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Mercedes comes out with all guns blazing in Formula 1 testing

Well, there's no doubt about which team 'won' the opening week of Formula 1 testing in 2020. Mercedes topped the times at Barcelona, covered the most laps and even managed to throw the paddock a curveball with its controversial dual-axis steering system, which we explore this week on page 31.

Given the Silver Arrows are coming off the back of an unprecedented six world title doubles, it's hardly a surprise they are looking so strong. As the team's technical director James Allison explains in our test report on p20, Mercedes has decided to go aggressive with the design of the W11, despite the fact that this is the last season of the current rules cycle. It's that sort of approach that has made Mercedes so difficult to beat since 2014.

There is still hope of a decent fight, however. Many feel Ferrari ran with its engine turned down during the first week in Spain, while Red Bull didn't push for times and sounds quietly confident. It's the second test this week – check out Autosport.com for live coverage and next week's magazine for the full analysis – so the true picture will soon become clearer, if not yet definitive.

Autosport has also gone through some changes over the winter. While we bid farewell and thank you to Gary Anderson, we welcome Tim Wright as our new technical consultant. As James Newbold's piece on p42 shows, Wright's career is an impressive one and includes F1 titles with McLaren and Renault, as well as Le Mans and sportscar success with Peugeot. He's also worked with Alain Prost, Ayrton Senna, Michael Schumacher and Fernando Alonso, so has some interesting driver insights too. Tim provides his trackside view of the new cars on p26 and joins technical editor Jake Boxall-Legge to pick out the key details from the crop of 2020 machines.



Kevin Turner

Kevin Turner
Editor

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**NEXT WEEK
5 MARCH**

Who won the F1 test war?
Our final analysis from
Barcelona



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Motorsport Images/Sutton

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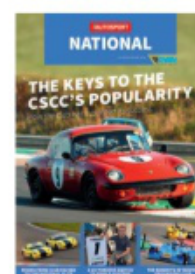
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HYPERCARS IN CRISIS AS ASTON PUTS PLANS ON HOLD

WORLD ENDURANCE CHAMPIONSHIP

Aston Martin's announcement last week that it is putting its Valkyrie LM Hypercar programme on hold was a bombshell that could have far-reaching ramifications for the World Endurance Championship. Not only does it mean that Toyota will be the only major manufacturer in the series in 2020-21, but it could have wider implications as international sportscar racing moves towards so-called convergence with the LMDh category.

The British manufacturer revealed that it is at the very least postponing its entry into the LM Hypercar class in the WEC beyond the coming 2020-21 season. It stated that it wanted to reassess its commitment to top-level endurance racing in the wake of the news that the next generation of IMSA SportsCar Championship prototypes will be able to race in the WEC from 2021-22 under the LMDh rules.

Aston Martin Racing president David King laid the blame for the decision on the LMDh announcement ahead of last month's IMSA-opening Daytona 24 Hours. He claimed that the new LMP2-based class had undermined the business case for the Valkyrie.

"A financial condition around the approval of our programme made an assumption that we would partly recover some of the investment with the sale of Valkyrie race cars to customer teams, if not in year one certainly in year two and year three," he explained. "The intention for IMSA convergence with the LMDh car did change things for us – we think the market for customer race cars is damaged.

"The Valkyrie is an expensive race car because it comes from a road car that costs £2.5million. Now those privateer teams are going to be able to buy premier-branded LMDh cars that are much cheaper."

What King did not say was how many Valkyrie racers Aston Martin needed to sell, or how successful its efforts had been in the six months between the confirmation of the Valkyrie race programme at last June's Le Mans 24 Hours and Daytona in January.

PEUGEOT WEIGHING UP ALTERNATIVES

The announcement from Aston came as it emerged that Peugeot is considering the LMDh route rather than building an LMH car to the prototype subset of the rulebook as originally planned.

Jean-Marc Finot, motorsport boss of Peugeot parent PSA, has insisted that there are questions to be answered about LMDh and its place in the WEC. He explained that the French manufacturer is looking for "perfect equality" between LMDh and LMH machinery.

"That means it is mandatory for LMDh and LMH to have the same weight, the same aero specification and the same power," he said. "If we don't have that, it would be difficult to manage the Balance of Performance."

Finot went on to say that Peugeot will make a decision immediately after the next batch of details on the LMDh platform – an adaptation of the category previously dubbed Daytona Prototype international 2.0 – are revealed over the 'SuperSebring' IMSA/WEC double-header weekend next month. He stated that a decision is required by the end of March if the programme is to stay on schedule.

ROSENQVIST AT DRAGONSPEED IN LE MANS RETURN

LE MANS 24 HOURS

IndyCar ace Felix Rosenqvist is set to make a return to the Le Mans 24 Hours after an absence of two years. The versatile Swede (below) will again drive for the Franco-American DragonSpeed squad in LMP2 should the team's two entries for the 2019-20 World Endurance Championship finale be confirmed.

DragonSpeed is reassembling its 2017 Le Mans line-up of Rosenqvist, team regular Ben Hanley and team patron Henrik Hedman. They are due to share the ORECA-Gibson 07 the team is fielding in the IMSA SportsCar Championship pending the release of the Le Mans entry list tomorrow (Friday).

"Felix is a stud in the car and adorable out of it – we love him," said DragonSpeed boss Elton Julian. "He gets on like a house on fire with Henrik."

Julian confirmed that Hanley, who made his car racing comeback with DragonSpeed in 2016, would be driving for his team rather than in LMP1 with the works Ginetta squad.

Julian revealed that he also has a deal in place with three-time Sebring 12 Hours winner Pipo Derani to drive his second car. The Brazilian is pencilled in to drive DragonSpeed's European Le Mans Series entry with Memo Rojas and Colin Braun, who is moving over from the IMSA ORECA for the 24 Hours.

"I called Pipo and was surprised he was still available," said Julian. "We've agreed a deal and put him on the list, so now we're waiting for the entry list to come out on Friday."

GARY WATKINS



NKP/MOTORSPORT IMAGES

Valkyrie recently ran at Silverstone with Max Verstappen and Alex Albon at the controls

P50 AUSTIN REPORT

RED BULL

King needs customers for viability

IS THIS THE END FOR HYPERCARS?

Toyota has no thoughts of switching to LMDh. Its WEC programme is focused on research and development into hybrids. "We are racing to develop technology and to improve technology, so it is true that for us it is not interesting to purchase an LMP2 chassis, to purchase an off-the-shelf hybrid system," said Toyota Motorsport GmbH technical director Pascal Vasselon.

What Aston's decision means and what a Peugeot switch to LMDh may signify for other manufacturers eyeing the WEC cannot be known. But the momentum is clearly shifting in the direction of LMDh.

But there is no indication that the WEC is going to abandon the LMH rules, or at least the prototype segment. The two new Toyotas are the only cars that are anything approaching certain to be on the grid come next season's WEC opener at Silverstone in September.

Niche manufacturer Glickenhaus isn't due to shake down its LMH prototype until the autumn, WEC stalwart ByKolles is staying quiet about its plans, and there have to be doubts about Ginetta's stated intent to race on with its current LMP1 car given its absence from last weekend's WEC round in Austin.

WEC boss Gerard Neveu is playing his cards close to his chest about next season. "Our first priority is to deliver the convergence strategy in Sebring," he said. "It will give us an indication of how the championship will be in 2021 [2021-22] and it will help us take the right decision on the format for 2020 [2020-21]. Probably we will work on small modifications, adaptations. The WEC will be here for sure."

GARY WATKINS

ASTON MARTIN



Mercedes steering system catches rivals on the hop

FORMULA 1

Mercedes' innovative dual-axis steering system could still be subject to a sporting protest by its rivals, although the team is confident that it is legal.

Mercedes sparked paddock intrigue when it debuted DAS on the second day of pre-season testing at Barcelona last week.

DAS (below) allows drivers Lewis Hamilton and Valtteri Bottas to adjust the toe angle of the Mercedes W11 by pushing and pulling the steering wheel backwards and forwards. The novel device – which has been in development for over a year – was widely applauded for its innovation, but questions immediately arose regarding its legality.

Article 10.2.3 of the technical regulations states that “no adjustment may be made to any suspension system while the car is in motion”, which DAS could appear to contravene. But if it is considered a steering system rather than a suspension system, it would be legal.

The stronger argument against DAS lies in the sporting regulations, with the parc ferme rules stating no set-up changes can be made to the car after the start of qualifying, again making specific reference

to the suspension system.

In both cases, Mercedes would likely defend DAS by arguing that it is a steering system instead of a suspension system.

Mercedes technical director James Allison said DAS “isn’t news to the FIA”, adding: “It’s something that we’ve been talking to them about for some time. The rules are pretty clear about what’s permitted on steering systems, and we’re pretty confident that it matches all of the requirements.”

Renault sporting director Alan Permane said: “James and his men have done something clever, and undoubtedly they think there is plenty of lap time in it. I’m sure they’ve been through it with probably Nikolas [Tombazis, F1 technical chief], the FIA and his guys and are happy it’s legal. I agree.

“There’s probably a parc ferme question mark over it, but I suspect that the detail lies in is it a steering system or is it suspension system? The two in the technical regs are defined differently and that’s where the detail is.”

Any protest against DAS under the parc ferme rules could only be lodged over the Australian Grand Prix weekend, when the FIA stewards meet for the first time this season.

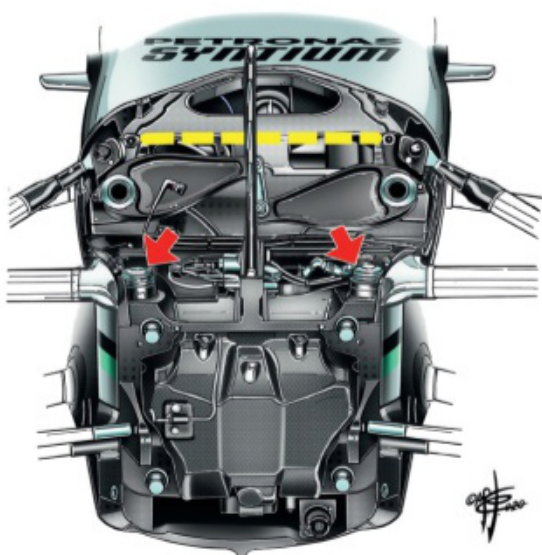
The FIA has already clarified that there are no safety concerns over DAS, despite Ferrari’s Sebastian Vettel questioning its usability, likening it to “running in flip-flops”.

Explaining how it felt to use DAS, Bottas said: “It’s pretty solid, and never does anything funny, and you only move the wheel if you want to. There’s no issue so far with it. It’s actually pretty easy to use.”

DAS has already been banned under the incoming technical regulations for the 2021 season.

LUKE SMITH

➔ P31 DAS EXPLAINED



Miami delays frustrate Carey

FORMULA 1

Formula 1 chief Chase Carey has downplayed the impact of the delays to the planned grand prix in Miami, but conceded to feeling frustration over its “ongoing complexity”.

Since its takeover of F1 in 2017, Liberty Media has been eager to grow the series in the US, with the Miami plans being worked on over the past two years.

Opposition has led to a number of changes to the proposals. Under the current plan, the circuit avoids public roads around the Miami Dolphins Hard Rock Stadium and on-track action during school hours. The project is still facing protests from a number of local groups, most notably at the recent Super Bowl.

But a major victory was scored earlier this month when commissioners did not vote down the proposals, allowing Miami Dolphins’ owners to proceed with plans to build the circuit within their grounds.

“We knew the US was going to take time,” said Carey. “On one level, yes, it is clearly taking longer than we would have hoped. It’s frustrating because we’ve spent so much time and there seems to be always some degree of ongoing complexity.

“I think the reality is that the US is a five-year-plus timeframe. In that context, 12 months isn’t that big a deal, but that doesn’t mean it’s not frustrating.”

Talk of additional F1 races in the US beyond the current GP at Austin’s Circuit of The Americas has intensified following Roger Penske’s takeover of Indianapolis Motor Speedway, home of the US GP from 2000-07. Carey remained coy on any talks with Penske, but said he was aware of the interest and spoke warmly of the circuit’s place within global motorsport.

“It’s obviously an iconic track for world racing. It’s part of the triple crown: Monaco, Le Mans and Indy,” he said.

LUKE SMITH





Electric tin-top series is go for 2020 demo season

PURE ETCR

An all-electric touring car category has been anticipated for some time. It was back in 2018 that WSC Technology, a subdivision of the WSC Group that originally developed the TCR regulations, confirmed it would launch a fully fledged ETCR concept. In that time both Cupra – the SEAT spin-off – and Hyundai announced potential challengers. Finally, last week in Paris the new series was christened and its format revealed.

Named Pure ETCR, it will kick off with a demonstration season, which includes a time trial at this year's Goodwood Festival of Speed and finishes with an event at January's Daytona 24 Hours, before an eight-round championship in 2021.

The cars will run Williams Advanced Engineering powertrains that will remain standardised for the first two or three years, says Francois Ribeiro, head of Eurosport Events, which promotes the World Touring Car Cup. Later, some components will be opened to manufacturer development.

Although the Cupra e-Racer (above) and Hyundai Veloster (right) are based on front-wheel-drive models, Pure ETCR machinery will be rear-driven. Despite a kerb weight of 1575kg, a maximum power output of 680bhp should propel them to 100km/h in 3.2 seconds. An anticipated 40km range will equate to WTCR's current 21-minute race format. Goodyear will

supply treaded, all-weather tyres.

The most curious aspect of Pure ETCR is the format. Manufacturers and drivers will be drawn randomly to contest 'Battle Groups', each made up of three drivers in year one. In each group, the cars will be released from greyhound racing-style starting gates. From there, drivers will progress to one of three sprint-race finals ranked A to C, with the highest-placed from the A final making up the overall podium.

Ribeiro said: "It's no secret when you look at the automotive world that it's not evolution but revolution we are facing. Motorsport cannot ignore it. We have to follow the automotive industry.

"Formula E promotes technology, it does not promote products. Touring cars have always been a great tool for manufacturers to promote their product. We promote real cars, not single-seaters, not electric SUVs.

"It's not going to be the Route 66 highway. It's going to be bumpy to get things off the ground."

Organisers expect to attract six marques for the inaugural season, each entering three drivers. Cupra has officially announced an entry, and its line-up will be led by two-time DTM champion Mattias Ekstrom, who will be joined by SEAT's World Touring Car Championship veteran Jordi Gene.

MATT KEW





Daruvala becomes Red Bull Junior to 'complete' F2 field

FORMULA 2

Carlin finally announced last week that it has secured FIA Formula 3 ace Jehan Daruvala to complete its Formula 2 team for 2020 – a deal that's been mooted through most of the off-season but which paddock rumourmongers were beginning to doubt. But the icing on the cake for the Indian is his elevation to Red Bull Junior status.

Mumbai youngster Daruvala, a race winner with Carlin in the F3 European Championship in 2017 and 2018, used to be a protégé of the Force India F1 team before it effectively became 'Force Canada' with the takeover by Lawrence Stroll, and held his own against his Ferrari-backed team-mates at Prema Racing last season. A training injury sustained after the FIA F3

season had finished meant he missed the Macau Grand Prix and also didn't take part in the F2 post-season test in Abu Dhabi, at which most of the following season's line-ups begin to crystallise.

The news means that Carlin has an all-Red Bull Junior line-up for this season in F2, with Yuki Tsunoda – who is also backed by Honda – another to step up from FIA F3 as a race winner.

The Indo-Japanese line-up is a sign of the team's successes over its history. While talking to Autosport for his column in this week's National supplement, team boss Trevor Carlin said: "It's funny. We were just talking about it when we were getting the press release ready to announce Daruvala. With the right bit of circumstances going for him he could be the next Indian driver in F1. And I was saying, 'That'll be our third Indian in F1'."

"We had Narain Karthikeyan in F3 [in 1998-99], and we became quite popular in India. And we had Karun Chandhok doing testing with us and later racing in Formula E. So hopefully we will have run all three Indian F1 drivers. The fact that we've run drivers from countries like that, and had success with them, expands your reach. After Narain, we did it with Takuma Sato and the same happened in Japan."

Of the 22-car F2 field, only the two Trident seats are yet to be announced, but they are fully expected to go to Roy Nissany and Marino Sato.

MARCUS SIMMONS



PORTLOCK/MOTORSPORT IMAGES

HOW IS F2 SHAPING UP?

DAMS

**Dan Ticktum/
Sean Gelael**

Reigning teams' champion is unlikely to repeat in 2020. Williams protégé Ticktum can be stunning, but has little F2 experience and had a shocker in 2019. Gelael has tons of F2 mileage, but all in the midfield.

VIRTUOSI RACING

**Guan Yu Zhou/
Callum Ilott**

Proper dark horses here. Renault F1-backed Zhou was the surprise of 2019 in F2, while Ferrari youngster Ilott can be incredibly rapid. Each has a year in F2 under his belt.

ART GRAND PRIX

**Marcus Armstrong/
Christian Lundgaard**

It'll be a surprise if either of these rookies can emulate George Russell and Nyck de Vries by winning a title for ART. But wow, if you want an exciting line-up of FIA F3 graduates, stand back and watch these Ferrari and Renault youngsters.

CARLIN

**Yuki Tsunoda/
Jehan Daruvala**

See ART, except perhaps a smidgen less exciting at this point. Even so, this Red Bull Junior pairing both have the potential to shine.

CAMPOS RACING

**Jack Aitken/
Guilherme Samaia**

No doubting here where the team's focus will be. Williams-backed Aitken will be solid, and doesn't need a huge step forward to fight for overall honours.

CHAROUZ RACING

**Louis Deletraz/
Pedro Piquet**

Experienced Deletraz should be in the points mix most of the time, while Piquet will get there in the end but hasn't exactly had a meteoric career.

MP MOTORSPORT

**Nobuharu Matsushita/
Felipe Drugovich**

Honda-linked Matsushita's been around for ages but could be just the ticket for a team with a refreshed technical line-up. Drugovich needs to bounce back from poor year in FIA F3.

HWA RACELAB

**Artem Markelov/
Giuliano Alesi**

Markelov seems to have been in F2 since Brian Henton won the title, so at least this new team has an excellent barometer. Ferrari boy Alesi struggled in 2019.

PREMA RACING

**Mick Schumacher/
Robert Shwartzman**

The Ferrari pair are the past two FIA F3 champs. Schumacher underperformed in his rookie F2 season – Shwartzman will keep him on his toes.

TRIDENT

**Roy Nissany?/
Marino Sato?**

Don't expect a title challenge here... although Sato did make a miracle turnaround in 2019 from Euro F3 oblivion to Euroformula dominator.

HITECH GP

**Luca Ghiotto/
Nikita Mazepin**

Veteran Ghiotto can win races on any day, so he's a great addition to this new team. Mazepin was 18th last season, when his team-mate won the crown.



JEP/MOTORSPORT IMAGES

Shedden to sub for Neal – could he race Honda?

BTCC

Three-time British Touring Car champion Gordon Shedden will substitute for Matt Neal at Honda in pre-season testing, and is eyeing a race return in the series.

Neal is still recuperating from injuries sustained in a mountain-biking accident, and Shedden will take the wheel of a Team Dynamics-run Civic Type R FK8, starting from a test today (Thursday) at Donington Park. “My recovery is going well and

everything is starting to mend; I’m doing everything possible to get in the car for the first round at Donington at the end of March,” said Neal. “However, we have undertaken a lot of changes to the car over the winter period that we need to try on track, and we need to do this with a back-to-back comparative test programme.

“So there was no better choice than my old team-mate ‘Flash’ [Shedden] – he knows the team, he knows our work ethic and he is the natural choice to jump into my seat.”

Shedden won all three of his BTCC crowns in Dynamics-run Hondas, but switched to the World Touring Car Cup for 2018-19 to race an Audi RS3 LMS, and has never driven the current FK8 Civic.

“A couple of years away did me good – I’ve learned a lot, and although the headline results weren’t there I’m a better driver,” he said. “The BTCC has gone from strength to strength, but I’d only sit in something I could win in and challenge for the title.”

MARCUS SIMMONS

JEP/MOTORSPORT IMAGES



Hamilton secures Hard VW seat

BTCC

Nicolas Hamilton has secured a place on the 2020 British Touring Car Championship grid with Team Hard.

Hamilton, the half-brother of six-time Formula 1 world champion Lewis, will drive a Volkswagen CC with prominent backing from telecommunications brand ROKiT. He will test the CC,

which has been adapted for Hamilton as he has cerebral palsy, in Spain prior to next month’s media-day run.

Hamilton contested eight of last year’s 10 BTCC rounds in a Motorbase Ford Focus, but missed the final two events due to funding issues. That was despite ROKiT stepping in to guarantee his budget for the Knockhill round.

“I’m super-excited to be with Team Hard for the

2020 season,” said Hamilton. “Last year was so challenging for me. Coming close to facing a reality where my career might be over was really tough, but people stuck by me, kept me focused and upbeat and I’m now in a great place.”

Hamilton completes Hard’s line-up. Jack Goff and Mike Bushell will drive VWs, and Carl Boardley a BMW 125i M Sport.

JACK COZENS

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Newman targets return after release from hospital

NASCAR CUP

NASCAR Cup veteran Ryan Newman continues to receive treatment for a head injury after his dramatic Daytona 500 accident, but the 42-year-old was able to leave hospital on Wednesday of last week – just two days after the shunt.

Newman, the 2008 Daytona 500 winner and 2014 Cup runner-up, was leading the rain-delayed race on the run to the finish line when his Roush Fenway Racing Ford

was turned into the wall by Ryan Blaney and then hit hard by Corey LaJoie's car.

In a prepared statement read by RFR president Steve Newmark at last weekend's Las Vegas round, Newman said: "I was fortunate to avoid any internal organ damage or broken bones. I did sustain a head injury for which I'm currently being treated. The doctors have been pleased with my progression over the last few days."

Newmark reiterated that there is no timetable for Newman's return. "He has

unequivocally expressed this is where he wants to be," said Newmark. "His objective is to get back in the car as quick as he can. Ryan's objectives have not changed. His goal is to win the 2020 Cup championship."

In Newman's continued absence, Newmark said that 27-year-old Ross Chastain has an "open-ended" arrangement to fill in, having driven a Spire Motorsports Chevrolet in the Daytona 500. He was a top 10 contender at Vegas, before a late spin.

JIM UTTER

Mercedes junior Aron gets ART Renault seat

FORMULA RENAULT

Mercedes Formula 1 protege Paul Aron has joined single-seater juggernaut ART Grand Prix for the Formula Renault Eurocup.

