure
it would still be up for grabs tomorrow as
I would need Nicolai not to finish. It's
unreal and just really emotional."

Lundqvist's race-one domination was a fitting way to seal the title, and even more important given the circumstances that transpired the following day.

While Saturday's race had been held in glorious sunshine, Sunday was a washout. Beginning 45 minutes behind schedule, the full-reversed-grid second race started behind the safety car and after only two laps the red flag was shown and results declared, meaning Lanan Racing's Josh Mason became the 10th driver to win a race this year.

"I just couldn't see anything — I could barely see the safety car or keep the car in a straight line," he said. "It's good that they stopped the race but I don't think we should have gone out in the first place."

As the weather and track conditions failed to improve, MotorSport Vision Racing, the club in charge of the meeting, cancelled the remaining events — including the third British F3 race, the last of the season.

The decision meant that Lundqvist also sealed the Sunoco Whelen Challenge. He only required a ninth-place finish to secure the spot if the race had gone ahead. As a result, he will compete in the Daytona 24 Hours next January in a DPi machine to round off what has been an almost perfect season.

STEFAN MACKLEY



go, but he then undid his hard work with a lock-up that dropped him to sixth.

Christian Olsen built a comfortable lead in the LMP3 Cup before handing his Ligier JSP3 over to Nick Adcock. Once Jack Butel had taken over from Dominic Paul behind the wheel of their Ligier, though, he began to close rapidly as Johnny Mowlem, Bradley Smith and Colin Noble also moved in. Smith's Norma M30 overtook Mowlem and Butel on the same lap for second.

Smith continued to close down Adcock's lead and made the decisive move at Village with a lap to go, and Mowlem and Noble followed him. Mowlem and co-driver Bonamy Grimes dropped to fourth with a track-limits penalty, and second place was enough to give Noble and Tony Wells the title. Sunday morning's Monoposto race was a washout. After two laps behind the safety car it went green, but track conditions proved untenable in the rain and it was red-flagged a lap later.

Alex Fores (Dallara F301) was declared the winner, from James Densley's Tatuus Formula Renault and Richard Gittings (Jedi Mk6).

PETER SCHERER



Lloyd gets over the line for first TCR UK title

DONINGTON PARK BRSCC OCTOBER 13-14

The inaugural TCR UK championship ultimately proved to be a more tightly contested affair than anyone could have expected. By mid-season Dan Lloyd's position seemed unassailable after six wins and a maximum points haul from qualifying, but over successive weekends his challenge came off the rails, setting up a potentially dramatic final round.

After those six unbeaten starts in the first three events, Lloyd had claimed just one more win in his WestCoast Racing Volkswagen Golf GTI, at Castle Combe in August. He also had to take a 30-point penalty hit, equivalent to a third-place finish, for a couple of robust moves at Castle Combe and Oulton Park. The nadir came last month



at Croft, a round Lloyd had hoped he'd be able to skip, when after finishing third in the opener he retired with suspension failure in race two. Suddenly, Ollie Taylor's Pyro Motorsport Honda Civic was in the title running, just 31 points down heading into the Donington finale last weekend.

The contrasting mindset between the two drivers was clear ahead of Saturday's practice sessions. Lloyd appeared tense, desperate not to let the title slip from his grasp. Taylor, in his first season of front-wheel-drive racing, was relaxed, treating anything he could achieve as a bonus.

Come Saturday evening, the tension in the VW camp was easing. Lloyd had scored his first pole position since the beginning of June at Brands Hatch, and he would have WestCoast racing team-mates Andreas and Jessica Backman between his Golf and Taylor's Civic on the grid. By securing pole position he extended his lead to 35 points, which meant that simply remaining ahead of Taylor in Sunday's first race would be enough to seal the title.

Lloyd duly delivered in style with a dominant win, but not without having to withstand further tension first. Sunday's torrential rain led to treacherous track conditions and racing was suspended after a crash in the Mazda MX-5 Supercup. "We had to wait so long, we didn't know what was happening," said Lloyd.