The 16-year-old Estonian, whose big brother Ralf was a race winner in the Formula 3 European Championship and podium finisher in the Macau Grand Prix, was taken onto the books of Mercedes in 2019. That

was his rookie season of car racing, in which he claimed third place in the Italian Formula 4 Championship with Prema Powerteam. Aron was also a race winner with Prema in the German F4 series.

This year is F2/F3 giant ART's first in FRenault since the team's formative years as ASM. It has previously announced Swiss F4 graduate Gregoire Saucy, and is expected to run 2019

Eurocup runner-up Victor Martins, with whose career ART boss Sebastien Philippe is already involved.

Of the recruitment of Aron, Philippe said: "Paul is very young and his objective, like ours, will be to exploit his potential without burning his wings, to progress throughout the year to finish the season in the top places of a championship so full of rising talent."

MARCUS SIMMONS





Cassidy leads rookie test line-up

FORMULA E

Nick Cassidy's name was conspicuous by its absence when Toyota announced its 2020 Super Formula entries. After all, he is the reigning champion. He does, however, retain his Toyota seat in Super GT and will now lead the line-up of drivers confirmed for the post-Marrakech E-Prix rookie Formula E test, which is set for 1 March.

Cassidy, 25, joins W Series race winner Alice Powell in the Audi-powered Envision Virgin Racing team (above) as he makes his maiden appearance in an FE car.

The New Zealander has already run in the team's simulator, which meant a return to working with Stephen Lane – formerly an engineer at the T-Sport Formula 3 team with which Cassidy scored a podium on his Macau Grand Prix debut in 2014.

"I've spent a lot of time on the simulator and I'm now very keen to get out on track," said Cassidy. "I've not experienced anything like a Formula E car before and I'm excited to see how I perform. I'll be joining the team throughout the weekend in Marrakech and it'll be great to go through all the race weekend rituals with them, especially as they got a double-podium there last year."

Dragon, which currently sits 11th out of the 12 teams in the FE standings, also revealed two high-profile drivers for the test. Former BMW DTM driver Joel Eriksson and part-time Carlin IndyCar runner Sergio Sette Camara will run in Morocco. That marks the start of their longer-term association with the team, as both also take on test and development roles for the rest of the season.

MATT KEW

MARRAKECH TEST LINE-UP

TEAM	DRIVERS
Audi	Kelvin van der Linde, Mattia Drudi
BMW	Lucas Auer, Kyle Kirkwood
Dragon	Joel Eriksson, Sergio Sette Camara
DSTecheetah	Filipe Albuquerque, James Rossiter
Envision Virgin	Nick Cassidy, Alice Powell
Jaguar	Sacha Fenestraz, Jamie Chadwick
Mahindra	Pipo Derani, Sam Dejonghe
Mercedes	Daniel Juncadella, Jake Hughes
NIO 333	Antonio Fuoco, Daniel Cao
Nissan e.dams	Jann Mardenborough, Mitsunori Takaboshi
Porsche	Frederic Makowiecki, Thomas Preining
Venturi	Norman Nato, Arthur Leclerc

AHMED RETURNS TO EUROPE FOR FIA F3 SEASON

FORMULA 3

British, European and Japanese Formula 3 championships race winner Enaam Ahmed will lead Carlin's assault on the FIA F3 Championship this season.

Ahmed, 20, scored 13 wins in 24 races to secure the 2017 BRDC British F3 title with Carlin. He followed that with race-winning campaigns in European F3 in 2018 and the Japanese equivalent last year. He made his debut in the FIA F3 car in last November's Macau Grand Prix with Campos Racing.

"I'm glad to be home," said Ahmed. "I can't think of a team I trust more than Carlin. They are family, and quite simply if I'm going to win it's only going to be with Carlin."

He will be joined by Frenchman Clement Novalak (below), who won last year's British F3 title with Carlin and drove with the team in the post-season Valencia FIA F3 tests last October, and American Cameron Das, who won a British F3 race for Carlin in 2017 before graduating to Euroformula Open.

Team boss Trevor Carlin said: "I'm extremely happy to have three drivers we know so well with us. We know what each of them are capable of and how they work, and all of these elements will help us."

JAMES NEWBOLD



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Huff calls time on world tin-tops

WORLD TOURING CAR CUP

Allied to sporting changes that have been expedited for introduction, the World Touring Car Cup paddock will have a very different feel to it in 2020 following 2012 world champion Rob Huff's announcement that he will not race in the series.

Huff, a veteran of 350 starts in the World Touring Car Championship and WTCR, is leaving the series to focus on his commitments with the Teamwork Huff Motorsport squad he co-launched, in the wake of Volkswagen's decision to cease its support of the Sebastien Loeb Racing squad for 2020 in line with its adoption of an electric-centric motorsport strategy.

The impact Huff has had on World Touring Cars should not be underestimated. An ever-present since the relaunch of the WTCC in 2005, Huff won races in all but three campaigns – 2005, 2015 and 2019 – and shares the record for outright victories (nine) at the Macau Guia circuit with motorcycle racer Michael Rutter.

Huff won for each of the six makes he represented in WTCC/WTCR, although it was with Chevrolet, the first manufacturer he raced for, where he secured his biggest success, coming out on top in a fierce three-way battle with team-mates Yvan Muller and Alain Menu in 2012 to claim the WTCC crown (right).

The 40-year-old says he expects there will be “plenty more touring car races in my future” but, if the 2019 season does prove to have been his last in WTCR, it's a major blow to the series. There's little doubt that, while Huff has been increasing motorsport priorities away from racing, the

decision was, to an extent, out of his hands and is indicative of WTCR's current plight. With VW gone, and Audi pulling its support, there was an immediate lack of options for someone who has earned factory status over a prolonged period.

Teams are also feeling the pinch of increasing costs, which has prompted WTCR promoter Eurosport Events to accelerate a raft of cost-cutting changes for 2020. The most significant of those is a return to the WTCC's two-race format at each round, which will shorten race weekends, while three-car teams will also be permitted – contrary to previous suggestions. The series has also extended its deadline for entries until 6 March – more than a month later than its traditional end-of-January cutoff. WTCR said the move was “in response to current market conditions”, which it said included the impact of the coronavirus outbreak.

At present, Honda is the only manufacturer to have firmed up its 2020 line-up. It has retained 2019 runner-up Esteban Guerrieri, Nestor Girolami, Tiago Monteiro and Attila Tassi.

JACK COZENS



IN THE HEADLINES

G-DRIVE PIPS CARLIN TO TITLE

G-Drive Racing clinched the Asian Le Mans Series LMP2 title – and an entry for the Le Mans 24 Hours – by just one point over Carlin after the final round at Buriram last Sunday. Ben Barnicoat claimed a point for pole in Carlin's Dallara, and combined with Harry Tincknell and Jack Manchester to win the race. Second place was enough for G-Drive's Aurus-badged ORECA, in the hands of Roman Rusinov, Leonard Hoogenboom and James French. Inter Europol led the LMP3 standings with Nigel Moore and Martin Hippe heading to Thailand, but gearbox failure scuppered their hopes, and the title was won by second-placed Colin Noble and Tony Wells in their Nielsen Racing Norma. Marcos Gomes and Ferrari squad HubAuto Corsa won the GT crown, with the Brazilian taking Buriram class honours with Tim Slade and Liam Talbot.

HINCHCLIFFE IN INDY 500

IndyCar race winner James Hinchcliffe will contest a minimum of three races in the series this year in a sixth entry from Honda-powered Andretti Autosport. The Canadian is on board for the Indy GP road-course race, the Indy 500, and the Texas Motor Speedway oval.

PERONI BACK IN THE SADDLE

Australian Alex Peroni, who suffered a terrifying shunt in the FIA Formula 3 round at Monza last year, is staying on with Campos Racing in the series for this season. He will again be joined by Alessio Deledda. Also in F3, Dutch racer Bent Viscaal moves to his 'home' MP Motorsport team after racing with HWA Racelab in 2019.

ALONSO PROTEGE STEPS UP

Spanish karting sensation David Vidales, a protege of Fernando Alonso, will take his first car-racing steps in the Formula Regional European Championship this season with US Racing, the team co-owned by Ralf Schumacher.

BTCC HYBRID IS EARLY

The British Touring Car Championship says it is running ahead of schedule with its hybrid power project, and plans to run the Cosworth-developed system for the first time this June, before a public debut at the following month's two-day Snetterton tyre test. It is planned for introduction in 2022.

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Ricciardo's Renault challenge

He's had a year to get his feet under the French manufacturer's table.

Now the popular Aussie's star needs to be back in the ascendant

ALEX KALINAUCKAS

Anomaly — is that the word?” asks Daniel Ricciardo, smiling as ever. The Renault driver is cheerily chatting his way through a media session midway through the first pre-season test of the 2020 season at Barcelona last week. He will end the event with the 10th quickest time, with team-mate Esteban Ocon putting Renault third in the teams' ranking.

Renault finished the test with 380 laps on the board, and early indications suggest another year of action-packed midfield scrapping ahead. At the launch of the new RS20 the team understandably downplayed expectations for the coming season.

But 2020 can't be a campaign where Ricciardo helps keep the ship steady — he needs to be making waves that ideally swell so he and Renault can surf to the high-profile results he missed last season. After five years of chasing wins and podiums with Red Bull, Ricciardo's first season with Renault ended without a single rostrum visit, and a best result of fourth at Monza, as he took ninth in the drivers' standings in 2019.

That wasn't a bad return by any stretch. For a driver joining a new team and coming away as the lead points scorer, ahead of a racer as talented as Nico Hulkenberg, it was a promising campaign. But promising won't cut it in 2020 — the second and final year of Ricciardo's lucrative deal. Last year was the bedding-in season, a chance for Ricciardo and Renault to bond with the pressure

“This can't be a campaign where Ricciardo helps keep the ship steady. He needs to make waves”

slightly off — not something he'd experienced much during his Red Bull years trying to please Helmut Marko on the way up the ladder, leading the senior team alongside newcomer Daniil Kvyat, or trying to outfox Sebastian Vettel or Max Verstappen either side of having Kvyat as his team-mate.

Now that he and Renault know each other, Ricciardo says 2020 “feels a lot more normal” heading into a new campaign: “Last year was about just changing team and trying to also give them as much feedback as possible, but also not create chaos in their brains — trying to balance that and also still trying to build relationships. It meant just being kind of smart with how I relayed information and not to just come in and be the loudest guy in the room, you know? I think now this year, I would say it compares to Red Bull testing. Last year was a bit of an anomaly. That stood out.”

After adapting from the grip and overall performance levels that had become second nature at Red Bull, Ricciardo bonded with the RS19 and enjoyed some eye-catching moments in 2019. Qualifying fourth at Montreal was a standout, as was his ‘Class B’ win at Austin. In the process he outscored Hulkenberg and, with the German driver edged out in favour of Ocon, Ricciardo is the incumbent. Suddenly the air of underperformance-understanding — not that there's much of that about in F1 — is with his team-mate.

Ricciardo's early impression of the RS20 is “that there are improvements”, and he was pleased to dip under the Barcelona track's 1m20s barrier on his “second lap of the [first] day”.

“So sub-20s very quickly. I think that it was a bit of familiarity — obviously getting into the car the second year now, but it certainly did have initial good impressions. Getting down to that level of grip and downforce, it was a bit easier than what I remember [last year] for sure, or being able to use that level of grip. But I guess now it's when you start looking for that extra half a second — that's when it really starts and we'll see what the car is capable of.”

If, as expected, Renault is again engaged in a congested midfield fight — likely to be extra-packed as a result of Racing Point's predicted resurgence (see page 24) — Ricciardo needs to shine brightly in 2020. His reputation as a bold and brilliant overtaker and racer remains, and he's certainly a popular paddock figure.

All of this, allied with the results he's already collected, will be important when it comes to what happens beyond the upcoming season. Although Verstappen and Charles Leclerc have locked down long-term deals at Red Bull and Ferrari respectively, the 2020 silly season for 2021 still has explosive potential. Lewis Hamilton is yet to start talks with Mercedes about a deal post-2020, with Valtteri Bottas, as ever, out to make sure he continues there. Vettel's place at Ferrari remains uncertain, even if the team has recently said he's its first choice to partner Leclerc next year.

Ricciardo at his best would be an asset to either of those squads, which Red Bull clearly recognised when it tried to keep him at the team for last year, before his shock switch to Renault was completed in the summer of 2018.

Of course there is no guarantee he would walk into one of those seats even if they were available, but keeping up the momentum he built last season and adding some more glittering results would do Ricciardo's chances no harm at all. Renault, too, would reap the reward and would also surely be keen to retain his services.

Before he does anything else, Ricciardo must see off Ocon's considerable threat. But, without the need to learn a new team and car style, he must go into the new season free of the “anomaly” feeling of 2019, looking to quickly reinforce his reputation. ❧

 **P20 BARCELONA TEST ANALYSIS**



Taking charge

Francois Ribeiro is not afraid of being bold, and he's certainly doing that with his new electric touring car series, Pure ETCR – and it may be just what the sport needs

MATT KEW

Formula E has a new and noisy neighbour: Pure ETCR. In principle, there's really no need for an all-electric touring car series to step on the toes of its distant single-seater cousin. Rather, it's much easier to imagine them complementing one another on the same race weekend.

But Francois Ribeiro – head of Eurosport Events, promoter of Pure ETCR – doesn't want his new brainchild to play second fiddle to anything. It won't make its way onto a support package and it will run in parallel with World Touring Cars. What's more, the implications from his less-than-subtle jabs during a launch event in Paris is that Pure ETCR is here to show FE the error of its ways.

In the press conference there were a couple of lines from Ribeiro that stood out. "Formula E promotes technology, it does not promote products," he said. "Touring cars have always been a great tool for manufacturers to promote their product. We promote real cars, not single-seaters, not electric SUVs."

That last part is quite an obvious dig at Extreme E, the electric off-road SUV racing series fronted by FE founder Alejandro Agag. We'll let that lie for now and instead pick up on the first part. Ribeiro – who Autosport can't help but think would be great company over a beer – has a very valid point. Jaguar has been in FE for four seasons now and sells its all-electric I-PACE road car. But when it first rocked up, there wasn't so much as a hybrid car in its

“Pure ETCR puts the elephant of electric power in front of fans, right in the middle of the room”

automotive range. FE, at that time, for Jaguar, was about developing the powertrain technology and not about directing customers to one of its showrooms. It was technology first, product second.

But whether incidental or not, it's worth pointing out that there is a contradiction in what Ribeiro is saying here. Without focusing on too fine a point, Pure ETCR isn't exactly going to promote products in the truest sense. From what we've seen so far, Cupra will enter the series with its e-Racer, while Hyundai has extensively tested the Veloster ETCR car.

Both of these are based on road cars that are front-wheel-drive hatchbacks. They are not close to delivering 680bhp and, crucially, nor are they rear-wheel drive as the Pure ETCR cars will be. Yes, the race cars might look closer to their road-car counterparts than FE's do, but the Pure ETCR machines will not directly promote

the manufacturers' products either.

What Ribeiro and Pure ETCR have got spot on, however, is the first public exposure. A time trial at the 2020 Goodwood Festival of Speed is a masterstroke. The hillclimb is famous enough, attracting around 300,000 people over a weekend. Add that to the extensive press coverage, the thousands watching at home via the YouTube live stream and so on... that's a massive audience in which to make your non-competitive debut. Amusingly, only two years ago the British Touring Car Championship cohort ran their own time trial up the hill in celebration of the series' 60th anniversary. Now look what's coming.

Unlike the BTCC, though, Pure ETCR exists to cut out the middle step of hybridisation – which the BTCC will begin testing this year. Pure ETCR jumps straight in with a standardised Williams Advanced Engineering powertrain that's capable of a staggering 680bhp in its most powerful trim. Obviously BTCC can argue that the requirement to switch to full EVs is some time off, so the hybrid era has time to breathe, but this gives Pure ETCR a comfortable headstart and a hefty headline 300bhp power advantage to boot.

A major feather in the cap of Pure ETCR is that the paddock will be powered by hydrogen generators. FE is still tethered to smelly and loud diesel units that are very conspicuous as you walk past. This feels like a real move from Pure ETCR to eliminate the emissions rather than just move them off TV or to another point in the carbon cycle.

Also different to FE, between sessions Pure ETCR cars will charge in a central energy station in front of the fans. They won't be hidden in a garage. These moves, beyond the on-track action, puts electric power (which is still an elephant for some) right in the middle of the room. You have to admire that bold approach.

The heats format (see page 9) that replaces a conventional qualifying and race system will take more convincing. It's harder to get excited by just three cars at a time being released out of gimmicky starting gates to compete on track. If you were being uncharitable, you'd argue here that Pure ETCR is employing change just for the sake of change.

But the thought process is that it's better to go bold – employ the best aspects of both World Rallycross and WTCR and combine the two – and potentially attract a whole new audience rather than arrive with something half-baked and just a touch too familiar.

And perhaps that's what's needed. The analytics from the Autosport website tell us that readers don't engage with the WTCC anywhere near as much as the BTCC, or FE and more. Perhaps by going radical in the first instance, Eurosport Events can hope for better this time around. ❄

YOUR SAY

Where does the clerk stand in all this, along with the Blue Book regulations, which see the person innocent until proven guilty and not the other way round?

RON GAMMONS

Allow clerks of the course to take the lead

The reported stand taken by Ron Maydon against pro drivers on the basis of driving standards rather sets him up as both judge and jury, surely (Opinion, Club Autosport, 20 February).

The question one has to ask, is where does the clerk stand in all this, along with the Motorsport UK Blue Book regulations, which see the person innocent until proven guilty and not the other way round?

If a driver, pro or amateur, has a string of driving-standards violations against him that have been properly dealt with by the clerk and/or stewards who have had the opportunity of reviewing all of the evidence, resulting in points or bans, then by all means some action is called for.

I would hope that Maydon upon reflection will see the logic and justice in allowing the clerks to take the lead.

Ron Gammons

By email



Yamaha's Maverick Vinales ended MotoGP's pre-season testing in Qatar fastest of all – using both wheels. See next week's issue for our season preview

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Fabian Coulthard's DJR Team Penske Ford Mustang GT cuts a dash at Adelaide. He finished the weekend with 10th and ninth-place finishes

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S ON TRACK



F1
2020

MERCEDES STARTS 2020 WITH DOMINATION AND INNOVATION

Mercedes' W11 bristled with new developments and seemed ominously quick, but were the other teams holding something back in the first pre-season test?

ALEX KALINAUCKAS

PHOTOGRAPHY



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Mercedes' steering system impressed, but new car features "hundreds of smaller tweaks"

A

s you read this, the second pre-season test of Formula 1 2020 will be well under way at Barcelona – more laps, more data, more stories. But what happened over last week's opening test is well worth recalling. The story of the season began and the initial themes of the campaign emerged. When it all concludes in Abu Dhabi at the end of season, the tales told throughout the year will trace back to those sunny three days in Spain.

For Mercedes, 2020 couldn't really have started any better. It completed the highest number of laps, with its engines doing likewise ahead of the Ferrari, Renault and Honda totals, and it set the two fastest times with Valtteri Bottas and Lewis Hamilton. It was quite a turnaround from the same test a year ago, when Mercedes looked like it had work to do compared to its rivals.

Mercedes wasn't just dominant in terms of times and statistics. The W11 has enough innovation to mark an apparently serious step forward in a year when the regulations are stable from the one just gone, and ahead of a revolutionary change coming for 2021.

"The temptation for us was just to keep polishing [the W10] – after all, it finished the season really strongly and it was developing very fast all the way through the year, so there was still lots of opportunity to make that one quicker," says Mercedes technical director James Allison.

"That conservative approach was very, very tempting. But in the end, we decided that wouldn't be enough. We were feeling the breath of our opponents on our shoulders [in 2019]. We know their hunger and we know that if we don't do something impressive with this car, they will eat us up and leave us behind.

"So, we decided that we would make a car that was aggressive. Despite the fact that there is no change in the regulations, we would take every part of the car and see if we could challenge ourselves to make it better."

The dual-axis steering (DAS) system stole the headlines (see page 31) – and so it should. It is an ingenious concept to reduce drag on the straights while putting the wheels where they need to be to generate the desired grip levels in the corners – clever thinking of what 'steering' really is. But Allison says there are "hundreds" of smaller tweaks, including a new front suspension, airflow-improving smaller sidepods (this was admittedly a Ferrari concept Mercedes has adopted for 2020), and a change to its rear suspension to pack on additional downforce.

"MERCEDES WAS ON TOP EVEN BEFORE BOTTAS SET THE BEST TIME OF THE TEST ON THE THIRD DAY"

"We have got a car here that is streaks ahead of [the W10] in terms of downforce," he adds. "We have got a car whose development slope has kicked up, is steeper than the one that we finished last year with – in that very, very good car from 2019. And we've got a car here that we hope will be fertile ground to develop strongly all the way through the 2020 season."

Throughout the first test, Mercedes simply looked like it had picked up where it ended each of the last six F1 seasons – utterly in control and not looking like it is going to cede ground to anyone any time soon.

The team was on top even before Bottas set the best time of the test – using the softest C5 compound from Pirelli's testing range – on the morning of the third day. Hamilton slotted in the second fastest time that afternoon, but two errors in the final sectors on his best flying efforts denied him the top spot. An utterly minor blip for Mercedes... »

RED BULL SEEMS THE BIGGEST THREAT

At the conclusion of the first week of testing, you had to go all the way down to the sixth fastest time of the 10 teams to find one of Mercedes' real rivals. This was where Red Bull lurked after a very much lower-key opening test.

Max Verstappen set the ninth fastest time overall – sixth in the teams' ranking – on the C3 tyres on the first day, which was 1.784 seconds slower than Bottas's best two days later. The C3 is estimated to be 1.2s per lap slower than the C5s Mercedes strapped on, but even with that subtracted the gap was still big.

But Red Bull appeared to be holding something back last week. Its new RB16 doesn't exactly lack clever design given its weight-saving multi-link bottom wishbone, and its drivers were pleased with the step the team has made from what was a demanding-to-drive RB15. "I think just overall it feels a bit more connected," says Verstappen. "But that was also the target. So, there was no real surprise there."

His team-mate Alex Albon, who is embarking upon his first full season with the team in 2020, adds: "I'd definitely say it's more usable – in terms of you can really feel the car. It feels nicer to drive, it really does."

"There [were] always areas last year where we felt the car was a little bit weak in some places. But, with Max and I, we have quite similar feedback comments. So coming over the winter it was kind of clear what direction we wanted to go in. Coming already straight into the first test, the car definitely feels better in those areas. So we've made a step forwards."

Verstappen explains that Red Bull's chief aim in the first test was "just doing a lot of laps", which it certainly did, as the team ended up only behind Mercedes in the lap-count stakes, 471 to 494. His indication that the team was "changing the car every single run" goes some way to explaining why Red Bull seemed to stay away from performance running last week.

WHAT'S GOING ON AT FERRARI?

Not going for headline times was also the approach taken by the final member of F1's big three teams: Ferrari. But all did not appear to be well at the Scuderia during test one. For a start, the team languished down in eighth place in the teams' times, with Sebastian Vettel's 1m18.154s putting him 14th in the overall order and 2.422s down on Bottas. Charles Leclerc was a further 0.135s back in 16th with a C3-shod lap, while Vettel was on the softer C4s.

But the issue seemed to go deeper than headline lap times suggest – after all, we're constantly told how meaningless times are in testing. The team just appeared to be downbeat, from Leclerc's press-conference demeanour on the opening day (he was clearly playing his cards close to his chest) to team boss Mattia Binotto's own negative comments two days later.

"I'm not as optimistic as last year," says Binotto. "So it means the others are faster than us at the moment, I believe. How much faster?"



Red Bull concentrated on lap count rather than performance running



Verstappen said RB16 is "a bit more connected" than old car

I think it's really difficult to judge and we'll go through all the data. But I don't think we are as fast as them at the moment."

Then came an engine failure on the first test's final day with Vettel at the wheel, which cost Ferrari nearly three hours of running, and there were pitlane observations that the SF1000 was graining its tyres significantly.

Although the laps in the first week came in fits and spurts, it was possible to track patterns in the big three teams' performances. The long-run times generally spread from the 1m18/19s to the 1m23s, which is roughly the pace we could expect a car fat with fuel to produce at Barcelona.

On the C3 rubber, without counting Red Bull, which our data doesn't cover for that compound, Vettel gave Ferrari a six-lap run average (with one outlier removed) of 1m19.971s on the final afternoon. That morning, Bottas produced a 1m19.782s average over seven laps for Mercedes.

On the more durable C2 tyre, Hamilton produced an average of 1m18.723s over eight laps on the opening afternoon, with



Vettel had an engine failure on last day



Bottas and Mercedes ahead of Red Bull – even when running aero fences

“ALL DID NOT APPEAR WELL WITH FERRARI DURING TEST ONE, DOWN IN EIGHTH PLACE IN TEAMS’ TIMES”

Verstappen doing a 1m19.695s average over the same distance on the final morning. Over 11 laps on the Friday morning, Vettel averaged 1m20.547s for Ferrari, which becomes 1m20.173s when just the first eight laps are counted.

This does produce a picture, but it’s certainly not a clear one as all three squads produced worse averages on the two more typical race compounds over the three opening days, which suggests the usual fuel-load disguising was naturally going on.

REASONS TO BE CHEERFUL?

What we did glean last week is that Mercedes remains mighty and looks to be ahead. And yet some hope of a proper contest remains.

First of all, Red Bull did not appear to show anything near its full hand in the opening test. As Verstappen indicates, the team was focused on nailing the usual reliability and configuration checks that come in the initial running with a new car. At Ferrari, Binotto disclosed that the team had “changed the approach to the testing and the programme” – it had been stung by Mercedes in Melbourne last year after ‘winning’ 2019 testing. That meant Ferrari focused on sampling different aerodynamic and mechanical approaches, while deliberately avoiding performance running.

Mercedes was also not bulletproof in the reliability stakes. Bottas’s running on the second afternoon was cut short by what the



Ferrari seemed slow but had team turned power unit down?

team described as an electrical problem, but it later emerged that the team had needed to change a power unit. Mercedes customer squad Williams also had an engine issue when Nicholas Latifi stopped shortly before lunch on the final day. Nothing that shouldn’t happen in testing, of course, but a weakness of sorts.

Mercedes itself also threw a healthy dose of intriguing speculation into the mix with a team press release it issued shortly after the first test had ended. After a lengthy explanation of how it calculates the pace of rival squads in testing, Mercedes included the questions: “Will Red Bull bring a significant upgrade package to the second test? Why have Ferrari spent this test running their PU [power unit] consistently at much lower levels than their partner teams?”

The former question suggests Mercedes is expecting Red Bull to turn up the wick on the development and pace fronts in the second test. But the second was a clue to a Ferrari mystery of test one.

At the Barcelona speed trap on the opening day, Ferrari was clocked at 190.2mph, compared to McLaren’s session-best at 204.741mph. The best Ferrari customer unit was Alfa Romeo on 197.471mph. On day two, Ferrari did 192.935mph, with Alfa top at 201.262mph. But on the final day, the Barcelona timing screens before Vettel’s engine failure suggested he had hit 204.431mph, although Binotto queried that when questioned by Autosport.

It raised the possibility that Ferrari may turn up the power in the second test and make a big step. Stranger things have happened... >>



T

he battle to be best of the rest in Formula 1 2020 looks like it will be as intense as ever.

Racing Point, McLaren and Renault all were solid at Barcelona, but it was perhaps the pink-liveried team that had an extra reason to be positive. Lance Stroll and Sergio Perez logged the fifth and sixth fastest times, giving Racing Point's apparently W10-inspired new RP20 fourth in the teams' ranking. Even more encouragingly, Perez's 1m17.347s came on the C3 rubber, the top time for the middle offering in Pirelli's range. Given the 0.6s and 1.2s swing up through the C4 and C5 tyres, this suggests he

could have put Racing Point second, only behind Mercedes.

Estaban Ocon had Renault third with the fourth-quickest overall time, while Carlos Sainz Jr put McLaren seventh on the 12th-quickest time of test one. But Sainz's lap came on the C2 rubber, as McLaren seemingly stayed away from performance running.

On the final afternoon, Daniel Ricciardo and Stroll put in lengthy efforts. Ricciardo started off with an 18-lap run at an average pace of 1m23.929s on the C2s, followed by 17 laps (with one outlier removed) at 1m22.783s on the C3s. He returned to the C2s for a final 22 laps at an average (with one outlier removed) of 1m21.450s. This suggests Renault did a race simulation, as his times came down as the fuel load lightened. And although he ground to a halt at the end of his long run, teams do deliberately run cars dry to check their systems.

At largely the same time, Stroll produced an average over 20 laps at 1m22.822s and then came back with another average over 17 laps of 1m22.987s. If we assume that both stints were done with a high amount of fuel, then this would indicate Racing Point is ahead of Renault at this stage. McLaren's position in the picture is harder to estimate, but Sainz did complete a useful long run on the hard C1 rubber on the first day. Over a first stint of 17 laps he averaged 1m23.660s, which came down to a 1m22.594s over 16 laps and then 1m21.952s over eight tours. The delta from C1 to C2 is

0.8s-1.0s, which could well mean McLaren is in Renault's range.

Alfa Romeo earned the second quickest time of the 10 teams, with Kimi Raikkonen's 1m17.091s (C5) putting him third fastest overall and top on day two. Antonio Giovinazzi also did a healthy long run on the final afternoon, but on the C3 tyres at an average of 1m23.100s over 16 laps with three outliers removed.

AlphaTauri left week one fifth in the teams' standings thanks to Daniil Kvyat's seventh-best overall time on the C4 rubber. Pierre Gasly completed two lengthy C2 stints on the final afternoon, one over 15 laps (with one outlier removed) at 1m23.129s and then a second an hour later of 16 laps at an average of 1m22.461s.

Williams and Haas had rather mixed fortunes in the first test, with a lack of eye-catching long running that make them tricky to place in the currently clouded pecking order.

“RUSSELL RECKONS ‘THERE’S NO WAY WE’LL BE AS FAR OFF THE PACE AS WE WERE LAST YEAR’”

Williams was night-and-day ahead of its own terrible start to 2019's pre-season, with George Russell's 1m18.168s — good enough for 15th overall and ninth in the teams' ranking — just 0.038s slower than it went in all of testing last year. Russell reckons “there's no way we'll be as far off the pace as we were last year” and there was certainly a positive aura around Williams last week, although Nicholas Latifi's engine drama will have given it some concern.

Haas ended up bottom of the teams' order with Romain Grosjean's 1m18.466s (C3s) and two crashes, one for Grosjean and one for team-mate Kevin Magnussen, on days two and three — the second of which was caused by a broken wheel spacer. This also kept the American-owned squad bottom of the lap count. ❧

TESTING DATA, BARCELONA, 19-21 FEBRUARY

BARCELONA TEST TIMES (TEST ONE)

POS	DRIVER	CAR	DAY ONE	DAY TWO	DAY THREE	TYRES FOR FASTEST LAP
1	Valtteri Bottas	Mercedes W11	1m17.313s	1m19.307s	1m15.732s	C5
2	Lewis Hamilton	Mercedes W11	1m16.976s	1m18.387s	1m16.516s	C5
3	Kimi Raikkonen	Alfa Romeo-Ferrari C39	-	1m17.091s	-	C5
4	Esteban Ocon	Renault RS20	1m18.004s	1m18.557s	1m17.102s	C4
5	Lance Stroll	RacingPoint-Mercedes RP20	1m18.282s	-	1m17.338s	C4
6	Sergio Perez	RacingPoint-Mercedes RP20	1m17.375s	1m17.347s	-	C3
7	Daniil Kvyat	AlphaTauri-Honda AT01	1m17.698s	-	1m17.427s	C4
8	Antonio Giovinazzi	Alfa Romeo-Ferrari C39	1m20.096s	-	1m17.469s	C4
9	Max Verstappen	Red Bull-Honda RB16	1m17.516s	-	1m17.636s	C3
10	Daniel Ricciardo	Renault RS20	1m17.873s	1m17.749s	1m17.574s	C3
11	Pierre Gasly	AlphaTauri-Honda AT01	-	1m18.121s	1m17.783s	C2
12	Carlos Sainz Jr	McLaren-Renault MCL35	1m17.842s	-	1m18.274s	C2
13	Alexander Albon	Red Bull-Honda RB16	-	1m17.912s	1m18.154s	C2
14	Sebastian Vettel	Ferrari SF1000	-	1m18.154s	1m18.384s	C4
15	George Russell	Williams-Mercedes FW43	1m18.168s	1m18.266s	-	C3
16	Charles Leclerc	Ferrari SF1000	1m18.289s	1m18.335s	-	C3
17	Romain Grosjean	Haas-Ferrari VF-20	-	1m18.496s	1m18.380s	C3
18	Nicholas Latifi	Williams-Mercedes FW43	1m18.382s	-	1m19.004s	C4
19	Robert Kubica	Alfa Romeo-Ferrari C39	1m18.386s	-	-	C3
20	Lando Norris	McLaren-Renault MCL35	-	1m18.474s	1m18.454s	C3
21	Kevin Magnussen	Haas-Ferrari VF-20	1m18.466s	-	1m19.708s	C3

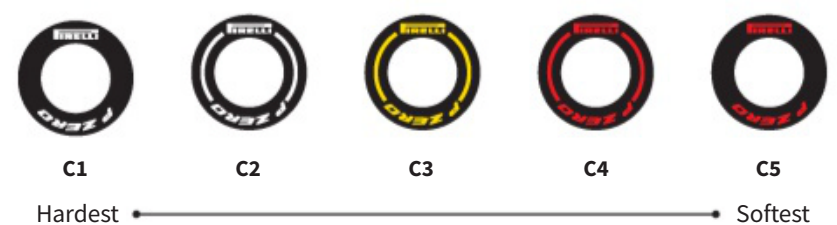
The fastest time for each driver is marked in bold, with fastest time of the day in red

DRIVER	LAPS COMPLETED	TEAM	LAPS COMPLETED
Hamilton	273	Mercedes	494
Verstappen	254	Red Bull	471
Sainz	237	Alfa Romeo	424
Giovinazzi	231	McLaren	423
Bottas	221	AlphaTauri	384
Albon	217	Renault	380
Gasly	206	RacingPoint	371
Grosjean	206	Ferrari	354
Perez	203	Williams	324
Ricciardo	190	Haas	316
Ocon	190		
Russell	189	ENGINE	LAPS COMPLETED
Norris	186	Mercedes	1189
Leclerc	181	Ferrari	1094
Kvyat	178	Honda	855
Vettel	173	Renault	803
Stroll	168		
Latifi	135		
Raikkonen	134		
Magnussen	110		
Kubica	59		

TOTAL LAPS
COMPLETED
BY ALL CARS
3941

RED FLAGS
5

TYRE GUIDE



SPEED TRAP (ENGINES)

Ferrari (Haas)	205.6mph
Renault (McLaren)	204.7mph
Honda (Red Bull)	203.3mph
Mercedes	201.3mph

NEXT TEST 26-28 FEBRUARY



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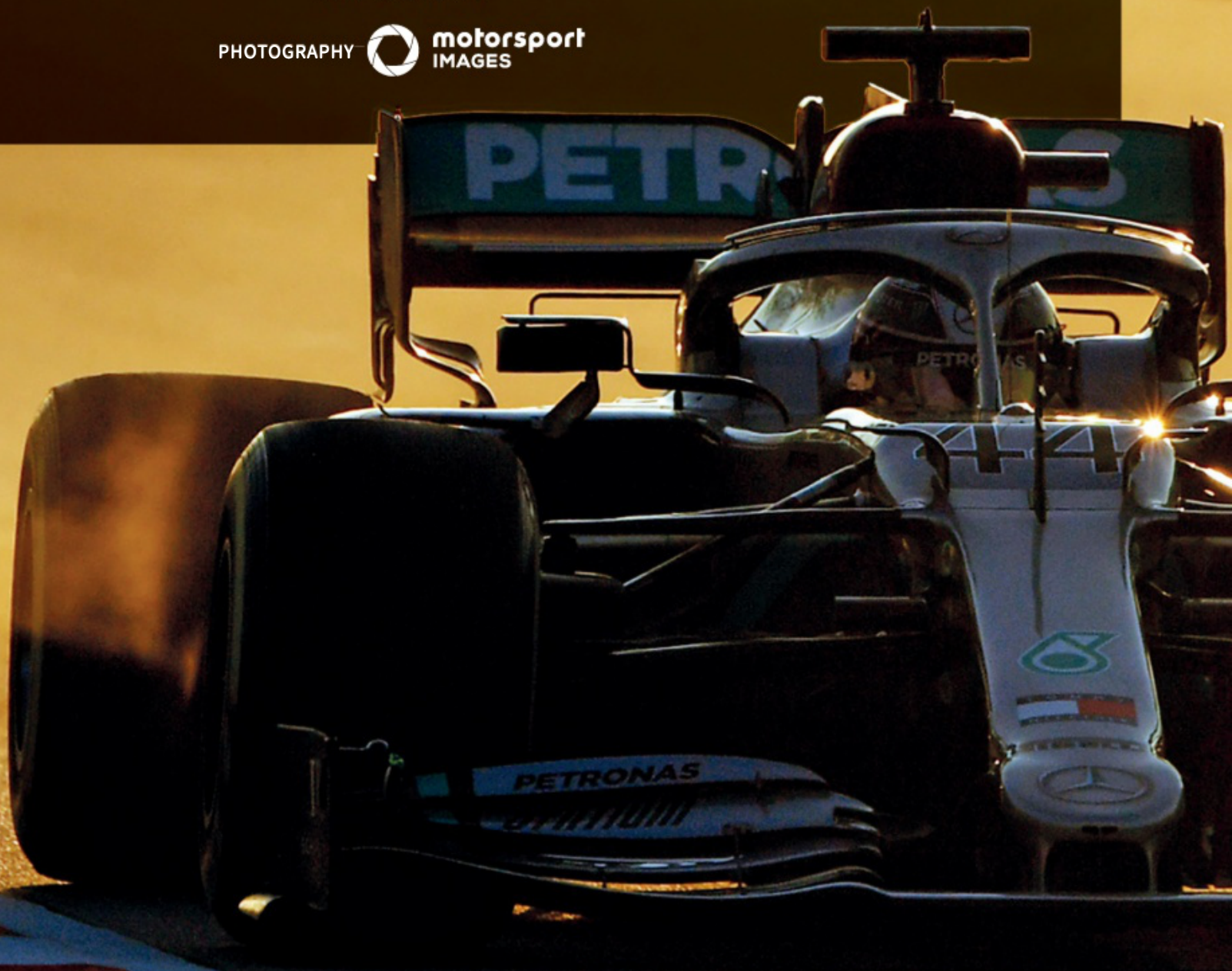
F1
2020

TRACKSIDE IMPRESSIONS

*You've seen the headline times, but how is the
F1 class of 2020 behaving on the track?*

TIM WRIGHT

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F

ollowing the first three days of pre-season testing, Mercedes is looking serene at the top of the pack with its W11, closely followed by Red Bull and then, surprisingly, Racing Point and not Ferrari.

Ferrari, which caused the second red flag of the test, is not looking particularly competitive, either on outright pace or on long runs, although it's clear that the team hasn't turned the wick up just yet. Charles Leclerc, who had to stand in for Sebastian Vettel, ended up languishing in 11th place on day one. The car looks unremarkable compared to those of other teams, maybe because of the matt paint job, but also in the architecture. Following an engine change on day three, Vettel completed a 10-lap run on Pirelli C2 tyres (with C1 the hardest), which looked decidedly sad with a lot of graining even on the rears, suggesting that the Ferrari is lacking downforce to work

the tyres properly. On the track, the car doesn't appear to have any nasty traits, but it also looks as though the drivers are having to be careful with applying the throttle on the exits. This is particularly notable at Turn 10 – the tight left-hander behind the paddock – where they are accelerating later than drivers from the other Ferrari-engined teams.

It was interesting watching at Turn 10 when most cars were on long runs. Mercedes' Valtteri Bottas was clearly fastest through that 'stadium' section up to the chicane, by 0.3 seconds, presumably helped by the DAS (see page 31). His approach to the long Turn 12 right-hander was particularly impressive, as he could throw the car in and know it would stay on line. On the exit of Turn 10 the engine-cut was most evident. Lewis Hamilton looked to be struggling more through this section in particular – when trying to better Bottas's 1m15.732s lap, he had rear-end snaps of power out of



Turns 10 and 13. Otherwise the Mercedes looks to be glued to the road, especially the fast corners such as Turns 3 and 9. Both drivers were able to complete long runs with metronomic precision, and the tyres looked in pristine condition at the end of each stint.

From what I saw, the next best was the Racing Point, Sergio Perez enjoying his 'pink Mercedes clone'. He was able to brake late and attack each corner of the final section of the Barcelona track, and occupied the top spot on the timesheets for most of the first day until Hamilton and Bottas got their acts together. There are subtle differences on the Racing Point in terms of the front-wing assembly, the bargeboards and the rear-wing attitude, all of which have been honed in the same windtunnel as Mercedes, but I'm sure this is purely accidental. Lance Stroll took some time to get used to his new machinery, not looking particularly comfortable in the slower-speed sections, but by the third afternoon he was able to

hustle the car to fourth place overall. The long-run pace needs to be improved if they are to trouble Red Bull or Ferrari.

Red Bull has been quietly amassing plenty of data with some trouble-free running. Max Verstappen, who concentrated most of his running on C2 tyres, was half a second slower than Mercedes on his long runs, but the car looks stable, especially on the long, quick corners like Turn 3. The engine-cuts on the exit of Turn 10 sounded particularly harsh, but this didn't slow the progress and allowed the Red Bull to get the power down smoothly. The new front suspension is obviously working nicely to get the car turned into the slow-speed corners, and braking looks efficient. Alex Albon also took some time to get used to his new steed, especially as he was having problems getting comfortable in his seat. Although he didn't light up the timesheets, he was able to produce helpful long runs, again mostly on the C2 tyres. >>



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New-look AlphaTauri
was one of the big surprises

Perhaps the biggest surprise for me was the AlphaTauri with Daniil Kvyat driving. He briefly led the Red Bull on the timesheets on day two in a car whose nose and front wing are the most different in the pitlane, with widespread pylons giving good stability. The undercut on the nose swoops down to a flat plane that feeds air nicely to the T-tray. It's interesting to see that AlphaTauri has not gone down the route of the outboard top-wishbone mounting being raised outside the wheelrim as some teams have adopted. (Red Bull and Ferrari are the other teams to run a lower front top wishbone.)

On the track the car is stable and efficient through the last section, if not the quickest. There was an interesting battle going on between Pierre Gasly and Albon at one stage, with the two trading lap times on their long runs, Albon winning this one by two tenths.

As for the others, it looks pretty much like status quo, although it does appear that Williams has made some strides and could bother the likes of Alfa Romeo. George Russell was able to record a respectable time on day one, and Williams has definitely benefited from being able to run from the start of testing. A lot of work was dedicated to set-up changes, but I think the biggest bonus is the inclusion of Nicholas Latifi, who will give Russell a run for his money. The car still looks a little dated compared to its competitors, and Williams unfortunately had an engine problem on day three that limited the car's running. My impression of seeing the car on the circuit was that it's not as nimble in its change of direction as others, but maybe further tuning can improve this. One change I did see them making was one of the mechanics using a speed brace on a component just behind the front suspension, presumably changing the droop stop, to help keep the front down in slow-speed corners.

The Haas looks strong in the final section, although Romain Grosjean continues to outbrake himself on occasions into Turn 10. Kevin Magnussen completed just over 100 laps on day one, which



Williams has started
2020 in better shape
than it was in 2019



included a race distance when he was running at the same time as Mercedes and Red Bull. His lap times were impressive and consistent, the car looking much more driveable than in previous years. Haas seemed to lose a little direction on day two, despite another big haul of laps put in by Grosjean, and then unfortunately had a failure of a rear hub on day three that ended the team's testing. But Haas, along with Renault, Alfa Romeo and Williams, struggles to set an outright quick time, so has still not found out how to switch on the tyres.

The Alfa Romeo looks good in the braking area at Turn 10, can hit the apex and get on the power smoothly, especially in the hands of the experienced Kimi Raikkonen. The car looks fairly conventional, but he was at least able to wring the fastest lap on day two using the softest C5 tyre. Even so, the long-run pace is only on a par with that of Renault and McLaren.