When the race, now halved in length to 15 minutes, finally got under way, Lloyd kept his nerve to nail the start and lead into Redgate. Taylor was also quick off the line, passing Jessica Backman but, as he set up a move on her brother Andreas in the first corner, Taylor's Civic twitched and sent him through the gravel. Taylor slipped to seventh and faced a battle to keep his title bid alive, but he climbed back to fifth on that lap as he passed Jessica Backman again and Lewis Kent went off at Coppice.

Out front Lloyd was taking command, building a 3.6-second lead over Andreas Backman within two laps.

"We had rivers going across the circuit,"
Lloyd said, "I know exactly where the rivers
are because I've done so many days here,
but it's not ideal when you're the first one
there. First lap, I made sure I got round
and then cracked on from there."

By the time Josh Price had cleared Andreas Backman for second with a move at the Old Hairpin on lap five of 11, Lloyd's advantage was over 6s. Price retired a couple of laps later, his Honda Civic having lost fuel pressure, and Lloyd stroked home to win by 17s. Taylor was unable to find a way past fellow Civic runner Finlay Crocker, who completed the podium behind Andreas Backman, and the title was Lloyd's.

"He [Lloyd] showed his class there," said WestCoast boss James Nixon.

DONINGTON PARK WEEKEND WINNERS

TCR UK

Race 1 Dan Lloyd (Volkswagen Golf GTI)
Race 2 Josh Price (Honda Civic Type R FK2)

MAZDA MX-5 SUPERCUP

Race 1 Luke Herbert

Race 2 Aidan Hills

Race 3 Steve Roberts

NATIONAL FORMULA FORD

Race 1 & 2 Rory Smith (Medina JL18)
Race 3 Luke Cooper (Swift SC16)

CIVIC CUP

Race 1 Bruce Winfield (FN2) Race 2 Ben Sharpe (EP3)

BMW COMPACT CUP

Race 1 Steven Dailly

Race 2 Ian Jones

oss

Race 1 Jon-Paul Ivey (Radical PR6)
Race 2 & 3 Richard Wise (Chiron LMP)

HRDC CLASSIC ALFA CHALLENGE

Chris Snowdon (GTV 2000)

HRDC ALLSTARS

Tom Bell (Austin Mini Cooper S)

HRDC TOURING GREATS

Darren McWhirter (Jaguar Mk1)



For full results visit: www.tsl-timing.com

The season finale proved to be an action-packed affair except at the very front. On his return to the championship, Price had struggled in dry qualifying with a ballast-heavy Civic. But, from the front row of the reversed grid, he outdragged polesitter Carl Swift (Cupra) and never looked back, claiming a maiden win by 18s.

Swift maintained second until he started losing his brakes after half distance, fading to eighth. His Maximum Motorsport team-mate Stewart Lines took advantage to claim second, while Lloyd completed the podium after an eventful race.

Lloyd made rapid early progress from row five, only to drop back after contact with Taylor at McLeans on the opening tour, then with Kent a lap later. But the new champion picked off those in front with aplomb before securing third by passing Andreas Backman at Redgate on the last lap.

Taylor was sixth after a trip through the gravel at Coppice early on.

MARK PAULSON

HERBERT HOLDS OFF HARDING



Luke Herbert successfully defended his Mazda MX-5 Supercup crown in tricky conditions at Donington Park. Herbert and Jack Harding entered the weekend level on points, but the advantage swung Herbert's way when he secured pole position for both races while Harding could only qualify 14th and 11th.

Wet conditions had hurt Harding, who had no new tyres left from his season's allocation. Come the dry race one it was a different story. Harding carved through the field and came close to stealing the win from Herbert on the final lap.

Heavy rain on Sunday morning meant Harding would suffer again. While Herbert followed home Aidan Hills, who scored his second victory of the season, Harding was eighth after the race was red-flagged with just four laps completed. A six-car accident on the run to McLeans left Sam Tatler and Colin Bysouth needing hospital trips with suspected broken bones.

From the reversed-grid pole in race three, Harding needed the win and fastest lap, with Herbert no higher than fourth, to take the title. A poor start dropped Harding to sixth, and his recovery to third behind Steve Roberts and Hills wasn't enough. Knowing the job was done, Herbert eased off to finish sixth.

With the National Formula Ford title already decided, champion Niall Murray was absent, opening the door for Rory Smith to secure a pair of wins, his first in the series. In a frenetic opener, Smith (Medina JL18) passed Matt Round-Garrido's



Medina JL17 and polesitter Joey Foster (Ray GR08) for the lead, then benefited when Foster hopped the chicane's sausage kerb, forcing Round-Garrido into evasive action. Luke Cooper's Swift SC16 passed the Spectrum of Michael Moyers for second on the outside at Redgate.

Smith's second win came courtesy of a pass on Moyers at Redgate, with Michael Eastwell further demoting his Kevin Mills Racing team-mate. Cooper won a shortened third race in very wet conditions from Ray-driving Americans Jake Craig and Carter Williams, the best results for both.

Rob Baker condemned team-mate
Mark Grice to finish as runner-up in the
Civic Cup standings for a third consecutive
year. Ninth in race one following an early
off at Hollywood when avoiding a slow
car, Baker was rescued by the top-10
reversal for Sunday's grid. He followed
home the fast-starting Ben Sharpe, while
Grice's hopes were dashed when he went
off in the wet at Schwantz Curve. Bruce
Winfield had beaten Grice to the flag in
Saturday's curtain raiser.

Champion Steven Dailly won the first Compact Cup race after passing Ian Jones at Coppice on the final Iap, having earlier shuffled polesitter Matt Parkes down the order. Jones beat home Ben Huntley, Dailly and Parkes in a close race two.

Despite missing Saturday's race while best man at a wedding, Josh Smith (Radical PR6) wrapped up the OSS title with the third in class he needed in the wet race two. That was dominated by Richard Wise's Chiron, which doubled up in race three. Jon-Paul Ivey won on Saturday, carving through from the back of the grid in his Radical after running rain tyres on a drying track in qualifying.

The Classic Alfa Challenge, the HRDC's latest initiative, brought a win for Chris Snowdon's GTV after pressure from Ted Pearson, who had a moment in his Alfasud.

MARK PAULSON

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Perseverance is rewarded as Locost victories go West

SNETTERTON 750MC OCTOBER 13

Mark Burton has dominated this year's 750 Motor Club Locost championship, but four-time second-place finisher Martin West's perseverance was rewarded at Snetterton. He scored a breakthrough win, then doubled up in a cracking finale.

West's 50-point haul meant he vaulted the absent Ben Powney for 2018's runnerup spot. In tight 200-circuit contests, podium debutant David Winter finished 0.23s behind West in race one, then West's day was made when friend Paul Clark landed second in race two. Burton, nine times a winner in a remarkable first full season, finished third in both races.

With four victories to Danny Hands's one coming into Formula Vee's deciding double-header, Craig Pollard deservedly landed his first title with the Bears GAC team. Hands, the 2008 champion, needed two big scores to have a chance of denying him. Both wins went to Graham Gant, taking his seasonal tally to six from 10

Hands ran second in race one, but his GAC jumped out of gear accelerating out of Murrays and was hit by James Harridge. Pollard was therefore set fair to finish third. behind second-placed master-drafter Ian Buxton (GAC), up from eighth.

The second race's start was quickly aborted when a tag from Alex Jones (Bears GAC) at Riches flipped David Leniewski's AHS Dominator. Peter Belsey was second in the shortened restarted race.

Patrick Fletcher sealed a Clio 182 title hat-trick with an exciting win. He sold leader Jack Kingsbury a dummy into 'the Searpin' to win the first race and the championship. Don de Graaff piled through too, and survived a last-lap clatter with Kingsbury at Nelson, which sent Kingsbury back to fifth. Fletcher sat out the subsequent race and Kingsbury led throughout to win.

RGB Sports 1000 went to the wire too, with title favourite Billy Albone in Dave Watson's Spire as electrical gremlins again blunted his engine during Friday's test. The reigning champion started second,

starts in the Worm's Eye View.