McLaren was looking pretty impressive on day one, with Carlos Sainz setting good times while taking advantage of a cooler track, but as the temperature rose and others got going, the team slipped down the order. The car is certainly reliable and McLaren has experimented with different set-ups, and at one stage a new front wing was

“WILLIAMS’S BIGGEST BONUS IS THE INCLUSION OF LATIFI, WHO’LL GIVE RUSSELL A RUN FOR HIS MONEY”

introduced. Like the others, it was able to put plenty of miles on the clock, but I'm not sure it will trouble the top four teams.

Renault was another team that had a slow start, and on day one with Esteban Ocon the car looked to be running rather low, almost wearing a groove down the main straight as he left a trail of sparks (maybe this was why he said the car had a lot of downforce). This improved as the team experimented with different bodywork and set-ups and by the time Daniel Ricciardo had his turn in the car he was able to set a competitive time on day two. The design of the car has taken a lot of ideas from the likes of Mercedes in terms of the front suspension, but the front wing has a completely different approach in the size and shape of the flaps, with a highly loaded outboard section. The bargeboards too show a different array of large upright sawtooth sections. Renault does seem, however, to have matched the performance of its customer team McLaren, so hopefully will be in the mid-pack battle come Melbourne.

Several teams are using the brake ducts to blow air past the discs and calipers and expel air from the inside of the wheelrim. Some different solutions were seen to wheels and spoke design to aid this. ❧

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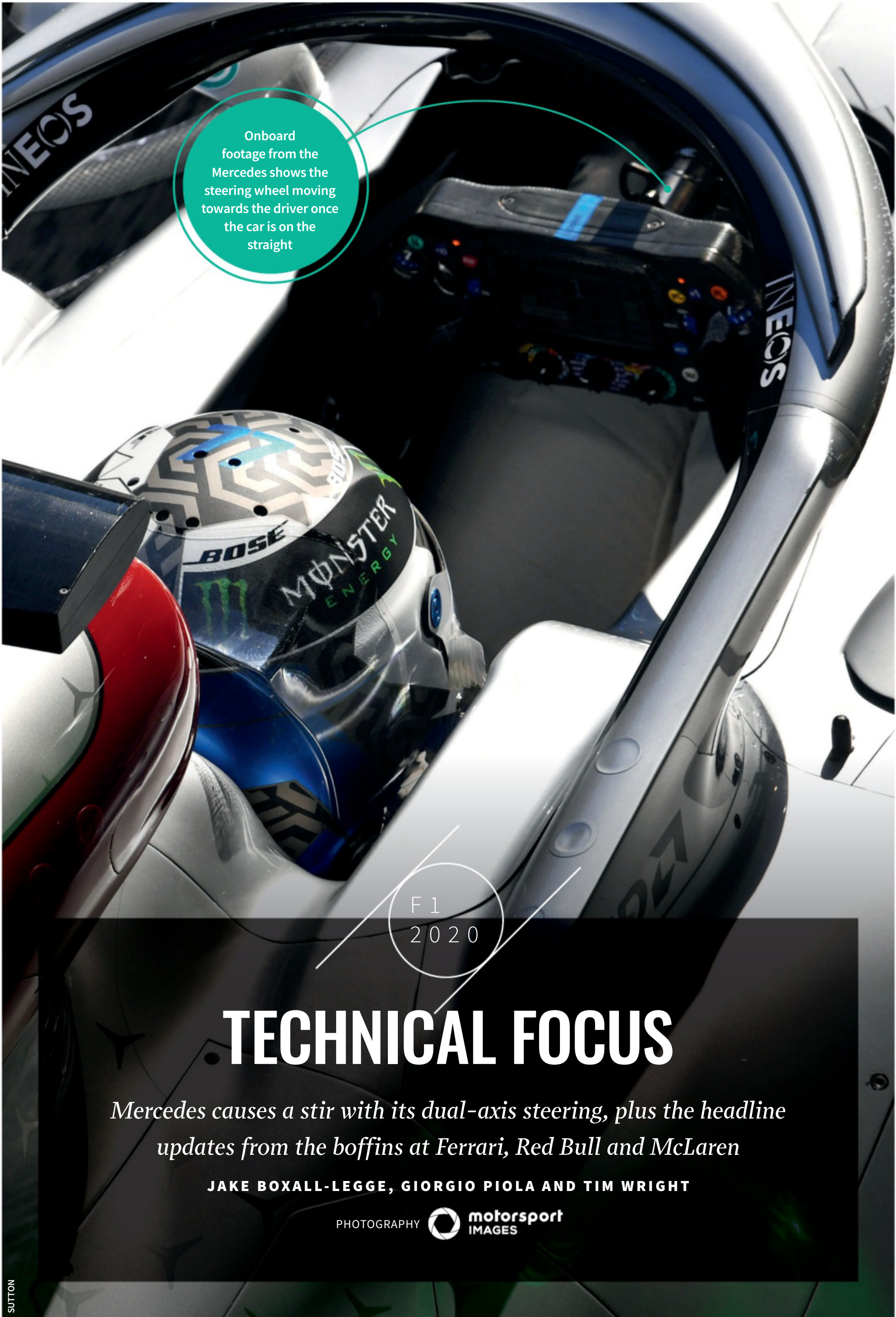
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footage from the
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steering wheel moving
towards the driver once
the car is on the
straight

F1
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TECHNICAL FOCUS

Mercedes causes a stir with its dual-axis steering, plus the headline updates from the boffins at Ferrari, Red Bull and McLaren

JAKE BOXALL-LEGGE, GIORGIO PIOLA AND TIM WRIGHT

PHOTOGRAPHY  **motorsport
IMAGES**



DAS STEERS MERCEDES INTO NEW TECH TERRITORY

It appears that Mercedes has a new trick using a moveable steering wheel, known internally as DAS (dual-axis steering). Onboard footage shows the wheel moving towards the driver once on the straight and this reduces the front-wheel toe, which is advantageous.

The system should reduce drag and tyre scrub on the straights, without hindering driveability in the corners. One of the key mechanical changes that engineers can make to a car is the toe angle, the angle at which – when looking at a plan view of the car – the front wheels naturally turn inward or outward. At its core, increasing the amount of toe-out (when the front of the wheel is further out than the rear) means that the overall cornering performance should be a little better as the wheel already leans into the corner.

Since the driver experiences a reduced slip angle (the difference between steering angle and the direction of travel) as a result, the

steering inputs should be minimised. This arms the driver with improved grip, improved handling and improved confidence in the corners.

Under braking at the end of the straight the wheel moves away from the driver, increasing the toe. Therefore, in the slow-speed corners the wheels toe out more to give more grip, but on the long straight the toe reduces.

With a conventional suspension layout, there's always a compromise between toe angles and straightline speed. A driver needs to be able to deal with every kind of corner on the circuit, but without losing performance on the straights – and so an adjustable system would provide the right characteristics without being locked into a certain set-up.

“It just introduces an extra dimension to the steering and we hope will be useful during the year,” says Mercedes technical chief James Allison. “But precisely how we use it, why we use it, that’s something we’ll keep to ourselves.”

The W11's front wheels
toe out more in slow
corners to boost grip

MOTORSPORT IMAGES/MAUGER

TIM WRIGHT'S THEORY ON HOW DAS WORKS

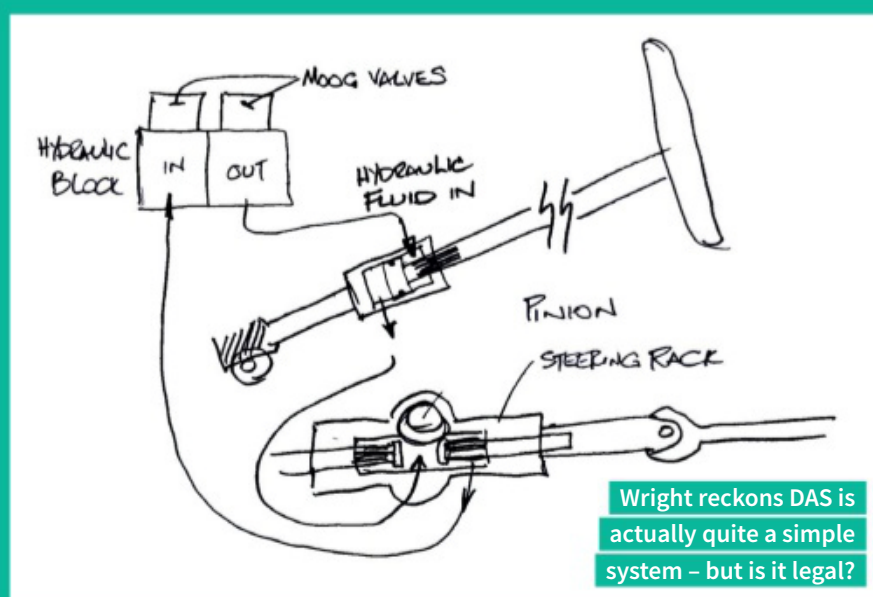
I have a theory of how the DAS system could work and it is actually quite simple, but risky and perhaps not legal.

Let me start by adding what I found was the perfect definition of steering:

"The function of a steering system is to convert the rotary movement of the steering wheel in the driver's hands, into the angular turn of the front wheels."

The moveable steering wheel could be a ruse and is only done because they want to convince people that the system is part of the steering. The same effect could be achieved just by having a switch that activates a Moog block attached to the steering rack and have the trackrods activated in the way they have done now.

The only problem with this is that if it were seen that the front-wheel toes change direction apparently on their own, then this is definitely



against regulations.

What I think they have come up with (if you look at my crude drawing) is to have a cylinder on the steering column, or maybe it's all part of the rack that is linked to a Moog block, on one side, that when activated pushes hydraulic fluid into the cylinder and thereby moves the steering wheel. The column would have

a splined section that can slide easily attached to the piston inside the cylinder.

The steering rack must have the normal rack-and-pinion assembly, but inside the rack is a double piston arrangement, linked to the cylinder on the column and then to the other side of the Moog block. Once the steering wheel has moved, the

displaced fluid then activates the pistons in the rack, either drawing them together or pushing them apart. Again, the trackrods would be attached to these pistons and be splined. When the system returns to normal, the first Moog shuts off and the second one is activated to allow the fluid to return.

Of course, this action could also be done automatically and be mapped to certain parts of the circuit just as the differential is. We saw on the video that Lewis Hamilton was pushing a marker button on the steering wheel, to show the engineers where he wanted the system to be activated.

This was all done during a testing session when the cars are mainly running on their own, but imagine during a race when you're concentrating or trying to pass a rival – it must be disconcerting to have the steering wheel suddenly move.

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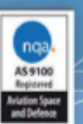
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FERRARI FROM THE MADDING CROWD

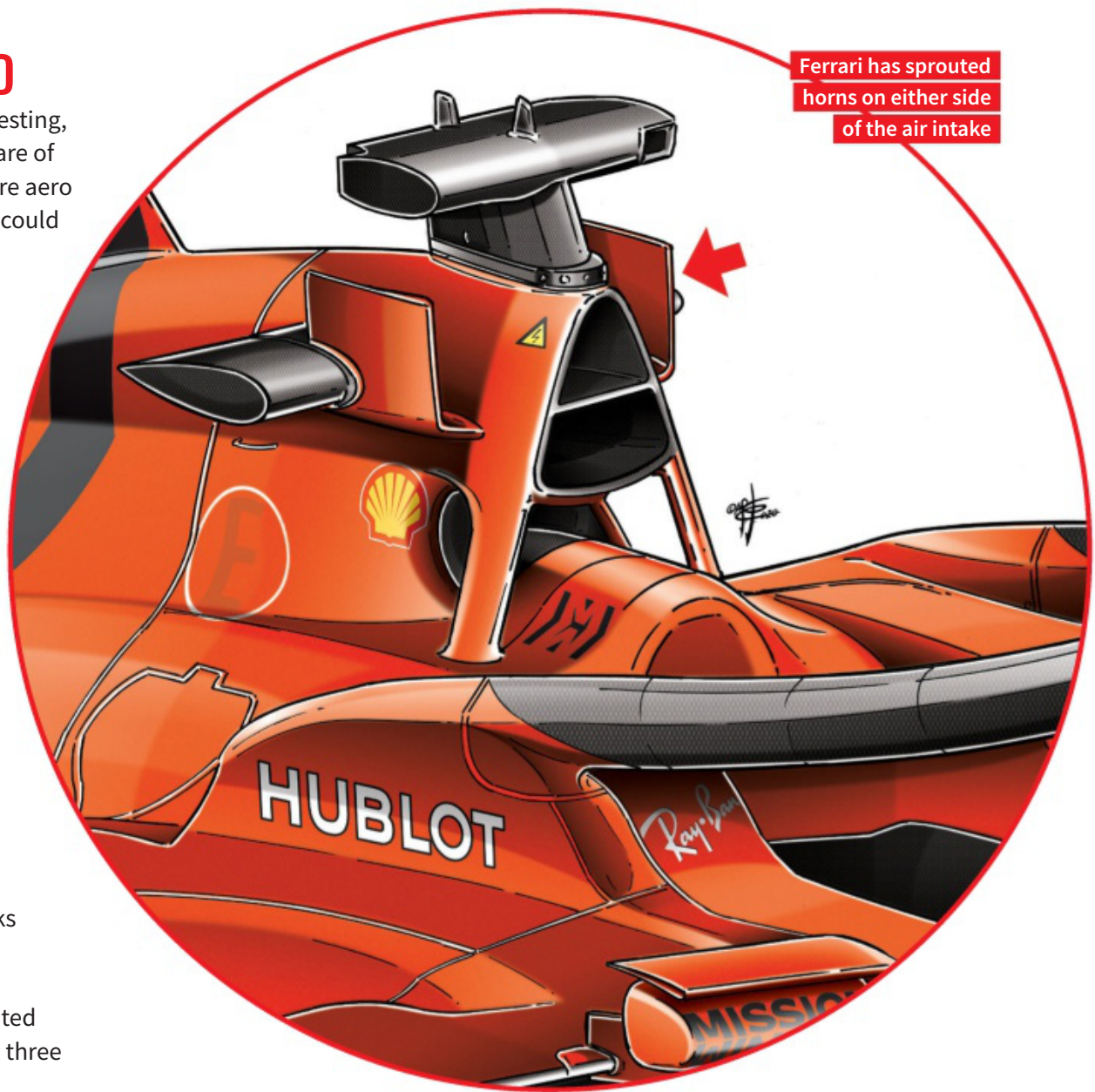
Ferrari showed very little of its true pace in the first week of testing, having worked through its run programmes without the fanfare of 2019. What is clear, however, is that the SF1000 has a few more aero tricks than last year's car as Ferrari sought to build a car that could perform strongly at a larger range of circuits.

It could be said that Ferrari must take the bull by the horns more often, and the team has done so quite literally – sprouting its own horns for 2020. These appear either side of the air intake above the driver's head, blending into the TV camera pods. Ferrari has been able to fit this within the permitted bounding box for bodywork thanks to its smaller intake system.

The horns seem to be primarily to further enhance the airflow heading to the central section of the rear wing, firstly by conditioning any ill effects from the halo, but also by cleaning up any further turbulence that may affect it. The tips will develop vortices, although it's not entirely clear how Ferrari uses them to boost the rear-wing performance – possibly by bringing them down to the suction surface of the wing at the underside.

The team also has a new bargeboard package featuring a twin-boomerang design. Both are mounted to the same turning vane, with a longer-chord upper member focused on cleaning the airflow ahead of the sidepod undercut. The lower element has its leading edge further forward, and works in tandem with the various serrations on the bargeboards.

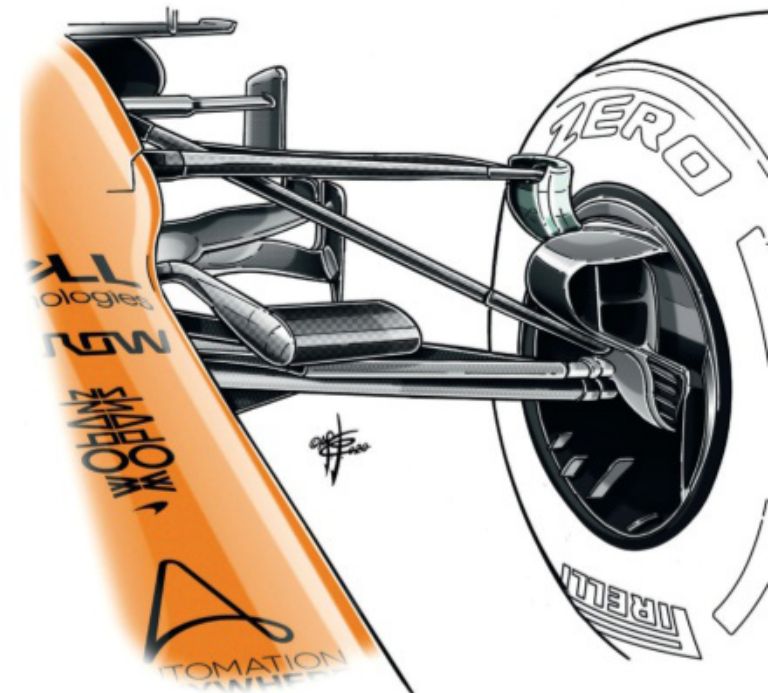
With a year's development the complexity of Ferrari's bargeboard has increased, and even the upper section mounted behind the suspension components has been broken up into three parts to pull airflow downwards more aggressively.



McLAREN REVIVES WISHBONE MOUNTING

At the Belgian Grand Prix last year, McLaren increased the size of its suspension upright mounting point for the upper wishbone, although it quickly reverted to its usual design for the rest of the season.

But after a redesign of the suspension package over the winter, the larger metal mounting point returns, meaning McLaren can use a smaller wishbone and improve the overall strength and aerodynamic properties of the suspension. There's also a selection of smaller curvatures on the wishbone fairing to offer the airflow a little more guidance.



RED BULL'S ATTENTION TO SUSPENSION

Red Bull has gone from a multi-link top wishbone to a multi-link bottom wishbone. Because the lower wishbone is more heavily loaded, this in effect can save weight due to having two joints that can be smaller and therefore also reduces the size of the bolt.

It looks from the layout that, with the position of the steering arm being further away from the front lower wishbone, it induces more castor on lock, this being a slightly different way to lower the front on lock instead of the pushrod linkage.

Interestingly, Red Bull has not adapted the higher outboard top wishbone mounting, which is why the lower

wishbone mounting has been split into two, to take the extra load.

AlphaTauri, which uses the previous year's suspension designs from Red Bull, uses the same multilink upper wishbone that its sister team did last year.

At the rear, Red Bull has retained the raised mounting to improve the overall aero at the back, and has also raised the lower wishbone to bring it in line with the driveshaft. The pullrod is also made shorter, attached to the raised upper wishbone mounting. Another addition to the package is the tiny fin on the engine cover, which seems to be there to send airflow down the car and towards the floor.

RENAULT RS20

JAKE BOXALL-LEGGE AND TIM WRIGHT

Dressed in an all-black testing livery, Renault's new RS20 showcases revised aerodynamics in a bid to atone for a disappointing 2019. Daniel Ricciardo is joined by Esteban Ocon for this year, but can the team make it to the podium with its new line-up?

PHOTOGRAPHY **MOTORSPORT IMAGES**

BODYWORK AND REAR

The sidepods are similar to McLaren's from 2019, as Renault draws inspiration from its customer team. The engine cover, however, hasn't changed a great deal and Renault retains its oval-shaped lead inlet, with further inlets underneath for cooling. The rear wing has changed very little, as the endplates are strongly rooted in the 2019 design. This breaks up the overhanging strakes with cambered connecting points to the rest of the endplate, which should generate a little extra downforce.

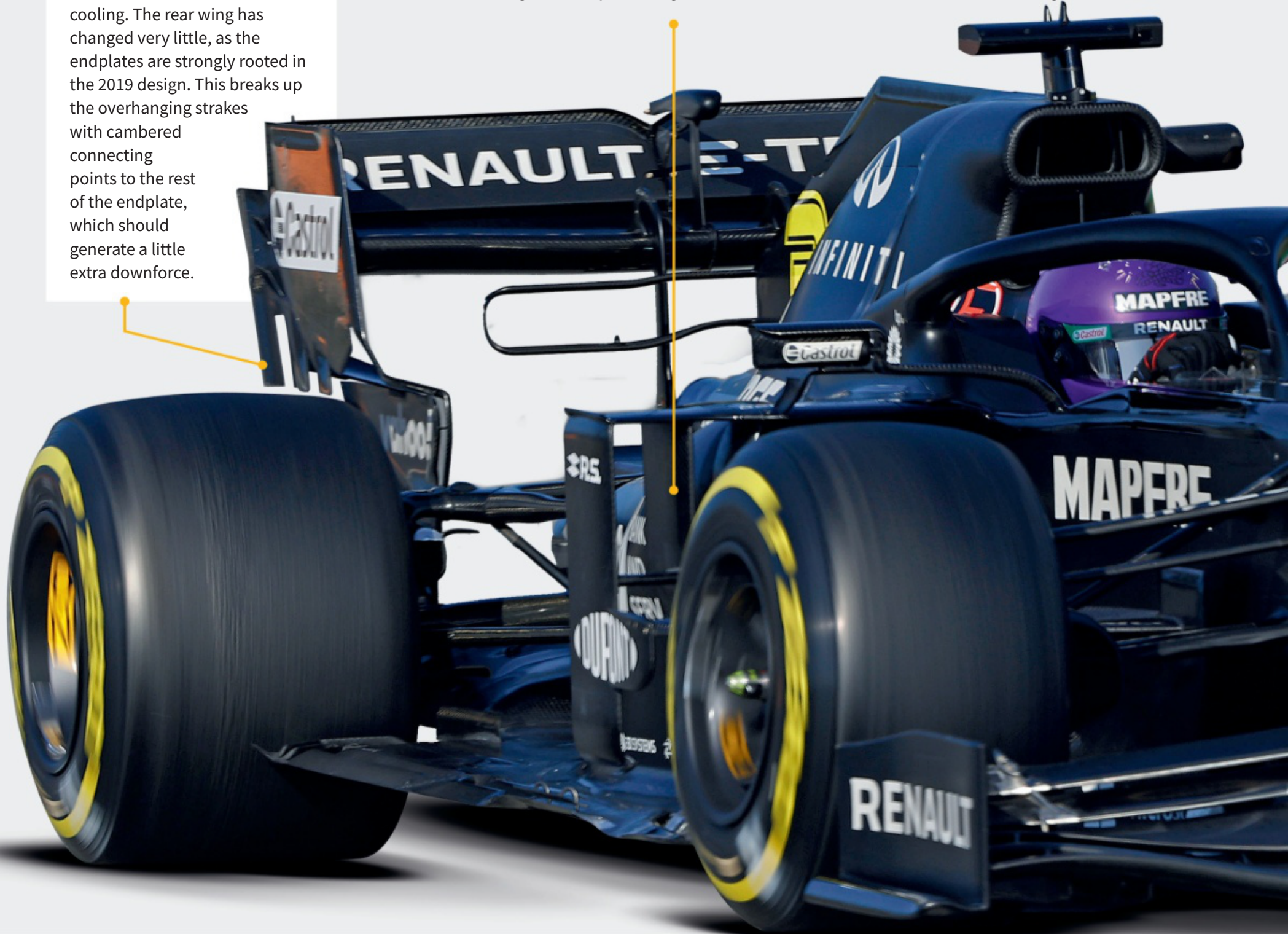
BARGEBOARDS

Renault has overhauled its bargeboard package for 2020, developing a rather unusual style in its bid to control the airflow shed from the front wheels. With a large main bargeboard element, there are also multiple rows of serrations, teeth and cuts to aggressively drive that air outwards and away from the floor. There's also a new boomerang, which connects to the sidepod-mounted turning vanes.