Albone (1) secured RGB Sports 1000 title

SNETTERTON WEEKEND WINNERS

LOCOST Races 1 & 2 Martin West

FORMULA VEE Races 1 & 2 Graham Gant (WEV FV01)

CLIO 182

Race 1 Patrick Fletcher Race 2 Jack Kingsbury

RGB SPORTS 1000

Races 1 & 2 Christopher Wesemael (Mittell MC-53)

750 FORMULA Races 1 & 2 Ed Pither (PRS 1b)

HISTORIC 750 FORMULA

Race 1 Ben Myall (Gerrell Mk1)

Race 2 Simon Boulter (Time 3B)



For full results visit: www.theresultslive.co.uk

Pollard claimed

Formula Vee crown

and was fourth behind poleman Chippy Wesemael and fellow Mittell men Danny Andrew and Paul Smith - who had an outside chance of denying Albone - when his steed faltered in Coram and he pitted.

When Smith's exhaust detached, Albone animatedly led the call to have his noisy machine black-flagged. After Smith stopped, Albone leaped aboard his own car to finish unclassified, his title secured.

Nobody threatened Wesemael in the longer finale in which the top four was replicated; Smith ran second before retiring.

Ed Pither extended his record of winning every 750 Formula race he'd finished this year to eight with two Snetterton victories in his PRS, repaired following extensive damage sustained at Cadwell Park in July.

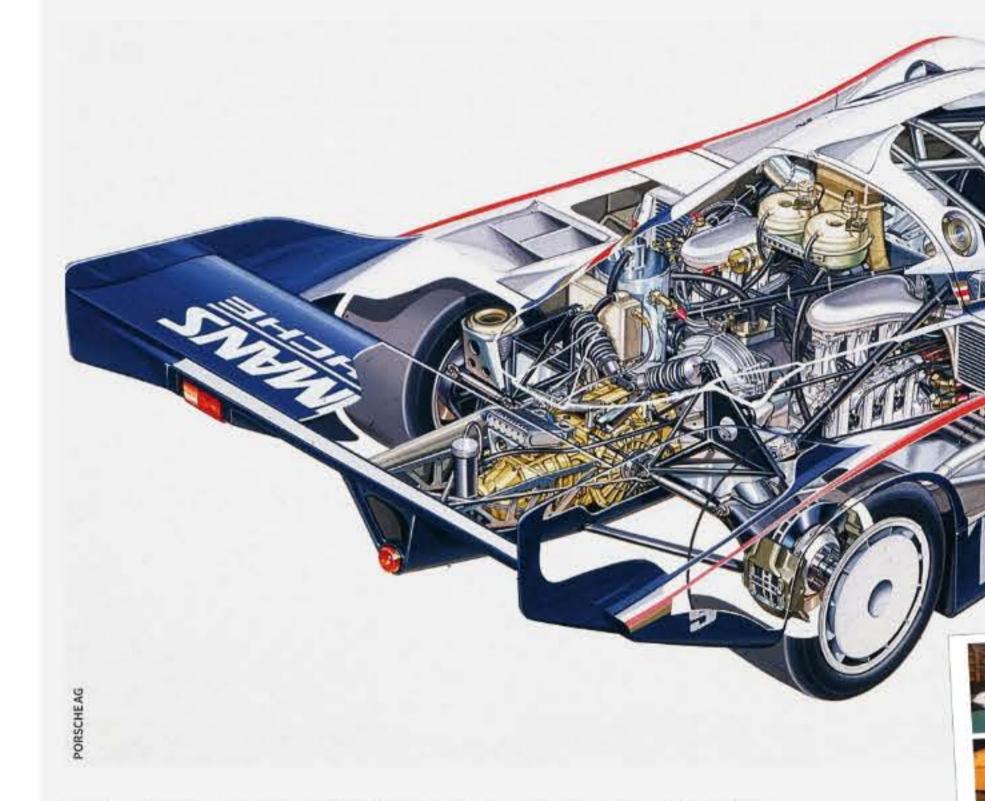
The title was resolved dramatically. With points leader Bill Cowley suspended and former champ Albone twice beating Peter Bove (Darvi) to second as a non-scoring invitee in his eponymous car, 2017 runnerup Mark Glover needed one sixth place to snatch the crown. While ignition-switch failure rendered him a race-one non-starter, he finished fifth in race two to seal the prize.