Unlike numerous other teams, Renault's initial turning vane geometry appears to be quite simple. A smaller leading element, just enough to fit the

DuPont logo, links to a larger element that is mounted parallel to a second, more inboard turning vane next to it, with the aim of cleaning up the airflow passing around the sidepod and the floor.

At a detail level, the mirrors are somewhat interesting; although following the trend of shrouded mirror designs that most teams have employed for 2020, the bottom mounting also provides a similar effect, connecting to the mirror via a cambered element to draw airflow into the wake of the mirror to reduce drag.





IS IT AN IMPROVEMENT?

Renault needs its RS20 to conquer all of the ills that beset last year's car. The RS19 was strong on the quicker circuits, but struggled with the low-medium speed courses throughout 2019. Having driven the old car in Abu Dhabi last year, Esteban Ocon's first impressions of the new one were promising.

"The car feels very good to start with," explained Ocon. "It feels well born. It is predictable. I think it's a solid base to start with."

"Sometimes when you step in cars you think, 'Ah, there is an issue' that you're trying to solve for the whole winter, but there isn't any kind of that at the moment. So it feels pretty healthy."

There have been a couple of issues so far with the fit of the bodywork, and Renault has had to cope with that on the fly, sticking down the engine cover with 'aero tape' as it failed to sit flush with the rollhoop. But if the fitting room is the only place where Renault struggles in 2020, it should have a pretty good year.

NOSE/FRONT WING

With a Mercedes-inspired nose, the design tapers in after the attachment point, meaning Renault hasn't had to tinker with the 2019 tub design too much. This opens up more space for a cape to be fitted, managing the airflow down the

centre of the car and also adding more front-end downforce.

The front wing seems to be an evolution of last year's design, with an inboard-loaded wing section and a high-camber outboard section between the endplate and wing-

flap adjuster. There, the final wing flap has a rounder trailing edge with a larger chord length than the other parts in this area. It also features the tunnelled wingtips at the ends to manage the tip vortices ahead of their passage to the bargeboards.



RACING POINT RP20

JAKE BOXALL-LEGGE AND TIM WRIGHT

Racing Point unveiled its RP20 chassis only once the car had pulled out of the garage to conduct its first laps on track. Heavily inspired by Mercedes' car from 2019, Racing Point has gone all-in for this year in a bid to challenge for podiums

PHOTOGRAPHY **MOTORSPORT IMAGES**

IS IT A 'CLONE'?

On the face of it, the RP20 is very heavily influenced by the Mercedes W10, but the team hasn't opted for a symbiotic B-team relationship akin to Haas or AlphaTauri.

"We're limited to gearbox and some of the outboard suspension," explains technical director Andy Green. "All the internal suspension is Racing Point designed, always has been, and obviously all the aerodynamic side and chassis side has to be Racing Point. There is no data transfer there, it's not allowed in the regulations.

"We decided to take a risk and that risk was basically to tear up what we've done in the past few years and start again from scratch, from what we could see Mercedes had been doing. All we've got is what we see, and that's what we've started from.

"It's a big risk. I don't know whether it's going to pay off – we'll have to see – but I don't think what we've done is particularly new as far as taking a team's concept and doing it ourselves."



FRONT END

The front of the car is perhaps the area most inspired by the title-winning Mercedes W10. Although many teams this season have gravitated towards the thinner, tapered noses, Racing Point has smoothed out the tip to ease the transition to the new cape section. Further up, the winglets surrounding the S-duct are also added to the mix, which makes use of a small zone

intended for the nose-to-chassis transition to divert airflow outwards.

The front wing picks up Mercedes' late-season design, with some small personalisations. The footplate has been changed slightly, featuring a smaller tunnel to build a tighter vortex, and it includes a small fin at the trailing edge that directs a little more airflow outboard.

As for the wing itself, Racing Point has drawn on Mercedes' late-season front-wing design, complete with the fourth-element split at the wingtip. By creating that, the aerodynamicists can introduce a little more control into the inboard vortex produced at the tips.



BARGEBOARDS AND SIDEPODS

Further details inspired by the W10 include the deflectors down the flanks of the car, which pick up the airflow emanating from the suspension components and divert it down to the bargeboards. Those bargeboards employ the shortened double-boomerang design developed by Mercedes last year.

Racing Point has also drawn on the late-season turning vanes added by the Silver Arrows for October's Japanese Grand Prix, although Racing Point only has four horizontal slats as opposed to Mercedes' six. The sidepod inlets, meanwhile, are more conventional and don't make use of the letterbox aperture allowed by lowering the crash structure.

Racing Point has opted for a more conventional sidepod inlet



REAR END

Since the Racing Point makes use of the same powertrain as Mercedes, it makes sense for the bodywork at the rear to be the same. The Red Bull-style rear end seen on the RP19 seemed to be incongruous with the Mercedes powerplant, and so the team has abandoned that ethos on the new car. It's as tight as the W10 was, with

a similar shark fin at the rear of the engine cover and similar tapering at the rear, also including the small lumps at the back to give the components inside clearance.

The rear-wing endplates are also like the W10 design seen from July's German Grand Prix onwards, including the vortex generators and square cutouts on the trailing edge.

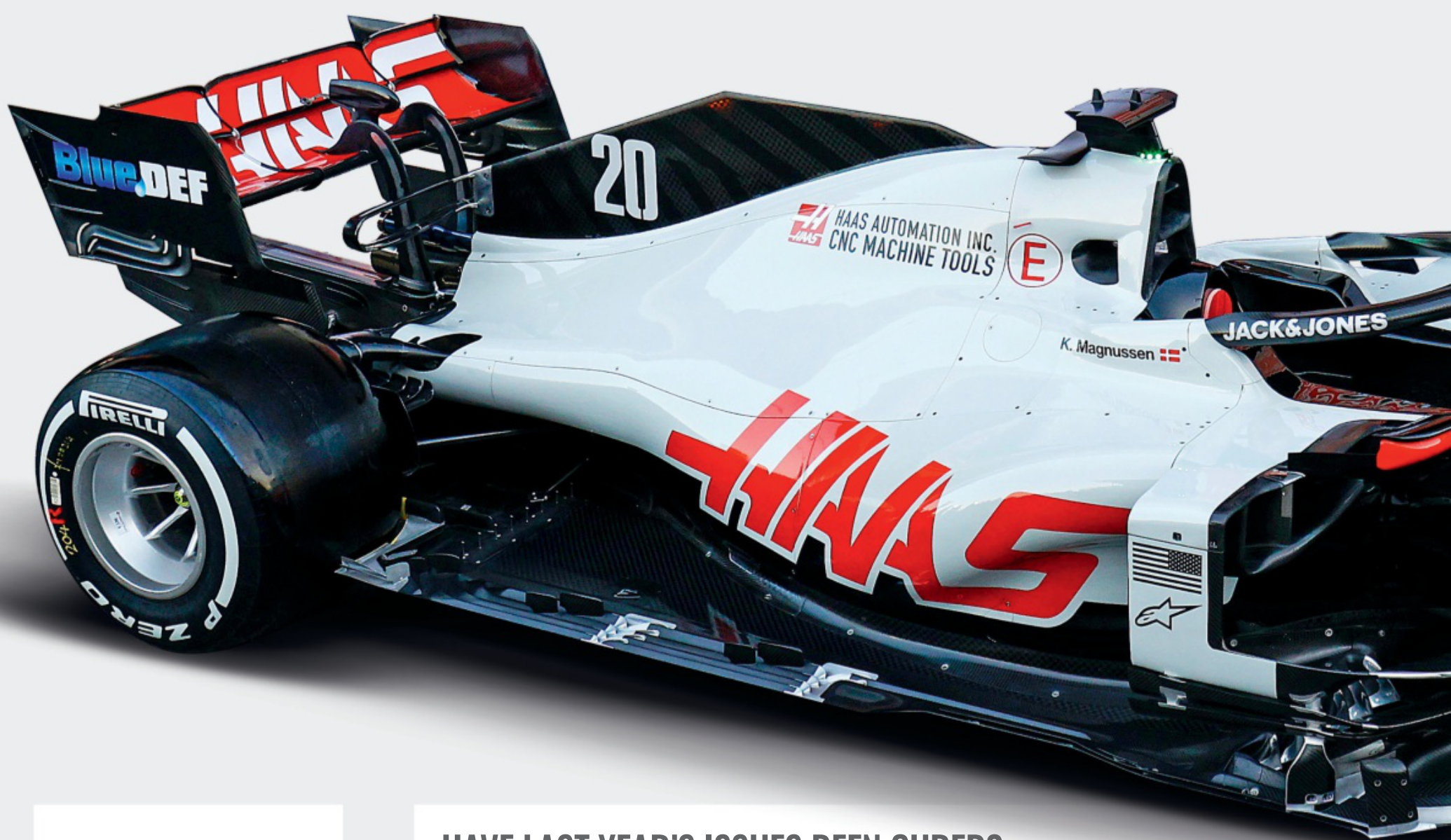


HAAS VF-20

JAKE BOXALL-LEGGE AND TIM WRIGHT

Although Haas had already unveiled its VF-20 through a series of renders, its new car was finally seen in the flesh at 8am last Wednesday in the Barcelona circuit pitlane. A tricky first week and two crashes cut mileage, but the car at least looks quick

PHOTOGRAPHY MOTORSPORT IMAGES



RENDERS: OBSOLETE

One of the key issues with launch renders is that it's only possible to see the details that the team would like you to see. Any innovations or aero tricks are naturally obscured until the latest possible moment, lest other teams start developing their own versions. In Haas's case, there were select areas kept incredibly dark, particularly around the bargeboards. But, thanks to the magic of actual photography, those areas are now exposed.

HAVE LAST YEAR'S ISSUES BEEN CURED?

It's too early to say if the ghost of the problematic VF-19 has been exorcised. This time last year, the car was hailed as looking easy to drive with solid handling characteristics, and only the blips in the reliability of the Ferrari powertrain were

any cause for concern. But the cooler climate masked its inherent aero problems.

Once more, the car looks good in testing, although Romain Grosjean's day-two excursion and Kevin Magnussen's wheel-spacer

issue hampered the team getting further mileage.

"All the systems are working well, the new suspensions are working well also, we're learning to use all the tools that we have, and the car's got some really good strengths and some other places that we need to improve," says Grosjean.

"I'm cautiously confident," adds team principal Gunther Steiner. "Not completely; it's difficult to say – even if we do better and someone else did an even better job, then you're still behind. But I think we learned a lot last year."



SUTTON



MORE DETAILS

Some other details appear to have changed from the renders. Most concern the rear end, where Haas trialled a couple of different T-wing designs throughout the first test week. One of those was seen on the launch car, but the team also tested a single-element design. Different T-wing designs provide the team with different levels of drag and downforce, and the single-element design will also produce a stronger vortex at the tips. By turning those tips downwards, the team can control the placement of the vortices.

The rear wing also has a few minor differences. Instead of the central V-shaped cut-out seen in the renders, Haas has run with two smaller variants at the first and third quarters of the upper element. Usually, the V-shape is used to bleed the wake of the DRS actuator off the pressure surface of the wing, but Haas seems to take a different approach and its CFD simulations presumably suggest that the cut-outs are better placed there.

BARGEBOARDS

One thing that stands out in the bargeboard area is Haas's approach to the 'boomerang' design, which became a trend throughout 2019. Now more stocked with boomerangs than an Australian tourist shop, the VF-20 has three,

bridging the bargeboards and the turning vanes mounted to the sidepod. Those turning vanes are made up of three slats, which twist around and connect to the main bargeboard element – the largest is the upper part, which turns airflow downwards after it passes around a quartet of

serrations. The second and third boomerangs are mounted further down.

There are also a lot of teeth mounted to the bottom, which aggressively turn airflow outwards, along with two further elements that assist the trailing edge of the bargeboards.



Haas trialled different T-wing designs throughout the first test

INSIGHT



Wright and Prost debrief at the San Marino GP during the 1985 title-winning season



INTRODUCING

TIM WRIGHT

Autosport's new technical expert has had a colourful career littered with success in F1 and sportscars over four decades

JAMES NEWBOLD

PHOTOGRAPHY



For someone who “wasn’t bright enough to go to university”, Autosport’s new technical expert Tim Wright has enjoyed a motorsport career that would be the envy of most engineers. From running Alain Prost to back-to-back Formula 1 World Championship titles in 1985 and 1986 to winning the Le Mans 24 Hours as a race engineer at Peugeot in 1992 and working with Ayrton Senna, Michael Schumacher and Fernando Alonso, Wright has been at the heart of the action for the past 40 years and remains involved today engineering in sportscar events around the world.

Since starting out as a draughtsman and working his way up to race engineering, Wright has been in teams with some of the most powerful and significant figures in the sport, including Jean Todt, Ross Brawn and Ron Dennis, had input into legendary machines such as the all-conquering McLaren MP4/4, and seen first-hand the transformations that resulted from the adoption of ground-effect

and the data revolution. There are few better qualified to bring you the best insights into the latest technical developments in F1 and beyond.

Wright, 71, started his career with a four-year apprenticeship with Babcock & Wilcox, a company making nuclear and steam boilers, before moving onto ejector-seat company Martin Baker, where he was bitten by the motorsport bug and started racing Mini Sevens with money inherited from his grandfather.

After a tough first year, where Wright admits he was “pushed around a bit”, he acquired a purpose-built engine from Mini specialist Richard Longman and took a second place at Brands Hatch – “That was the first time my name ever appeared in Autosport” – before an altercation with an earth bank at Mallory Park spelled the end of his short-lived racing career.

“It was quite a big impact,” recalls Wright. “I was newly married and she put her foot down about spending the money to get it repaired!”

He got a draughtsman job at March Engineering in 1974, and was thrown into the deep end working on “everything from Formula 3, Atlantics, Formula 2 and sportscars”.

“During the off-season, I put together assembly drawings of all the different types >>



McLaren initially struggled with ground-effect. Here's Patrick Tambay in M28B at 1979 Monaco GP

of cars and their constituent components, which was rarely done in those days," he says. "At March you tended to size up a couple of bits for a Formula Atlantic from a Formula 3 car, but it had to be that much beefier and more rigid."

His F1 involvement while at March was limited to sorting the suspension on the radical 2-4-0 six-wheeler that never raced, yet for Wright it proved "a really good grounding before I went on to places like McLaren".

F1 became Wright's sole focus when he arrived for his first spell at McLaren in late 1976, as the Teddy Mayer-run team was in the midst of transitioning from the elderly M23 to designer Gordon Coppuck's new M26. Wright recalls Coppuck – who Wright would later team up with again at Spirit – as an "incredible engineer", but concedes that he was "lost" when the ground-effect craze took hold, instigated by unrelated namesake Peter Wright and Colin Chapman at Team Lotus.

"Gordon was struggling with the concept of ground-effect and the one car that really

outlined that was the M28," he says. "The car was far too flexible and it was too long. Considering the amount of downforce the ground-effect was giving, the chassis just couldn't cope with it. Not having the benefit of windtunnels, it was all a bit of a guess."

One podium for John Watson aside, McLaren was in a tailspin, which continued into 1980

and would only be righted when Ron Dennis and John Barnard took the reins the following year. By then Wright had left to follow McLaren's charismatic team manager Alastair Caldwell to the Fittipaldi team, which had former Lotus team manager Peter Warr and future Ferrari technical director Harvey Postlethwaite leading its technical staff.





SUTTON

A young Adrian Newey had also joined the team fresh out of university, while two-time world champion Emerson Fittipaldi and future title winner Keke Rosberg were its capable drivers, but the team never fulfilled its obvious potential and folded after a miserable 1982.

“The biggest problem was that there was no money to spend,” says Wright. “When we designed the last Fittipaldi, the F9, we couldn’t afford to buy a gearbox — Hewland put us on hold because we hadn’t paid the bills, but in the end we got one through Williams!”

Wright then accepted Coppuck’s invitation to join the tiny Spirit team he had co-founded with John Wickham as “a means to an end to stay in F1”. Using an adaptation of Spirit’s successful Formula 2 car, built in the kitchen of a rented house on the outskirts of the Slough trading estate and fitted with a turbocharged Honda engine, the team was up against it from the start. Even the best efforts of a determined Stefan Johansson counted for little, but the experience gave Wright an insight into life

beyond the drawing office for the first time.

A return to McLaren beckoned for 1984, and it was a very different team to the one he’d left. “It wasn’t much bigger, but everything was slicker and much tidier,” recalls Wright. “It was all part of Ron’s OCD. Everything was very clean and clear-cut, and John was meticulous with how we approached the design. There was a lot more optimism about the place.”

McLaren swept the drivers’ and constructors’ titles in 1984, with Niki Lauda pipping Prost by half a point, but by 1985 Prost’s race engineer Alan Jenkins had fallen out of favour with Barnard, and Wright was offered the opportunity of a lifetime. “I knew the rudiments of it all, but John sat me down and talked me through it,” he says. “Bit by bit, and with Steve Nichols [Lauda’s engineer] as well, I started learning. The first race of 1985 was in Brazil, which Alain won!”

Prost won a further four races to easily wrap up his first world title, but 1986 was anything but a cakewalk as the Honda-powered >>

WRIGHT ON

PROST AND SENNA

“It’s difficult to say who was the best. I had huge respect for Alain — he was great fun to be with, he was always winding me up and playing around, whereas Ayrton was much more serious, but could be just such a nice guy. One time with Ayrton we flew out from Heathrow to Japan for a test and he was just like your mate. I always remember we had to rush off after the test to get the train back to Tokyo and two hours later he could tell me exactly what the car was doing at every corner. Entry, mid-corner, exit — it was all still in his head.

“Alain was technically very good because he could feel the car and he knew what he could get out of the tyres at the right time. His tyre management was superior to anyone, whereas Ayrton was just outright speed. If the car stayed with him, he would wring the last little bit out of it, but I think over time he began to understand that there were other things he had to take care of to get through a race. Alain learned a lot from Niki [Lauda], and subsequently Ayrton learned a lot from Alain.

“Alain was never the best at outright speeds and lap records, but as long as he was in the top three or four he would be able to drive a good race. He could be demanding, but it was rewarding because I learned from him and I could make decisions that he respected.”



SUTTON

Williams FW11 — benefiting from the early engine development done by Spirit — was the car to beat. In the absence of a clear pecking order at Williams, Nelson Piquet and Nigel Mansell took vital points off each other and gave Prost a fighting chance, which he ruthlessly took when Mansell suffered his dramatic tyre failure in Adelaide. Wright cites it as the race of his life.

“Those last five or six laps, we didn’t know if he was going to run out of fuel because the Bosch metering system was new, and on their computer readout we were minus,” he recalls. “We thought, ‘Any lap, he’s going to run out of fuel.’ And virtually as he crossed the line, he did. For Alain to come through and win the championship in the last race by a couple of points when it was virtually assured that Mansell was going to win was the best.”

Wright was given McLaren newcomer Johansson for 1987 as a vote of confidence in the Swede, but the ex-Ferrari driver endured a difficult year — not helped by hitting a deer in Austria — and departed at season’s end to make way for Senna.

At Dennis’s behest, Wright spent 1988 and 1989 travelling backwards and forwards to Japan to oversee the development of the new Honda V10 and V12 with future Le Mans ace Emanuele Pirro, who Wright rates as the best test driver he’s worked with. “You needed someone who was reliable, good feedback, someone you could depend on not to do silly things, and get the right information,” says Wright. “That’s what Emanuele gave me.”



Wright also attended occasional races overseeing the spare car, and was on duty in Monaco in 1989 when Senna requested to use it. All the while, he was still on the design team, “helping out with designing bits and pieces as they were needed”.

“It was a non-stop period for two years,” says Wright. “It was incredibly intense, plus travelling to races and so on, but I was still active in the drawing office. By that time, there were a lot more people so we had people designing parts of the car that I didn’t need to be involved in. But having been involved with the dyno testing with Honda, I did a lot of work on the oil tank and the pipework for the V10 — it was quite tricky to get it to breathe properly.”

With Prost heading to Ferrari, Wright was back on the race team for 1990 overseeing new arrival Gerhard Berger. He had to reconfigure the pedals to get the lanky Austrian comfortable in the cockpit, but it made little difference to his prospects and he finished a distant fourth in points. “He was great fun to engineer and he had more outright speed than Stefan, but he never really managed to keep up with Ayrton,” Wright recalls. “The one that stands out for me was Suzuka, when Ayrton took out Alain at the beginning of the race and Gerhard came around in the lead. I told him to be careful at Turn 1 because there would be crap all over the circuit, but for whatever reason he didn’t take any notice and skidded off. He



Berger threw away what could have been victory at Suzuka in 1990

WRIGHT ON

SCHUMACHER

“I did a few tests where I worked directly with Michael when Pat Symonds wasn’t able to go. He wasn’t quite as intense as Ayrton, but very interested in detail, and he wanted to know exactly what he was going to get out of whatever change you were making. He was very intelligent; you could tell that he was different. He was naturally quick.”



SUTTON



Wright ran Peugeot 905 to 1992 Le Mans win and world sportscar title

could have won that race easily.

“Gerhard, as good as he was, was too much of a playboy. You can’t maintain that level of intensity without balancing it with fun, but for me Gerhard took that too far.”