Ben Myall pipped Simon Boulter in the conventional Historic 750 Formula sprint race after early leader Christian Pedersen's Austin 7 Monoposto blew two spark plugs out. Simon Boulter's Time 3B won the handicapped multi-start closer.

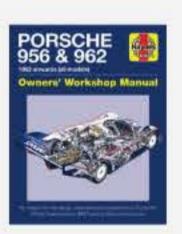
MARCUS PYE

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IN THE MEDIA . ARCHIVE . QUIZ



THE SECRETS BEHIND SPORTSCAR GREATNESS



HAYNES MANUAL

PORSCHE 956/962 RRP £25.00

No other marque can lay claim to the special affinity with Le Mans that 19-time winner

Porsche enjoys today. That status is largely down to the six overall wins at the famous 24 Hours — seven if you count 1994 victor Dauer — for Porsche's 956/962 models, which trumps the combined tally of Peugeot, Renault, BMW and Toyota.

Factor in five consecutive World
Sportscar Championships from 1982 to
'86, four straight wins at Sebring as well
as five Daytona 24 Hours wins between '85
and 1991, and the 956/962 can justifiably
be called the era-defining Group C design.
So it's well worthy of receiving the Haynes
Owner's Workshop Manual treatment from
self-confessed 956/962 fan Nick Garton.

The author states in the introduction his intention to offer insight to those too young to see the cars in their pomp. He achieves just that, with a tome that marries accessible narrative and classic photography with all the technical nuggets you would expect from the Haynes series.

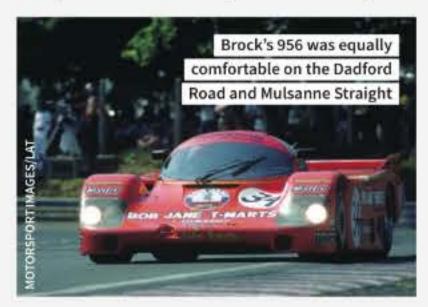
Garton begins with a comprehensive overview of the 956's development and subsequent transition into the 962, when FISA rules dictated that the drivers' feet needed to be moved behind the bulkhead. He also picks out some of the key races in the 956/962 lifecycle and profiles the

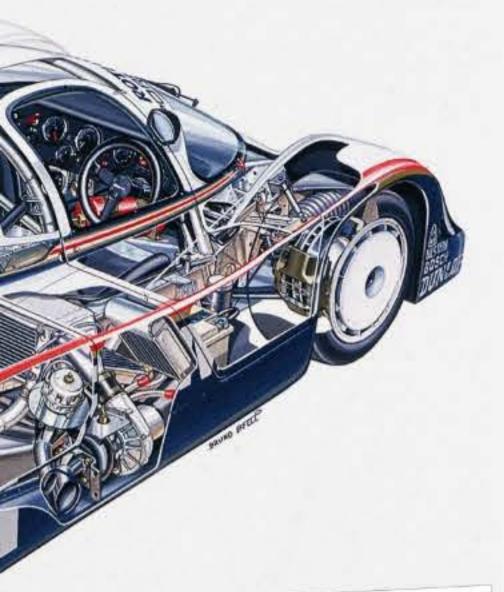
major drivers, ranging from Jacky Ickx and Derek Bell to the unheralded Aussie Vern Schuppan, who owed his place on the Rothmans squad to the injuries Rick Mears had sustained in a fire in 1981.

He dedicates 30 pages to a detailed anatomy of the chassis — Porsche's first foray into building a monocoque. He also covers how aerodynamics were optimised to achieve ground effect, the propensity of customer 956s to shed their wheels, the introduction of the Bosch Motronic engine-management system, and the travails of the revolutionary but unreliable PDK gearbox, which Bell was none too fond of developing in competition.

Garton describes the book as "an appetiser", but it's still detailed. He even highlights the issues with early door hinges, which were sourced from the VW Beetle, and were believed to be at the heart of the problems suffered by the winning 956 at Le Mans in 1983.

One of the book's core strengths is its focus not only on the works Rothmans team, but on the developments made by







privateer squads in IMSA and the World Sportscar Championship. The drastic measures taken by Joest Racing to beat the factory cars in 1985 after their '84 absence, and the efforts of Richard Lloyd Racing - whose "esoteric collection of pitcrew usually wore suits and ties rather than Nomex" - to rebuild the single-skin aluminium monocoque using honeycomb are particularly worthy of inclusion.

Fans of statistics will be pleased by an extensive list of 218 wins, but the real highlights are to be found in chapter six, unearthing the histories of iconic or infamous chassis. Example 962 004 definitely falls into the latter category after a pit fire at Hockenheim in 1985 left Norbert Singer badly burned, Ickx was driving 004 at Spa when he tangled with Stefan Bellof's Brun 956 at Eau Rouge, and Bellof was fatally injured on impact. Car 004 was then was rebuilt and driven by regenmeister Hans-Joachim Stuck at the Nurburgring 1000Km in 1986; there, blinded by the spray, he hit the sister Rothmans 962 of Jochen Mass and eliminated both cars, before 004 was quietly transferred into customer hands.

But the best anecdote must be Larry Perkins's night-time shakedown of 956 chassis 102 on the Dadford Road outside John Fitzpatrick's Silverstone base, ahead of Le Mans in 1984. He clocked 125mph with team-mate Peter Brock going ahead to block the road in a black Vauxhall Astra GTE. As Garton puts it, "one of the most outstanding achievements in the 956's astonishing CV."

JAMES NEWBOLD

motorsport. IV ON DEMAND HIGHLIGHT OF THE WEEK



1989: WORLD SPORTSCARS - NURBURGRING

If reading about Porsche's 956 and 962 has whetted your Group C appetite, then head over to Motorsport.TV for one-hour highlights of the World Sportscar Championship's visit to the Nurburgring in 1989 – only we're swapping Stuttgart-based brands since it's the Sauber Mercedes C9 that rises to the fore. Go to https://bit.ly/2EjZudA

THIS WEEKEND'S EVENTS

INTERNATIONAL MOTORSPORT

United States Grand Prix

Formula 1 World Championship

DON'T

MISS

Rd 18/21

Austin, Texas, USA

October 21

Live Sky Sports F1, Sunday 1730. Channel 4, Sunday 1800

Australian Supercars

Rd 14/16

Surfers Paradise, Queensland, Australia October 20-21

MotoGP

Rd 16/19 Motegi, Japan October 21 Live BT Sport 1,

Super GT

Sunday 1545

Rd 7/8 Autopolis, Japan October 21

TCR Europe

Rd 7/7

Barcelona, Spain October 20-21

Formula Renault Eurocup

Rd 10/10 Barcelona, Spain October 20-21

Live BT Sport 3, Saturday 1130

Euroformula Open

Rd 8/8 Barcelona, Spain October 20-21

Live BT Sport ESPN, Sunday 1200

International **GT Open**

Rd 7/7 Barcelona, Spain October 20-21

Brazilian Stock Cars

Rd 10/12 Londrina, Brazil October 21

NASCAR Cup

Rd 32/36 Kansas Speedway, USA

October 21

Live Premier Sports, Sunday 1830

Formula 3

Rd 8/8 Fuji, Japan October 20-21

UK MOTORSPORT

Oulton Park BARC

October 20

Saloons, Mighty Minis, Junior Saloons, NW Sports/Saloons, Classic VWs

Brands Hatch BRSCC

October 20-21 Formula Ford Festival: FF1600, Classic FF1600, Sports 2000, Ford Fiestas, Fiesta Juniors, Irish Supercars/Global GT Lights