At the 1990 German GP, Wright was propositioned by Rosberg – Prost’s McLaren team-mate in 1986 – to join Peugeot’s nascent World Sportscar attack for 1991. The 905 was the first car built for the new 3.5-litre era of Group C, but the Finn’s early optimism that Todt could replicate the marque’s success from the Group B era of the World Rally Championship was soon replaced by concern.

“He asked me if I would go and help because they needed some direction on engineering the car properly,” says Wright, who quickly had to scrub up on his schoolboy French. “The biggest problem was the car company was dictating what the car should look like and what bits we should be using – it was very messy.”

The chassis was built by aircraft company Dassault, which was more accustomed to hitting safety standards than pushing the boundaries of performance. Wright reasons “it was a traditional French thing, they had to be seen to be doing things their way”, and it meant the chassis was too heavy, the fixings were overcomplicated and it was aerodynamically deficient.

“The gearbox was horrendous – it weighed 80 kilos on its own and it kept breaking,” Wright continues. “Keke said that it had potential, but nobody really knew how to engineer the car.”

Philippe Alliot and Mauro Baldi won the opening round of the 1991 WSC at Suzuka when both Jaguar XJR-14s hit trouble, but the Peugeots were unable to challenge them in the early races and both 905s retired at Le Mans. It wasn’t until Magny-Cours, the sixth round of the season, that team leaders Rosberg and Yannick Dalmas even finished. They won, due to chassis improvements led by Wright and a new gearbox designed by Xtrac’s Mike Endean.

“That was a huge improvement as it was a sequential design that did away with the troublesome long traditional linkage,” says Wright, “and I got guys I knew in the UK to beef up the suspension as well. A lot of the mechanics had been on the rally team before and they were good guys, but the whole design philosophy was being dictated by the car company. We had to say to Todt, ‘Look, I understand this is all political, but if you really want to be successful you’ve got to take some of this stuff away from them.’”

After the disappointment of 1991, Peugeot upped the ante for 1992 and was much better prepared for Le Mans the second time around. Although the withdrawal of >>



SUTTON



Blundell and Dalmas hold Todt aloft, Warwick tries to wrench his arm

TODT AND DENNIS

“I couldn’t say there were many similarities. Todt was very well-connected, so if he wanted to get things done he would pick up the telephone and it would be done. I think Ron was better at arranging deals and getting the money he needed for whatever, whereas Todt was a lot more blunt. They were both very manipulative to get what they wanted, but Ron was a better tactician – he was a lot more persuasive than Todt. I got on well with both of them, but Ron was much more of an ally where Todt was definitely the boss.



Jaguar and Mercedes removed two major impediments to success at the 24 Hours, Peugeot still had the Toyota TSO10 and 1991 winner Mazda to contend with.

Wright was responsible for overseeing the Derek Warwick, Yannick Dalmas and Mark Blundell car, which, aside from a battery failure, enjoyed a clean run to victory, and subsequently the world championship title.

“We were doing 24-hour testing at Paul Ricard all winter, one a month for probably five months,” says Wright. “We took six cars to Le Mans in 1992 because they had three qualifying cars and three race cars. By that time we’d put thousands and thousands of kilometres on the cars, so we knew they were fairly bulletproof. I don’t think 905 was particularly easy to drive, but it was robust, it had a good engine and it used its tyres well.”

The world championship collapsed at the end of 1992, leaving Le Mans as Peugeot’s only major event of 1993. F1 veteran Thierry Boutsen had joined Dalmas and Teo Fabi in Wright’s car for the 24 Hours and, when the Belgian extended the invitation for Wright to join him at Jordan, he “jumped” at the chance to get back to F1. But Boutsen wouldn’t last long, and was replaced by Italians Emanuele Naspetti and Marco Apicella before Eddie Irvine took the hot seat at Suzuka and famously upset Senna by unlapping himself on his F1 debut.

“Ayrton didn’t like that one!” chuckles Wright. “We talked about it later on when I bumped into him at testing and had a bit of a

laugh about it. Ayrton had that side to him – he was obviously very passionate about his racing, but when he was relaxed he was philosophical about things.”

Andre de Cortanze, who had been the technical director of the Peugeot effort, then invited Wright to join him at Sauber for 1994. Wright started the year engineering Karl Wendlinger, but admits he never quite felt comfortable in Hinwil and matters were made worse when the promising Wendlinger was seriously injured at Monaco.

His replacement, Andrea de Cesaris, had previous history with Wright when he had baulked Berger in qualifying for the 1990 Spanish GP. “I was totally incensed so I went

marching off down the pitlane and I virtually picked de Cesaris up and pinned him against the pitwall!” says Wright, who considers working with the erratic Italian in 1994 his penance. “He had no idea how to race, he would complain about everything. Nothing was ever right. He was just a nightmare to work with.

“It was all very unfortunate what happened to Karl. There were these plastic containers in front of the barriers that were supposed to be full of water, but they weren’t so they didn’t act as they should do, which is why the car then tipped and he hit his head on the barrier. That shouldn’t have happened.

“I bumped into Ross Brawn, who I knew from Group C, and he was looking for an engineer to





Wright worked at Renault through its successful period in the 2000s, finally leaving in 2009

WRIGHT ON

ALONSO

“He was phenomenally quick straight out of the box. It was an eye-opener considering we’d had people like Jenson [Button] and [Giancarlo] Fisichella and even Mark Webber. He drove at Barcelona for the first time and was phenomenally quick in a car that wasn’t particularly good. Compared to someone like [Jarno] Trulli or Fisichella, he was head and shoulders above them, and he was very young then.”



run Johnny Herbert, so I joined Benetton.”

There, Wright got to work with Schumacher, Brawn and Rory Byrne – the axis that went on to Ferrari and dominated F1 in the early 2000s. But while Schumacher romped to the 1995 title, Herbert largely struggled and his two wins at Silverstone and Monza both came after his team-mate had been taken out by Damon Hill.

Wright maintains that Herbert was given every chance to make good on the opportunity. “If there were new bits, they went to Michael, but we treated them as equally as we could,” he says. “There were times where he was slightly quicker than Michael, then Michael would ask me what we had done. One time at Barcelona, we found something with the suspension that worked particularly well, Michael asked what we had done and then improved his position. We gave them equal opportunities; Michael was just better.”

Brawn had planned to set up a test team for 1996 prior to his departure for Ferrari, and Wright headed this up while occasionally standing in for Pat Symonds as a race engineer. He remained until 2009, by which time Benetton had become Renault and won back-to-back titles with Alonso in 2005 and 2006.

“We did all the straightline testing and track testing with a completely separate team,” says Wright. “I also took on the role of overseeing reliability, doing a lot of the dyno testing with Renault, running tests with different gearbox configurations and so on. Then in 2008 when they announced that

they would try and cut the amount of money being spent on development, I decided I wanted to get back into race engineering and I’ve been freelance ever since.”

Wright worked for the centrally run, MSV-organised FIA Formula 2 Championship as part of a pool of eight engineers running three drivers per weekend and rotating between them. Building relationships was impossible, by design – akin to how W Series operates today. He then went on to engineer in the football-themed Superleague Formula series, before moving on to De Villota Motorsport in Spanish Formula 3, a spell at Lotus running the Evora at Le Mans with drivers Johnny Mowlem and James Rossiter, then International GT Open with Teo Martin Motorsport, and most recently British GT with Century Motorsport, winning the 2018 GT4 title with its BMW M4.

Wright was a fan of the Superleague cars – “They were good to work with, engines were phenomenal, big old V12s and the chassis was a brick shithouse, it was a really good chassis” – but less so the series organisers and their choice of venues. Ordos in China’s Inner Mongolia region particularly stands out in the memory: “They had two different types of hotel, one was for Europeans and the other for the locals. We couldn’t get into a European one so they put us in the basement of one of their regular hotels, which turned out to be a brothel with guards on the lifts and stairs...”

Whether it’s single-seaters or sportscars, Wright enjoys having a direct relationship with

the driver and says all cars share the same core mechanical principles. “They’ve all got springs and dampers and wishbones,” he says. “It’s just a matter of tuning them to each particular type of car. You don’t need to be looking at computers all the time to get an answer. The driver tells me what the car is doing and I can help them, because I understand how cars work. Yes, it’s useful to have that data and look at split-seconds where you could maybe improve your braking, but ultimately it comes down to an understanding of how the mechanics of a car work. They’re all made the same.”

“The one thing that John Barnard drummed into me was to understand the mechanics involved with making the tyres work correctly. You can expand on that with aerodynamics and so on, but that’s a whole different field. To get a feeling for how a car reacts, it’s just understanding mechanical efficiency.”

DOUBLE MOVES UNITED TO THE TOP

United Autosports overcame the disadvantage of an extra pitstop to comfortably take its second win of the season

GARY WATKINS

PHOTOGRAPHY JEP





The chances of United Autosports following up on its maiden World Endurance Championship LMP2 class victory in Bahrain in December didn't look likely just after the start of the second hour in Austin last weekend. Paul di Resta had just pitted the team's ORECA-

Gibson 07 early with tyre issues and the car was down in eighth place. But, just over four and a half hours later, the machine co-driven by Filipe Albuquerque and Phil Hanson completed an almost comfortable 24-second victory.

A combination of the United trio's speed on a day when its Michelin tyres proved superior to the rival Goodyears and a revised strategy thought up on the hoof allowed the team to overcome the handicap of an extra pitstop caused by early issues. It helped, too, that United's rivals in class each had delays or problems of their own.

Di Resta had jumped into the class lead at the start, but the tyre issues meant he was down in fourth inside 15 minutes. The Scot, back at Austin for the first time since the end of his Formula 1 career, had started on the softer-compound Michelin rubber on which he and Hanson had qualified second.

There was a secondary issue with tyre pressures, which the team only tacitly confirmed, that explained why the car had slipped to seventh by the first driver change. They combined to force di Resta to duck into the pits 20 or so minutes early to bring a premature halt to his troublesome stint.

The United car quickly returned to the lead of the race, though only because it was out of pitstop sequence with its rivals. It bounced up and down the leaderboard until the final hour, when di Resta found himself with a lead of well over a minute. That was enough for him to duck into the pits with around 20 minutes to go and hang on to the top spot despite a quick stall on his way out.

"We made a bit of a miscalculation on something for the first two stints that meant we had to stop 11 laps early to avoid getting a puncture," said di Resta. "Once we resolved that, we were always fighting back. It looked like it would be hard to come back but we were strong at the end."

Albuquerque added: "We were surprised at the pace of some of the others; they were struggling. Hats off to United and its strategy."

The Jota-run, Goodyear-shod Jackie Chan DC Racing ORECA that took second in the hands of Will Stevens, Ho-Pin Tung and Gabriel Aubry didn't have the pace of the race winners. Yet it would have been in a position to benefit from United's late stop but for an early delay of its own: Stevens was tapped into a spin by Giedo van der >>

TF SPORT ASTON MAKES IT THREE IN GTE AM

The British TF Sport Aston Martin squad bounced back from a retirement in Bahrain in December to make it three wins from the past four races in the 2019-20 World Endurance Championship. Charlie Eastwood, Jonny Adam and Salih Yoluc followed up on their Shanghai and Fuji victories with their hardest-fought win yet.

The winning Vantage GTE and the factory-run Aston shared by Darren Turner, Ross Gunn and Paul Dalla Lana were locked together for most of the way at Austin, the TF car having to come from behind twice to seal the victory.

Yoluc lost time during his opening double stint when he had a coming-together with Dalla Lana. Adam got ahead of old team-mate Turner in the fourth hour, and then Eastwood had to do it all over again after being jumped by Gunn in the final round of pitstops.

Gunn was given two new tyres, whereas Eastwood took on four, which explained why TF's advantage of just over four seconds turned into a similar deficit as he came out of the pits. The two Astons were nose to tail a third of the way through the final stint and battled hard for the next third, before Eastwood found a way through and eked out 3.7s before the chequered flag.

"In my first stint, I left the pits 4.5s ahead of Ross and came in with 4.5s, so we were doing the same pace all the way through," said Eastwood. "It's always a sinking feeling when you see the other car drive past while you are still sitting in the pits, but it gave me motivation to push a bit harder."

Third place went to the Project 1 Porsche in which Michelin Le Mans Cup champion Laurents Horr has replaced David Heinemeier Hansson alongside Egidio Perfetti and Matteo Cairoli. Fourth place for AF Corse Ferrari drivers Emmanuel Collard, Nicklas Nielsen and Francois Perrodo was just enough to maintain what had been a joint championship lead (with Project 1) over the TF Sport trio.



"I'M AMAZED HE DIDN'T GET A PENALTY; HE WAS HALF OFF THE TRACK WHEN HE HIT ME"

Garde in the Racing Team Nederland ORECA at Turn 8.

Stevens wasn't best pleased by the move that the team reckoned cost it victory in Texas. "I'm amazed he didn't get a penalty; he was half off the track when he hit me," said the Briton. "Having to fight back through the field really hurt us on my second stint on the tyres."

If United had a clear edge on the Jota car, then the TDS Racing-run RTN entry in which van der Garde was joined as usual by Nyck de Vries and Frits van Eerd had an even more significant advantage over the pair of them on the lap averages.

The all-Dutch crew looked for a while as though they might reprise their Fuji victory, thanks to another stellar performance from de Vries. The Mercedes Formula E driver pulled back a minute on the leaders after taking over from amateur driver van Eerd at the start of his first double stint, but any chance RTN had of scoring its second win of the season had disappeared by the time de Vries clambered back aboard the team's ORECA for the run to the flag.

Van Eerd struggled in his second stint and was haemorrhaging time, so the team called him in early with the result that de Vries would have to make a splash-and-dash fuel stop at the end. He briefly looked as though he might have a sniff of making it back into the podium positions as he closed on Anthony Davidson in the Goodyear-

sponsored ORECA that Jota runs under its own name. That was until he ran out of grip: the Michelins on the right-hand side of the car had done two and a half stints by the end of the race.

Such was the drop-off of pace from the RTN car that de Vries was caught and passed for fourth by Nicolas Lapierre in the Cool Racing ORECA that he and Antonin Borga had put on pole. The Silverstone class winners were as usual compromised by amateur driver Alexandre Coigny's pace.

The tyre problems for RTN allowed Davidson, who shared the second Jota car with Antonio Felix da Costa and Roberto Gonzalez, a relatively stress-free run to the flag in third place, though they ended up a lap down on the sister car. Davidson and da Costa were a match for their professional team-mates, but Aubry had a clear edge over Gonzalez.



Signatech's chances
of retaining title are
slipping away



The fastest LMP2 over the course of the Lone Star Le Mans event in Austin could only finish an unrepresentative sixth. Signatech Alpine, last season's P2 champion team, finally had a competitive car for the first time of the 2019-20 campaign, but Andre Negrao, Pierre Ragues and Thomas Laurent lost out on any chance of a decent result when the right-front brake disc exploded in the second hour.

Ragues was on his second lap out of the pits and had just taken the lead from the RTN ORECA when the failure occurred at the end of the long back straight. The five minutes or so that the car sat in its pit undergoing repairs cost Signatech more than two laps to the class leader and left its drivers no way back.

"This is very disappointing because we have got the pace back," said Ragues. "The guys have worked hard since Bahrain, so we have to focus on the positives. We're off to a good start in 2020."

Signatech's chances to retain its title are looking more difficult by the race and it has now slipped 30 points off the class lead. United's second consecutive victory means that Albuquerque and Hanson now head the championship by four points (di Resta missed Fuji courtesy of a DTM clash so is down in third) from the Chan/DC drivers.

The context of United's rise to the top of the pile makes it all the more impressive. Not only is the team mounting its first full-season WEC campaign, but it made a last-minute switch to the ORECA from the Ligier JSP217.

"We had quite a few issues with the new car that kind of delayed our first victory," said Hanson. "Since we've resolved those issues we have showed our true strength. Hats off to the team." >>

REBELLION'S WIN NOT AS EASY AS IT LOOKS

Rebellion Racing looked as though it had things more or less to itself at the head of the paltry three-car LMP1 field at Austin. But the claim of drivers Bruno Senna, Gustavo Menezes and Norman Nato that it wasn't that easy was supported by Toyota.

The solo Rebellion-Gibson R-13 ended up winning the six-hour race by an ostensibly comfortable 51.5 seconds as the two Toyotas struggled in the face of success handicaps in excess of two seconds per lap. But the second win of the season for the Swiss entrant required some serious fuel saving along the way to avoid a late splash-and-dash stop.

That would have brought the second-placed Toyota TS050 HYBRID shared by Sebastien Buemi, Kazuki Nakajima and Brendon Hartley into the picture. The Japanese manufacturer was pretty sure it would have won had the Rebellion had to make a stop for fuel.

"Through the second half of the race Norman and I were really having to take care on the fuel," said Menezes. "It definitely proved to be much tougher than we expected going into the race."

The Rebellion went 22 laps on its first stint and 23 laps on its second with Senna at the wheel. That would not have been enough to avoid refuelling, which explains why, for a big portion of the race, the gap between the top two stabilised at 25 or so seconds as Menezes and Nato stretched their fuel allocation to at least 24 laps.

Had the Rebellion continued at 23 laps,

then "we were on to win", reckoned Toyota Motorsport GmbH technical director Pascal Vasselon. The Toyotas went longer on the fuel and were quicker in the pits, which kept the #8 TS050 notionally in the race. The Japanese manufacturer was unable to play a strategic card, however, because the race was devoid of safety cars.

The #7 Toyota was nowhere. Championship leaders Mike Conway, Jose Maria Lopez and Kamui Kobayashi were penalised by 2.77s per lap compared with the sister car's 2.21s and the Rebellion's 0.55s, but the real gap between the TS050s was a second over the course of the race.

The effect of the penalties imposed on the TS050s – a reduction in fuel flow and hybrid power – isn't linear, explained Vasselon. The further the car is outside its working window the more they take a toll.

"The linear coefficients are correct with handicaps from zero to 1.5s, but going from 1.5s to nearly 2.8s, we face very high non-linearity because you are outside the working point of the car," he said. "The gap we were expecting between the two cars was one second and we saw that."

That one-second deficit explains why Lopez and his team-mates were two laps down in third at the end of the race despite outqualifying their team-mates. That came from Hartley losing his quickest lap to a track-limits infringement and not being able to recharge the car's battery before needing to set a time in a session that had been interrupted by a red flag.





Thiim and Sorensen
took pole and led all
but six laps of race

ASTON MARTIN TIGHTENS ITS GRIP ON GTE PRO

Nicki Thiim and Marco Sorensen led all but six laps in Austin, and were behind only during the first three cycles of pitstops. So it's hard to argue that the Aston Martin duo didn't dominate in GTE Pro, even though the margin of victory was a scant four and a bit seconds.

The Circuit of The Americas has always been a home from home for the British manufacturer in the WEC, and the latest Vantage GTE proved well suited to the track thanks to its high downforce levels and the proliferation of quick corners. Pole position, a first for the car introduced at the start of 2018-19, fastest lap and victory number three of the current campaign were the result.

Yet Thiim still had to fight off a late challenge from the Porsche 911 RSR shared by Michael Christensen and Kevin Estre to seal the win. Christensen, who drove two doubles to the pair

of singles for his flu-ridden team-mate, reduced the deficit to the leader over the course of the penultimate hour and then forwent tyres when he made his final pitstop.

That jumped him from nine seconds behind to just four. The Porsche did make inroads into the Aston's advantage, a tenth here and a tenth there, though it never came down to much less than three and a half seconds.

"I don't know what's going on at the moment," said Thiim. "It's turning into a really good season where everything is working out fine. The car suits this track really well, and we're looking really good right now."

Sorensen reckoned the victory "was harder than it looked". It would have been harder still had the Porsche not lost time early in hour two. Christensen took over from Estre, but with the

seconds lost taking on new Michelins, the car ended up in among the GTE Ams and then bottled up behind James Calado's AF Corse Ferrari 488 GTE.

"That definitely hurt us," said the Dane. "I had to push quite hard and that cost time during the second half of my stint because I'd worked the tyres quite hard."

But Christensen was in no way claiming that this was a race that Porsche somehow lost: "I had the feeling they were playing with us a little bit at the end. Every time I got a little bit closer, he pulled away again. It looked easy for them."

Ferrari didn't have an easy day in Austin, though Calado and Alessandro Pier Guidi once again salvaged a decent result from a race that didn't appear to be going their way for long periods. Both AF cars were afflicted by an understeer problem that stymied their performance.

"The car was awesome in qualifying, but there was a massive balance shift between yesterday and today," explained Calado. "The understeer was severe, so we need to look at what happened."

Calado was able to sneak onto the podium in the closing stages when he nipped past Alex Lynn in the second of the Aston Martins. Lynn and co-driver Maxime Martin conceded that they rarely had the pace of the sister car last weekend.

The solo Chevrolet Corvette C8.R, making the first of two WEC appearances ahead of the Le Mans 24 Hours, ended up three laps down in sixth in the hands of Jan Magnussen and Mike Rockenfeller. They were never on the pace in a car that was running what can only be called a conservative Balance of Performance: the new 'Vette's engine air-restrictor was 6% smaller than the one it ran on its debut in last month's Daytona 24 Hours. ❧



Both AF Corse Ferraris
struggled with
understeer problem

RESULTS WORLD ENDURANCE CHAMPIONSHIP, ROUND 5/8, AUSTIN (USA), 23 FEBRUARY (189 LAPS – 647.442 MILES)

POS	DRIVERS	TEAM	CAR	CLASS	TIME
1	Bruno Senna (BRA) Gustavo Menezes (USA) Norman Nato (FRA)	Rebellion Racing	Rebellion-Gibson R-13	LMP1	6h01m37.705s
2	Sebastien Buemi (CHE) Kazuki Nakajima (JPN) Brendon Hartley (NZL)	Toyota Gazoo Racing	Toyota TS050 HYBRID	LMP1	+51.524s
3	Jose Maria Lopez (ARG) Mike Conway (GBR) Kamui Kobayashi (JPN)	Toyota Gazoo Racing	Toyota TS050 HYBRID	LMP1	-2 laps
4	Paul di Resta (GBR) Phil Hanson (GBR) Filipe Albuquerque (PRT)	United Autosports	ORECA-Gibson 07	LMP2	-7 laps
5	Will Stevens (GBR) Ho-Pin Tung (NLD) Gabriel Aubry (FRA)	Jackie Chan DC Racing (Jota)	ORECA-Gibson 07	LMP2	-7 laps
6	Anthony Davidson (GBR) Roberto Gonzalez (MEX) Antonio Felix da Costa (PRT)	Jota Sport	ORECA-Gibson 07	LMP2	-8 laps
7	Nicolas Lapierre (FRA) Antonin Borga (CHE) Alexandre Coigny (CHE)	Cool Racing	ORECA-Gibson 07	LMP2	-8 laps
8	Giedo van der Garde (NLD) Frits van Eerd (NLD) Nyck de Vries (NLD)	Racing Team Nederland (TDS)	ORECA-Gibson 07	LMP2	-8 laps
9	Andre Negrao (BRA) Thomas Laurent (FRA) Pierre Ragues (FRA)	Signatech Alpine Elf	ORECA-Gibson 07	LMP2	-9 laps
10	Kenta Yamashita (JPN) Mark Patterson (USA) Anders Fjordbach (DNK)	High Class Racing	ORECA-Gibson 07	LMP2	-10 laps
11	Roberto Lacorte (ITA) Andrea Belicchi (ITA) Giorgio Sernagiotto (ITA)	Cetilar Racing	Dallara-Gibson P217	LMP2	-11 laps
12	Ben Hanley (GBR) Henrik Hedman (SWE) Colin Braun (USA)	DragonSpeed	ORECA-Gibson 07	LMP2	-12 laps
13	Nicki Thiim (DNK) Marco Sorensen (DNK)	Aston Martin Racing (Prodrive)	Aston Martin Vantage GTE	GTE Pro	-16 laps
14	Kevin Estre (FRA) Michael Christensen (DNK)	Porsche GT Team (Manthey)	Porsche 911 RSR	GTE Pro	-17 laps
15	James Calado (GBR) Alessandro Pier Guidi (ITA)	AF Corse	Ferrari 488 GTE Evo	GTE Pro	-17 laps
16	Alex Lynn (GBR) Maxime Martin (BEL)	Aston Martin Racing (Prodrive)	Aston Martin Vantage GTE	GTE Pro	-17 laps
17	Davide Rigon (ITA) Miguel Molina (ESP)	AF Corse	Ferrari 488 GTE Evo	GTE Pro	-17 laps
18	Jan Magnussen (DNK) Mike Rockenfeller (DEU)	Corvette Racing (Pratt & Miller)	Chevrolet Corvette C8.R	GTE Pro	-19 laps
19	Salih Yoluc (TUR) Charlie Eastwood (GBR) Jonny Adam (GBR)	TF Sport	Aston Martin Vantage GTE	GTE Am	-19 laps
20	Paul Dalla Lana (CAN) Darren Turner (GBR) Ross Gunn (GBR)	Aston Martin Racing (Prodrive)	Aston Martin Vantage GTE	GTE Am	-19 laps
21	Richard Lietz (AUT) Gianmaria Bruni (ITA)	Porsche GT Team (Manthey)	Porsche 911 RSR	GTE Pro	-19 laps
22	Egidio Perfetti (NOR) Laurents Horr (DEU) Matteo Cairolì (ITA)	Team Project 1	Porsche 911 RSR	GTE Am	-19 laps
23	Francois Perrodo (FRA) Emmanuel Collard (FRA) Nicklas Nielsen (DNK)	AF Corse	Ferrari 488 GTE Evo	GTE Am	-19 laps
24	Christian Ried (DEU) Riccardo Pera (ITA) Matt Campbell (AUS)	Dempsey-Proton Racing	Porsche 911 RSR	GTE Am	-20 laps
25	Michael Wainwright (GBR) Andrew Watson (GBR) Ben Barker (GBR)	Gulf Racing	Porsche 911 RSR	GTE Am	-20 laps
26	Thomas Flohr (CHE) Francesco Castellacci (ITA) Giancarlo Fisichella (ITA)	AF Corse	Ferrari 488 GTE Evo	GTE Am	-21 laps
27	Bonamy Grimes (GBR) Johnny Mowlem (GBR) Charlie Hollings (GBR)	Red River Sport (AF)	Ferrari 488 GTE Evo	GTE Am	-21 laps
28	Bret Curtis (USA) Adrien de Leener (BEL) Thomas Preining (AUT)	Dempsey-Proton Racing	Porsche 911 RSR	GTE Am	-21 laps
29	Motoaki Ishikawa (JPN) Olivier Beretta (MCO) Kei Cozzolino (JPN)	MR Racing (AF)	Ferrari 488 GTE Evo	GTE Am	-21 laps
30	Ben Keating (USA) Felipe Fraga (BRA) Jeroen Bleekemolen (NLD)	Team Project 1	Porsche 911 RSR	GTE Am	-29 laps

Winners' average speed 107.421mph. **Fastest lap** Nato 1m49.503s, 112.620mph.

LMP2 de Vries 1m52.545s, 109.575mph. **GTE Pro** Thiim 2m02.522s, 100.653mph. **GTE Am** Campbell 2m03.508s, 99.849mph.

QUALIFYING

1 Nato/Menezes 1m47.530s; **2** Lopez/Conway 1m49.161s (right); **3** Nakajima/Hartley 1m49.431s; **4** Lapierre/Borga 1m49.910s; **5** Albuquerque/Hanson 1m50.073s; **6** Laurent/Ragues 1m50.984s; **7** Aubry/Stevens 1m51.354s; **8** Davidson/Gonzalez 1m51.592s; **9** Yamashita/Fjordbach 1m51.747s; **10** Hanley/Hedman 1m52.765s; **11** de Vries/van Eerd 1m53.131s; **12** Sernagiotto/Lacorte 1m54.305s; **13** Thiim/Sorensen 2m00.733s; **14** Este/Christensen 2m00.952s; **15** Lynn/Martin 2m01.029s; **16** Calado/Pier Guidi 2m01.031s; **17** Bruni/Lietz 2m01.049s; **18** Rigon/Molina 2m01.229s; **19** Cairolì/

Perfetti 2m02.784s; **20** Gunn/Dalla Lana 2m02.830s; **21** Eastwood/Yoluc 2m02.909s; **22** Rockenfeller/Magnussen 2m02.967s; **23** Campbell/Ried 2m03.110s; **24** Nielsen/Perrodo 2m03.376s; **25** Fraga/Keating 2m03.450s; **26** Fisichella/Flohr 2m03.462s; **27** Preining/Curtis 2m03.682s; **28** Cozzolino/Ishikawa 2m03.781s; **29** Mowlem/Grimes 2m03.964s; **30** Barker/Wainwright 2m04.296s.

Fastest in each clas

LMP1 Nato 1m47.387s
LMP2 de Vries 1m48.695s
GTE Pro Thiim 2m00.725s
GTE Am Gunn 2m01.281s.

CHAMPIONSHIP

LMP drivers

1 Lopez/Kobayashi/Conway **112**;
2 Hartley/Nakajima/Buemi 107;
3 Senna/Menezes/Nato 93; **4** Aubry/Tung/Stevens 44; **5** Albuquerque/Hanson 42; **6** da Costa/Gonzalez 35.

LMP1 manufacturers

1 Toyota Gazoo Racing **126**; **2** Rebellion Racing 93; **3** Team LNT 29.

LMP2 drivers

1 Albuquerque/Hanson 94; **2** Aubry/Tung/Stevens 90; **3** di Resta 79;
4 da Costa/Gonzalez 77.

GTE drivers

1 Sorensen/Thiim **109**; **2** Pier Guidi/



Calado 83; **3** Este/Christensen 82;
4 Lynn/Martin 77; **5** Bruni/Lietz 69;
6 Rigon/Molina 55.

GTE manufacturers

1 Aston Martin **186**; **2** Porsche 154;
3 Ferrari 146.

GTE Am drivers

1 Collard/Perrodo/Nielsen **85**;
2 Eastwood/Adam/Yoluc 83;
3 Turner/Dalla Lana/Gunn 78.5;
4 Keating/Bleekemolen 73.5.

Whincup leads from Reynolds on way to victory in first race of weekend



Winning Whincup initiates Holden send-off

AUSTRALIAN SUPERCARS
ADELAIDE (AUS)
22-23 FEBRUARY
ROUND 1/14

It could so easily have been a Triple Eight Holden clean sweep in Adelaide, but a healthy dose of Sunday drama handed an early points lead to Ford's reigning champion Scott McLaughlin instead.

On the Saturday it was a tame, albeit intriguing, start to the season. Jamie Whincup led the first stint from pole in his Triple Eight Holden, but found himself sitting behind McLaughlin after the opening round of stops. That was thanks to some sharp strategic work from DJR Team Penske, which plucked seventh-placed McLaughlin out of a train of cars on lap seven, much earlier than most of the frontrunners, to create a significant undercut.

Whincup did, however, hold a fuel advantage thanks to a longer first pitstop. After shadowing McLaughlin through the

second stint he reclaimed the lead after the second stops. From there he could cruise to victory – just days after the announcement of Holden's impending demise, and hours after his own confirmation that he won't retire at the end of this season.

"I've got to dedicate this one to Holden – it's been a bloody tough week for everyone involved and it's great to get a win," said the seven-time series champion. "We got smoked by the other brand here last year, so it's nice to bounce back."

Shane van Gisbergen did his best to make it a factory Holden 1-2, spending the final stint parked under McLaughlin's rear wing. He couldn't find a way past, though, as McLaughlin split the pair at the finish.

The two Kiwis resumed their tussle on Sunday after locking out the front row, van Gisbergen on pole with McLaughlin alongside. McLaughlin got the jump at the start, leading until a lap 13 safety car sparked the first round of stops. They pitted together, slick work from Triple

Eight getting van Gisbergen back out ahead.

From there it should have been a straightforward win, the Holden driver showing he had the pace as he stretched his advantage to more than five seconds. But his race unravelled during his second stop when the refueller detached before van Gisbergen's car had taken on the required minimum fuel drop. That meant a third trip to the pits with 10 laps to go, which dropped him back to fourth, right behind Cam Waters's Tickford Racing Mustang.

With fresh rubber, a podium still seemed likely for van Gisbergen, only for a suspension issue to take him out of the race for good. Having battled a broken front anti-roll bar for most of the race, a lower control arm finally gave up under the strain with four laps to go.

As McLaughlin took victory, van Gisbergen was left to rue not only the fuel blunder and suspension failure, but a poor choice of lift back to the pits on the cool-down lap. To the delight of the internet, the Red Bull-backed works Holden driver climbed into Waters's Monster-sponsored Mustang.

Chaz Mostert, meanwhile, took a sensational second place to round out his debut weekend as a Walkinshaw Andretti United Holden driver. The key was a long stop after his first stint, which allowed him to leapfrog much of the top 10 later in the race. His former Tickford team-mate Waters rounded out Sunday's podium.

ANDREW VAN LEEUWEN



A Sunday victory boosted
 McLaughlin into points lead

KLYNSMITH
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 IMAGES

Logano dealt lucky hand in cut-short clash

NASCAR CUP
LAS VEGAS (USA)
23 FEBRUARY
ROUND 2/36

Joey Logano bagged his 24th NASCAR Cup victory at Las Vegas after a crash on the final tour cut short a two-lap sprint finish.

A spin for Ross Chastain six laps before the chequered flag prompted a late caution period, during which all but seven cars came into the pits for fresh tyres for the dash to the flag. As the race resumed with two tours to go, that left Logano leading William Byron, Ricky Stenhouse Jr and Matt DiBenedetto in the pack that had stayed out.

As Logano took the white flag to start the final lap, a few cars in the tight pack behind were caught out of shape, triggering a multi-car crash that sent many spinning or forced them out wide to avoid the incident.

Another caution was thrown and, as Logano's Team Penske Ford had already



started the final lap, the race ended under neutralised conditions.

DiBenedetto had made a strong restart to finish second ahead of Stenhouse, Austin Dillon, Jimmie Johnson, Bubba Wallace, Brad Keselowski and Kevin Harvick.

Chase Elliott was the quickest in the first half of the race, winning the first two stages, but a puncture midway through the final stage dropped him down the order.

Martin Truex Jr, who had been battling Elliott in the first two stages, had similar luck during the final part of the race. The

Joe Gibbs Racing Toyota driver was forced to pit at the start of the final stage due to loose wheel lugs. As he began his recovery, he suffered a flat tyre and fell backwards.

That typified a difficult race for the Gibbs crew. Kyle Busch was set to start on pole after rain cancelled qualifying, with team-mate Denny Hamlin in fourth, but both were sent to the back of the grid due to unapproved bodywork changes. Busch briefly ran inside the top 10, but ultimately fell back to 15th.

BETHONIE WARING

It's Alders as Doohan tyres fail

ASIAN FORMULA 3
BURIRAM (THA)
22-23 FEBRUARY
ROUND 5/5

Red Bull Junior Jack Doohan's last-gasp charge for the title was scuppered by not one, but two late-race punctures just when it seemed that he had season-long points leader Joey Alders on the ropes.

Alders benefited to win the opener when Doohan's right-rear tyre cried enough on the final lap with the Australian's Pinnacle Motorsport car



miles in front. When the same thing struck leader Doohan in the closing stages of race two, Ukyo Sasahara sailed past to win, with third place for Dutchman Alders wrapping up the title for the BlackArts Racing man. Hitech GP driver Sasahara won again in the finale, from Doohan.

Key to Alders's first-race win was a scintillating opening lap, in which he rose from fifth on the grid to second. He could do nothing about Doohan until the late drama. Nikita Mazepin held off Jamie Chadwick for second on the road, but a penalty for a collision earlier in the race relegated the Russian to fifth, behind Chadwick, Pietro Fittipaldi and impressive series debutant Mikhail Belov.

In race two, Fittipaldi beat Chadwick to second behind Sasahara, but a track-limits penalty dropped the Brazilian to fourth behind Chadwick and Alders.

Behind Sasahara and Doohan, Chadwick was third in the finale from Mazepin, but again Mazepin was given a penalty for a collision, moving Belov up to fourth.

Again there were makeweights, three of the 16-car field starting the opener from the pitlane, retiring early and never seen again — significant when a series needs 16 to start the opening race at each round for full FIA F1 superlicence points.

WEEKEND WINNERS

AUSTRALIAN SUPERCARS
ADELAIDE (AUS)

Race 1 Jamie Whincup
Triple Eight (Holden Commodore ZB)
Race 2 Scott McLaughlin
DJR Team Penske (Ford Mustang)

NASCAR CUP
LAS VEGAS (USA)
Joey Logano
Team Penske (Ford Mustang)

NASCAR XFINITY SERIES
LAS VEGAS (USA)
Chase Briscoe
Stewart-Haas Racing (Ford Mustang)

NASCAR TRUCK SERIES
LAS VEGAS (USA)
Kyle Busch
Kyle Busch Motorsports (Toyota Tundra)

ASIAN FORMULA 3
BURIRAM (THA)
Race 1 Joey Alders
BlackArts Racing
Race 2 Ukyo Sasahara
Hitech GP
Race 3 Ukyo Sasahara
Hitech GP


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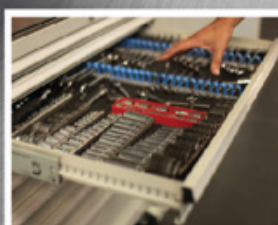
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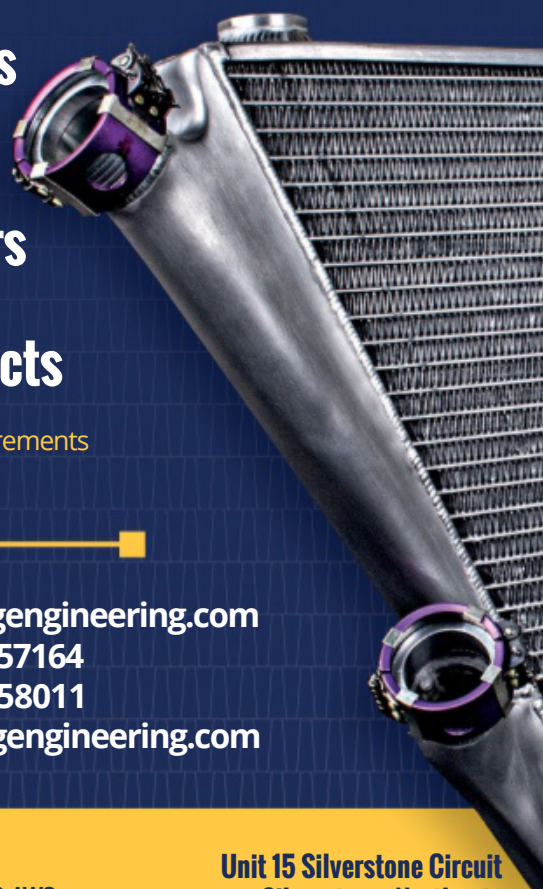
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Spanish GP race winner will tackle Monaco Historique in Maserati 4CM



JEP/MOTORSPORT IMAGES

MALDONADO TO RACE PRE-WAR MASERATI IN MONACO

HISTORICS

Grand prix winners Pastor Maldonado and Rene Arnoux are among five ex-Formula 1 drivers on the entry list released this week for the Automobile Club de Monaco's 12th GP Historique event on 8-10 May.

The nomination of Venezuelan Maldonado, 34 – who won the 2012 Spanish GP in a Williams-Renault FW34 – in Rolando del Bello's 1937 Maserati 4CM has caused intrigue among Pre-War single-seater regulars.

"He might be quick," said US-domiciled Briton Mark Gillies, among nine ERA drivers in the renamed Louis Chiron contest, which has attracted competitors from 11 nations.

Frenchman Arnoux, 71, winner of seven GPs for Renault and Ferrari, bested at third on the principality's streets with the latter in 1984. A familiar face at historic events including Goodwood, Arnoux will pilot one of Methusalem Racing's 1974-spec Ferrari 312 B3s in the Niki Lauda '73-'76 grid, the

middle of three races for three-litre F1 cars.

Monaco-based Alex Caffi, 55, whose best F1 result was fourth at Monaco in 1989 aboard a Scuderia Italia Dallara-Cosworth, will be among Arnoux's rivals, in an Ensign N176 prepared by Swiss F1 cameo player Loris Kessel's team.

Giovanni Lavaggi, 62, who contested F1 races for Minardi and Pacific, joins Arnoux at Methusalem in a sister Ferrari. Swiss Jean-Denis Deletraz, 56, who also appeared briefly in the mid-1990s for Larrousse and Pacific, saddles an ATS D4 for Frederic Fatien's GP Extreme squad in the Gilles Villeneuve '77-'80 set.

Favourites in the youngest showcase include previous winner Michael Lyons (Hesketh 308E) and FIA Masters Historic F1 champion Matteo Ferrer-Aza (Ligier JS11/15). The Juan Manuel Fangio '50s race entry features five Lotus 16s, and Colin Chapman's marque also stars in the Graham Hill 1500cc F1 race in which Andy Middlehurst (25) will again take some beating.

MARCUS PYE



Arnoux and Lavaggi will race Ferrari 312 B3s

SUTTON

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Speedworks confirms British GT4 entry

BRITISH GT

British Touring Car Championship squad Speedworks Motorsport will expand into British GT this year, running a factory-supported Toyota GR Supra GT4.

The GT4 programme will build on the squad's relationship with the Japanese manufacturer, having secured works backing for its BTCC team last year when it started running a Toyota Corolla.

Speedworks BTCC racer Tom Ingram tested the brand-new Supra at the end of last year and the team has now decided to return to British GT for the first time since 2012.

The Supra will be driven by Sam Smelt – who made his GT debut in a Ford Mustang GT4 last season –



and Ginetta GT4 Supercup graduate James Kell.

Speedworks boss Christian Dick expects to take delivery of the car in the second week of March, allowing for a few weeks of testing before the first round.

The team will have one of the first six cars to be produced, and Dick explained that the relationship with

Toyota Motorsport GmbH will allow Speedworks to benefit from data from the other cars.

“One of the things that’s really important for TMG and ourselves and the drivers is we can piggy back on as much of their [TMG’s] testing experience as they have got with the car to hit the ground running,” he said.

“It’s really exciting times – Tom Ingram drove the car for us and was full of praise of the car.

“One of the big things we learned with the BTCC programme is it’s about evolution not revolution. It’s not where we start the year, it’s where we finish. Wherever the starting point is, we need to make sure we make steady progress and improve throughout the year.”

TMG’s Florian von Hasselbach added: “There was large customer demand for this car so the process of selecting teams wasn’t easy. Thanks to Speedworks’ BTCC programme with Toyota, we know how professional and dedicated they are, so we are convinced they will be able to show the potential of the GR Supra GT4 at tracks across the country.”

STEPHEN LICKORISH

Bahraini squad to run GT3 McLarens

BRITISH GT

British GT race winner Dean Macdonald will step up from the GT4 class to the new 2 Seas Motorsport squad in one of two McLaren 720S GT3s it will enter in the Silver class of this year’s British GT Championship.

Team co-owner Isa Al-Khalifa, 20, whose father Abdullah is the chairman of the Bahrain Motor Federation and second son of the King of Bahrain, will graduate from the Porsche GT3 Challenge Middle East to drive one car with a yet-to-be-confirmed team-mate, while 19-year-olds Macdonald and Angus Fender share the other.

Macdonald finished third in the GT4 standings last year in an HHC Motorsport McLaren 570S, while Fender took two podium finishes in as many GT3 appearances at the end of last year in Century Motorsport’s BMW M6.

The team, which will be run by Nick Cristofaro, has hired former HHC engineer Mark Chittenden as team manager and



experienced engineer Xavi Ramon Torrijos, with Macdonald citing its key hires as integral to his decision to sign.

The Scot says he expects the team to be capable of springing a surprise. “It’s a new team but the people that are in the team aren’t new to the paddock,” he said. “I know how good the guys are at their jobs and it makes me really confident about joining the team.

“I think we’ll be a strong partnership.

Obviously Angus proved himself at the end of the year in GT3 and hopefully I can be just as fast as him. With the engineers and everybody in the team, I think we’ll be very competitive.”

Meanwhile, HHC has announced its first GT4 driver pairing, with 750MC RGB Sports 1000 champion Chris Wesemael joining Ginetta GT5 Challenge graduate Gus Bowers.

JAMES NEWBOLD

Porsche return for Ginetta

Junior squad TCR

PORSCHE SPRINT CHALLENGE

Ginetta Junior squad Total Control Racing is the latest team to reveal plans to race in the new Porsche Sprint Challenge GB series this season.

The category, which features the Porsche 718 Cayman GT4 Clubsport and includes races on both the British Touring Car Championship and British GT support bills, has already attracted a diverse range of teams and drivers, TCR being the latest.