Silverstone HSCC

October 20-21

Historic Formula 3, Historic FF2000, Historic FF1600, Historic Touring Cars, Guards Trophy, Historic Road Sports, '70s Road Sports, Classic F3/FF2000, Formula Junior, Classic Clubmans, Derek Bell Trophy

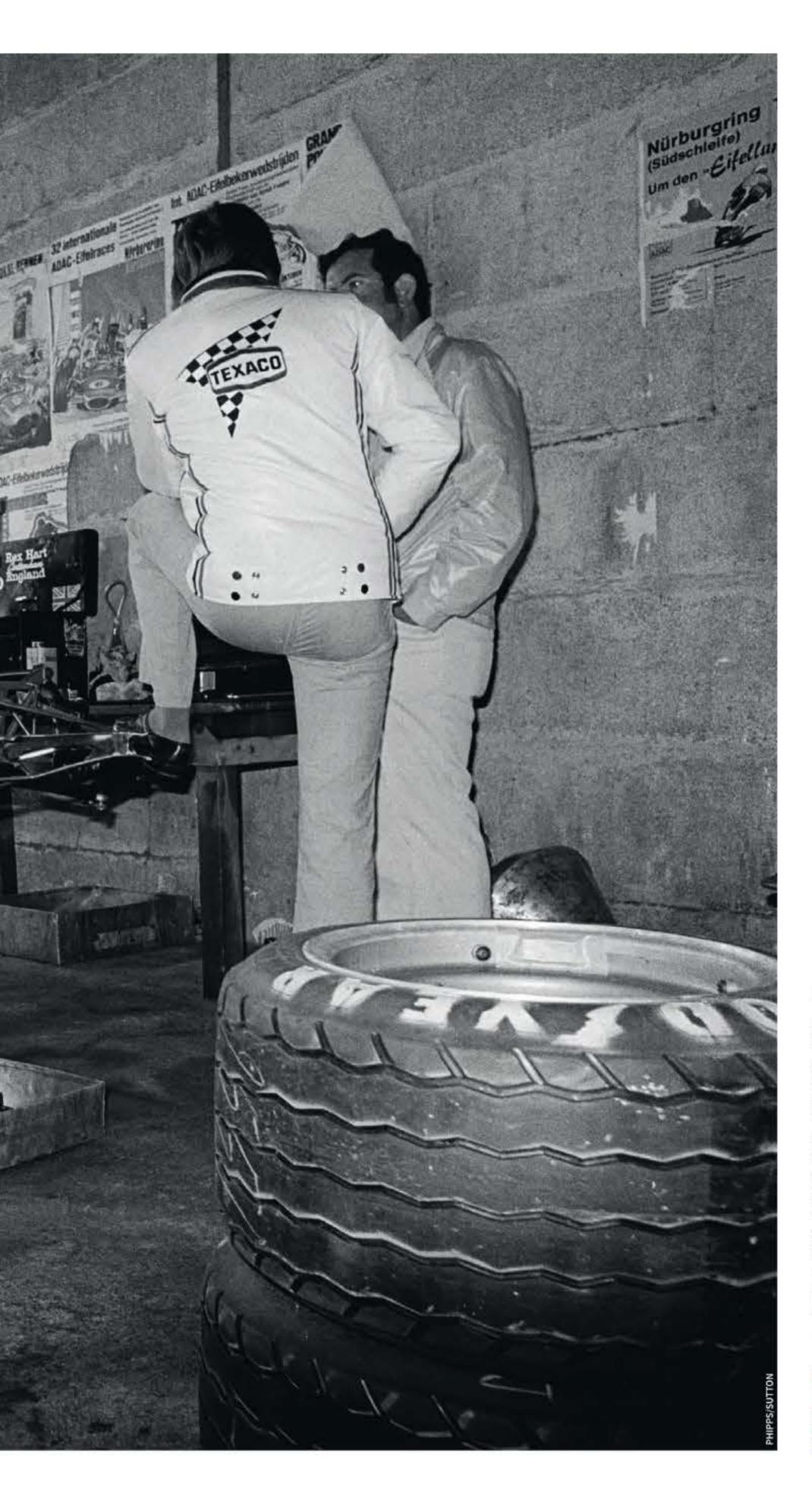
Donington Park BRSCC

October 20-21

F1000, Porsches, Mazda MX-5s, Production GTis, Fun Cup







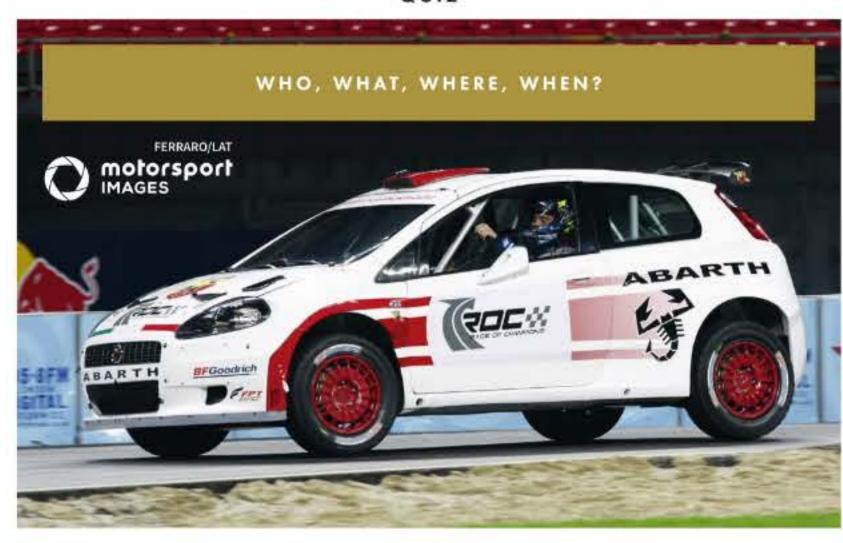
FROM THE ARCHIVE

Ronnie Peterson's barebones Lotus-Ford 72D is prepped in the gloriously grungy environs of his team's Nurburgring pit garage ahead of the 1973 German Grand Prix. Peterson qualified on the front row behind eventual winner Jackie Stewart (Tyrrell-Ford 006), but after being demoted to third place at the start by Stewart's team-mate François Cevert, he failed to even make it to the end of the first lap when an electrical fault killed his Cosworth V8. He was left to rue the fact he had requested that the engine be changed just before the race...



TEST YOUR KNOWLEDGE

QUIZ



WHO IS THIS?

Hailing from the home of paella, though small of stature this racer would make a big impact as a driver and team owner.

His initial forays were remote, before he took a well-trodden path. Although the results didn't merit it, he found a home from home in the top tier, but his tenure would be brief.

He returned home and with a roof over his head found some success. His eye for spotting the very best local talent meant when he moved from cockpit to pitwall it was accompanied by silverware.

A step up into international racing brought further honours, but an attempt at a move to the top step was fraught with funding issues and inevitably failed. He made a positive charge into a new venture and helped to claim inaugural glory and re-established his reputation.

ON THIS DAY

- Which Japanese drivers made their Formula 1 race debuts on this day in 2009?
- 2 Today is Pascal Wehrlein's birthday; where and when did he score his best F1 result to date?
- 3 Ludovico Scarfiotti was born on this day in 1933. Where did he score his sole world championship grand prix win?
- 4 Who won the Rally Sanremo, which finished on this day in 1990?
- 5 Which Piquet Sports driver won the GP2 Asia race in Shanghai on this day in 2008?

NAME THE HELMET



LAST WEEK'S ANSWERS

Who, what, where, when Jan Lammers, March-Ilmor CG911, Suzuka, October 25 1992. Who is this? Klaus Ludwig. On this day 1) Peter Collins. 2) 18. 3) Jeff Burton. 4) Sam Schmidt. 5) 3. Name the helmet Aguri Suzuki.



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LIVE THE SEASON FINALE IN THE HILLS OF THE ALGARVE

















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