TCR has achieved success in a variety of BTCC support series and has previous history with Porsche after running Jason Templeman to third in the standings in the inaugural Carrera Cup GB season in 2003.

It will now run Ginetta Junior graduate Theo Edgerton in the Sprint Challenge and aims to field a second car.

"We've always enjoyed being with Porsche as we've been with them in the past," said team boss Lee Brookes. "We had the opportunity with a customer that was looking at Porsche and he bought a car and we agreed we would run it for him.

"Testing's gone well – the car's been faultless, as you would expect with Porsche."

Edgerton (above) has also tested a British Formula 4 car with Arden but opted for the Porsche series, which features six events.

"I decided [to go with] Porsche as it's a well-known brand and the schedule for this year helps me race around my GCSEs and will hopefully help me reach my target of BTCC or British GT," he said.

A number of other teams and drivers have already signed up to the Sprint Challenge including Carrera Cup squads Valluga Racing – running Britcar racer Ian Humphris and Club Enduro driver Carl Cavers – and In2 Racing, which will run historics competitor Ambrogio Perfetti. Another historics regular, Pete Chambers, will compete for

Mike and Andrew Jordan's JRT team.

Porsche GB assistant motorsport manager Ian Fletcher has been encouraged by the interest shown in the series so far.

"For a first-year championship, we're looking like [entries in the] high teens and we're confident we will get there – there's still plenty of time for drivers to test and speak to teams as the Sprint Challenge doesn't start until the end of April," he said.

"Carrera Cup cars can be intimidating for people, but the Cayman is not. We've got Pro drivers that see motorsport as a career path for them and there are in the Am class that are successful gentleman drivers and have aspired to race a Porsche. We're really looking forward to it."

STEPHEN LICKORISH & PETER SCHERER



WALKER

Salkeld graduates to GT4 Supercup with Assetto

GINETTA GT4 SUPERCUP

Reigning Ginetta G40 Cup champion Chris Salkeld will graduate to the Ginetta GT4 Supercup this season, while regular Supercup frontrunner Tom Hibbert will again race in the series.

Salkeld secured the G40 title in dramatic fashion by passing title rival Rob Keogh on the final lap of the Donington Park finale, and he will remain with Assetto Motorsport for his step up.

"After everything the team did for me last year, it was a



WALKER

no-brainer for me to stay with them to make the step up to the GT4 Supercup," said Salkeld (above), who will race in the Pro-Am class. "It's a big step up for

me this year, but one that I'm really excited about making.

"We're looking firmly at 2020 as a development year, with a new championship, new car and

a new style of racing to learn."

Salkeld's fellow G40 Cup race winner Daniel Morris will also progress to the GT4 Supercup and will race for the Triple M Motorsport squad.

Meanwhile, Hibbert – who finished third in the standings last year – will contest another season with Triple M.

"I'm going to leave no stone unturned this year in an all-out effort to win the overall championship," he said. "It's looking like a very competitive year and I know I'll have to work hard to stay at the front."

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Lanan Racing will run
three cars in British F3



Lanan completes its British F3 line-up with F1000 winner Prior

BRITISH F3

Piers Prior has completed Lanan Racing's line-up for the upcoming BRDC British Formula 3 Championship campaign.

The 22-year-old will compete in his first full season of car racing, having only raced a single-seater on one previous occasion.

That was in F1000 machinery at Silverstone last year, where he came through from the back of the grid to take victory in mixed conditions. Previously, he made one-off outings in the Mini Challenge and MG Cup.

Prior will join British F3 race winner Josh Mason and British F4 graduate Bart Horsten (pictured above) at Lanan.

"I've wanted to race in British F3 since I've been old enough, just getting the budget is very difficult and I can't quite believe it's happening," said Prior.

"There's lots of drivers who have got more experience in single-seaters in general and in the series. Having experienced team-mates will be really helpful. I believe I've got the abilities and skill to get up there.

"At the start of the season, I will be learning and trying to wring as much speed as I can out of the car, but I want to be challenging for trophies by the middle and end of the season, I just need to get the experience."

STEFAN MACKLEY

AFM and Orton join forces in Fiestas

FIESTA JUNIOR

Ginetta Junior squad Alastair Rushforth Motorsport will expand into the Fiesta Junior series this year.

The team will run karting graduate Will Orton in the Fiesta category, which is set to feature significantly larger grids this season after an investment in the series by the organising British Racing & Sports Car Club has encouraged more entries.

Orton tested with the

squad towards the end of last year and team boss Rushforth has past experience of working in the category.

"The Ortons knew they wanted to go into circuit racing but weren't 100% sure which route to go," Rushforth said. "Everybody wants to go to Ginetta Junior because of the package it's on and it's a cracking championship, getting massive coverage, but that coverage and being in that playground comes

with a price tag.

"Their thought process was to look at Saxos and Fiesta Junior for his first year in cars as it's a little bit more low-key and the budget is less.

"The Ortons bought a car and there's only one round that clashes with Ginetta Junior so it made sense for us to run Will in that. As a team, we can now cater for two of the three options for 14-to-17-year-olds and it's good for us to have a bit of diversity."

STEPHEN LICKORISH

IN THE HEADLINES

BRITISH F4 FOR VILLAGOMEZ

Mexican Rafael Villagomez will dovetail his French Formula 4 campaign with contesting the eight rounds of British F4 that do not clash. Villagomez secured the French F4 drive after winning the Richard Mille Young Talent Academy scheme. He will also race in British F4 with Fortec Motorsport, but will miss the April Brands Hatch and September Silverstone events.

GRAHAM TARGETS RETURN

Former BRDC F4 Winter Series champion Matty Graham is targeting a return to racing this season after a two-year lay-off. His last race was in British GT with the Ebor GT Maserati GT4 in 2017. He had a runout last week in a Redline Racing Porsche Carrera Cup car. "Feeling that power again was a bit of a shock at first but, after two or three laps I soon got used to it and would be keen to race in the championship," he said.

FROM LITHUANIA TO GINETTA

Former asphalt rally ace Dave Holland is weighing up joining the Ginetta GT4 Supercup ranks this season. "We have been racing and rallying in Lithuania for the last few years, but saw this and fancied a go," he said after testing at Donington Park last week. Renault UK Clio Cup driver Jade Edwards also tested a Ginetta G55 and is evaluating a move into the GT4 Supercup.

O'BRIEN'S BRITISH GT SWITCH

Connor O'Brien will join Patrick Kibble at TF Sport in British GT this season, in the first of the 2019 GT4 championship-winning team's two Aston Martin Vantage GT4s. O'Brien (below), 19, had been set to stay at Optimum Motorsport for a second year but, with the team's move from Aston Martin to McLaren machinery in GT3 expected to be replicated in GT4, O'Brien has moved to TF to remain with the familiar Aston equipment.





BMH is targeting diverse grids in 2020

MG LIVE

Two special historic guest races will form part of the timetable at this year's MG Live, as the event returns after a year's break due to Silverstone resurfacing work that forced the cancellation of the 2019 edition.

The MG Car Club and British Motor Heritage will run a 40-minute pre-1966 saloons race, while Equipe Classic Racing and FISCAR will team up to run two joint races for 1950s cars.

The invitational BMH race will use broadly the same regulations as the Goodwood Revival's St Mary's Trophy, though with Dunlop Historic Race tyres, and each car can have one or two drivers.

Organisers hope the grid will be diverse,

with a "good number" of British cars, as well as cars that have not raced in some time.

"The criteria have been specifically chosen to ensure a truly mixed field of everything from MGs to Minis and Lotus Cortinas to the mighty Ford Galaxies," said BMH managing director John Yea, "so the sight and sound of the 58-car grid should certainly be something to savour!"

This year also marks the MGCC's 90th anniversary, and BMH – with which it has a longstanding relationship – will also support the MGCC's other race meetings in 2020.

Meanwhile, there will also be a shared grid at MG Live for the new-for-2020 Equipe 50s series and FISCAR competitors. The double-header will be open to 1950s production sportscars and sports-racers

with under two-litre engines, and will have two classes split into pre- and post-1956 cars.

"We've had a great reception [of the new series] which is why we've put on this extra race," explained Equipe Classic Racing partner John Pearson, whose organisation will also run grids for its Equipe GTS and Pre '63 categories at MG Live. "Most of the 50s cars will be eligible for Equipe Pre '63 if the drivers want more track time."

FISCAR chairman John Turner added: "If, as expected, this joint venture proves successful, and whilst retaining our own identity, I do not rule out future collaborations with Equipe Classic Racing, who have kindly accommodated us at this splendid meeting."

GRAHAM KEILLOH & STEPHEN LICKORISH

Historic campaign for young Llewellyn

RALLYING

Tom Llewellyn, son of two-time British Rally champion David, will compete in the British Historic Rally Championship this season.

The 18-year-old competed in the Welsh Rally Championship last year at the wheel of a Ford Escort Mk2, and secured the two-wheel-drive and Under 23 titles during his first season

of historic rallying.

Alongside co-driver Peredur Wyn Davies, Llewellyn will compete in the eight-round BHRC, with the opening encounter – Rally North Wales – taking place on 28 March.

"I had a good season in the Welsh Championship last year and it really allowed me to learn the Escort and how to really get hold of a Historic car," he said.

"The Escort has everything

– it's the whole package. It's a proper car with a strong engine and proper brakes and of course being rear-wheel drive makes it a lot of fun. But after a good run on the Cambrian [Rally, where he won class H3] I really hope to be fighting for the top end of the championship. I do feel like I'm ready to take on the championship contenders and it looks like it's going to be an exciting season."



Llewellyn will drive Ford Escort Mk2

LAWRENCE

His father David, who won the British Rally Championship in 1989 and 1990, added: "It won't be easy for him, but I'm looking forward to seeing how Tom gets on this season."

IN THE HEADLINES

UPGRADES FOR REVOLUTION

Revolution has made a number of upgrades to its A-One prototype for this season. The changes include a revised diffuser and second rear-wing element to improve grip, while new dive planes and wing endplates have been added to give drivers and engineers greater ability to adjust the balance of the car. "Much of our test work has been around achieving pace with a user-friendly feel and feedback," said Revolution managing director Phil Abbott.

MORRIS INTO BRITCAR

Multiple Porsche Club GB champion Peter Morris will race in the Britcar Endurance Championship this season, sharing a BMW M3 GTR with fellow Porsche Club GB title winner Jonathan Evans. The duo will be part of a two-car CRH Racing Britcar line-up as the squad will also enter a Porsche Cayman in the new Britcar Trophy category for Ginetta racer Robert Pugsley.

NEW HOME FOR CLASSIC VWs

The Classic VW Cup will race with MotorSport Vision Racing during the 2020 season, having left the British Automobile Racing Club. The championship, which will revert to just Class A and Class B, will hold six rounds throughout the season at Donington Park, Brands Hatch, Silverstone, Brands and Donington again before the final meeting at Snetterton. It is one of six series to join MSVR for the upcoming season.

RUDMAN TO DEFEND TITLE

Reigning Legends Cars National champion Miles Rudman (below) will return this season to defend his crown. "We're thrilled our reigning champion Miles Rudman is back to defend his title this season and he heads a fantastic entry thus far for our 2020 championship," said series owner Phil Cooper. The championship begins at Brands Hatch on 4-5 April.



Rare F3 Ginetta G8 restored to contest historic races in 2020

HISTORIC F3

The unique 1000cc F3 Ginetta G8 in which Chris Meek finished fourth on its debut at Snetterton in 1964 will be back on track in historic events this year, following a restoration by owner Bill Cowing.

Produced by the Ginetta-founding Walklett brothers, the ultra-low G8 was, unusually, built around a fibreglass monocoque chassis sandwiching a tubular steel structure to which suspension frames were attached. The tub had to be remastered and moulded for Cowing, who

has previously raced a rare FF1600 G18.

Last seen in hillclimbs in the 1970s, the car passed through several owners as a project. In its original red-and-silver livery, the Ginetta is a welcome addition to the 'screamer' series, directed in recent seasons by Keith Messer and Mike Faloon.

Also fresh from restoration on Historic F3's Race Retro stand was the Merlyn Mk10/14 raced by Swede Jonas Qvarnstrom in period. It will be driven by Ewen Sergison, who, with Rachel Lovett, is set to take over promoting the attractive Pre-'71 class.

MARCUS PYE

Murray's Mazda gets a new engine

ROAD RALLYING

Two-time National Formula Ford 1600 champion and Festival winner Niall Murray is installing a Honda S2000 engine into his own Mazda MX-5 to boost his road rally efforts in 2020.

Long-time road rally competitor Murray has recently used a Toyota Starlet in Targa and multi-venue events, and hopes the upgraded MX-5 will be ready for Wales's late-July 116 Targa Tracks Rally. He is

undertaking the project with friend and navigator Sam Dolan, son of FF1600 team boss Bernard.

"We need something quicker," said Murray. "The competition's just moved on over the last couple of years – you have people in 230bhp Yarises and 220bhp MR2s.

"The most power people are getting out of the Mazda [MX-5] engine is around 170bhp, and the way mine was going it was probably about 70bhp. So I went

looking for a Honda engine."

Murray bought a written-off S2000 at auction, and putting its engine into the MX-5 suits Targa rallying's requirement that units have the original inlet manifold.

"It's a big project, but it's going well. It's a bit of craic," Murray added.

Murray will also compete in the full Irish Drift Championship this year in a Nissan PS13, and hopes to add British drift rounds.

GRAHAM KEILLOH

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A historic year

Formula 1 may be yet to turn a wheel in anger, but for historics enthusiasts a momentous 2020 season, packed with exciting events, has already begun

MARCUS PYE

The dawning of every new season is an exciting time for racing folk eager to finally drive the winter blues away. For me, 2020 – the 70th anniversary year of Autosport, the World Drivers' Championship and Castle Combe Circuit – got off to a momentous start. The opportunity to see a different slant on historic sport in South Africa (rather than Phillip Island in Australia or Hampton Downs or Taupo in New Zealand as I've done before) was especially welcome, but to get back on track in good old Formula Ford after a 10-year sabbatical was fantastic.

I saw that unexpected treat as the first of three beginnings, for last weekend's Race Retro show pointed to the long domestic season ahead, and it's barely a month until the 78th Goodwood Members Meeting engages major players in a huge spectrum of cars on UK soil. The Duke of Richmond and Gordon's jamboree kicks off a bumper programme of world-class international meetings, with the ACM's Monaco GP Historique and ACO's Le Mans Classic returning in their alternate year cycles. Their additional focus promises to make it an extraordinary summer.

My multi-faceted sojourn south of the equator will be covered in a special feature next month, but the dedicated historic show at Stoneleigh Park, situated between Coventry and Birmingham in the heartland of the Britain's traditional motor industry, put the full gamut of disciplines – single-seater formulas to sporting

“The Monaco GP Historique and Le Mans Classic promise to make it an extraordinary summer”

trials, rallying to speed events – under the spotlight once more. As ever, it went down well with faithful disciples, the hardier among whom enjoyed the live rally stage. Talking rallying, the ex-Petter Solberg Subaru Impreza WRC – the last car that Colin McRae drove in public, at the Goodwood Festival of Speed – was sold for a whopping £189,000 by Silverstone Auctions last Friday!

One of the attractions this year was a section devoted to the cars of Tony Southgate. Icons spanning eras when the designer's art and production engineers' craft combined to create machines of great beauty as well as function. Examples of Coventry-born Southgate's striking F1 Shadow and Group C Jaguar exemplified a microcosm of his huge CV, sown at Lola and Eagle and evolved right through to his sportscar designs for Toyota, Ferrari and Audi. Indy 500, Formula 1 and Le Mans winners make up an impressive

portfolio, bolstered by Southgate's Ford rally work.

Out in the main hall, my eyes were drawn to Tolman Historics' stand, a beautifully proportioned, superbly clean and cleverly executed edifice inspired by Goodwood's pits. Longtime Mitsubishi rally engineer Chris Tolman's equipe is well-known in McLaren GT race circles these days, but classic car restoration underpins its roots. A stunning 1971 Lola T212 in Helmut Marko/John Love's Team Gunston Springbok Series colours and a Formula Junior Lotus 18 demonstrated its historic race work.

To mark the 60th anniversary of the square-cut Lotus – in which Jim Clark scored his first single-seater victory, over four-wheeled debutant John Surtees at Goodwood's 39th MM in March 1960 – the Formula Junior Historic Racing Association organised a rendezvous of the popular model's racers, past and present, beside another example on the Historic Sports Car Club's stand on Saturday. As usual, a broad selection of members' cars sat shoulder-to-shoulder, from Trevor Parfitt's 'Doc' Shepherd Austin A40 to Matthew Watts' colourful ex-Xavier Lapeyre Martini-BMW MK19/22 representing the Silverstone-based club's award-winning Historic F2 championship.

The Classic Sports Car Club has long supported Race Retro, and it underlined its flexible approach to providing inclusive racing with a dramatic newcomer to its Special Saloon and Modsports field, and adding a Modern Engine Group to the 2020 mix. A big-winged Ford Escort Mk2, powered by a 500bhp turbocharged Honda S2000 engine, certainly drew a lot of attention.

Looking ahead, momentum is building rapidly at Goodwood, where high-speed demonstrations of three-litre F1 cars of the Lotus 72 era and Tom Walkinshaw's Jaguars from XJR-6 to 16 on the 30th anniversary of the marque's last Le Mans victory, plus a new Rallysprint competition showcasing Audi's mighty Quattros, all join the Members' Meeting programme on 28–29 March.

It's an event of contrasts, with diminutive 500cc cars to monstrous Edwardian racers contesting the SF Edge Trophy racing hard. A massive tin-top fest offers heats and final for the fans' favourite Gerry Marshall Trophy, while the Pierpoint Cup targets American V8 sedans of the pre-1966 period. Roy Pierpoint made his debut at the circuit in 1949 and 16 years later won the British championship in an Alan Mann Racing Ford Mustang.

At Monaco on 8–10 May, a fortnight before the World Championship GP, the historic showcase pays homage to the greatest drivers of the past by renaming its seven races – Louis Chiron, Juan Manuel Fangio, Graham Hill, Jackie Stewart, Niki Lauda and Gilles Villeneuve are honoured in the single-seater plateaux this time round. The 1952–57 sportscar race is named for Ferrari ace Vittorio Marzotto, although, ominously for the prancing horse stable, there will be many more Maseratis in the pack. 🏆



MERC AND FERRARI JOIN 'DRIVE

NETFLIX DOCUMENTARY FORMULA 1: DRIVE TO SURVIVE

One of the starkest differences in Formula 1 pre- and post-Liberty Media's takeover in 2017 has been its approach to digital media — and there is no greater beacon of that than the Netflix *Drive to Survive* series, which returns to the streaming service for a second season on 28 February.

The unprecedented level of behind-the-scenes access to the F1 world made the first season a huge success. It opened the world of grand prix racing up to a wide, youthful audience, converting curious observers into new fans. For those already following F1, it shone a light on some of the human storylines away from the track.

The biggest change for season two is the addition of Mercedes and Ferrari, both of whom were not part of the first series. Based around the Australian Grand Prix, the opening episode immediately makes their involvement clear. The very first person you see is Ferrari team principal Mattia Binotto, while Lewis Hamilton, Sebastian Vettel, Toto Wolff and Valtteri Bottas also appear in the opening stages of the episode.

But the addition of F1's biggest teams and drivers does not take the spotlight away from the rest of the grid. Their presence is felt in the opening episode, but the focus is on the same protagonists as last year's curtain-raiser: Haas, Red Bull and Daniel Ricciardo. *Drive to Survive* isn't going to become *The Mercedes and Ferrari Show*, thankfully.

The format of the series remains largely unchanged, splicing interviews with drivers and team members with paddock segments and on-track action. There

does appear to be less world feed track footage this time around, giving the off-circuit storylines more of an opportunity to play out. But the producers haven't tried to reinvent the wheel.

The editing and production of the series is impressive yet again. Mercedes and Ferrari might have been part of the season, but both limited the access offered to Netflix to select races. Rather poetically, Mercedes picked the German Grand Prix, the site of its lowest ebb of the year.

While the eagle-eyed observer might quickly spot that many of the shots of Hamilton, Vettel, Bottas and co. only come from a couple of paddocks and races — mainly Hockenheim and Austin — the way the footage is woven into the episodes means casual viewers won't notice any difference.

And that is who is at the heart of the series: the casual fan. Much the same as in season one, there is a certain degree of creative licence used to hype up storylines. For example, Max Verstappen is portrayed as making a last-lap pass on Vettel in Australia — when it actually happened 24 laps before the end. Such edits might nark more dedicated F1 fans, but they offer a stronger thread for the bulk of the audience.

Compensating for this is the added detail and access F1 fans thrive on. Some of it comes across as throwaway details, such as Christian Horner confirming Verstappen did have an escape clause in his Red Bull contract, while others gain the focus of an entire episode. There is no better example of that than *Boiling Point*, the second episode, which chronicles Haas's mid-season struggles and intra-driver tension, as well as the Rich Energy saga fallout at Silverstone.

The success of the series again lies in portraying the characters who make up the rich tapestry of F1.



FINISHING STRAIGHT



[autosport.com/podcast](https://www.autosport.com/podcast)



THE FIRST 2020 FORMULA 1 TEST



Join the Autosport team in Barcelona as it commits its analysis from the first Formula 1 test to podcast form. In particular, the most-talked about innovation of 2020 so far – Mercedes' trick dual-axis steering – is explained. Also, we discuss whether or not Ferrari is playing it cool so far after a false dawn 12 months ago. Look out for more podcasts during the second week of testing.

TO SURVIVE'



Netflix filmed Mercedes at the German GP – its 2019 nadir

Any pomp around Mercedes's arrival in the show is quickly defused as both Hamilton and Wolff forget the official team name – something Bottas then nails in one take.

Horner again plays a good pantomime villain from early doors, reprising his role from the first season, as he claims Ricciardo was “running from a fight” by leaving Red Bull for Renault.

Season two of *Drive to Survive* builds upon and expands the success of the first series, meaning it will once again be a tremendous watch for all sports fans, regardless of their level of F1 knowledge.

LUKE SMITH



YouTube

[youtube.com/AUTOSPORTdotcom](https://www.youtube.com/AUTOSPORTdotcom)



MERCEDES 'COPIED'? F1 TESTING TECH ANALYSIS



The launch of the Racing Point car turned heads when the bodywork and front wing were looked at a little closer. Jake Boxall-Legge (Technical Editor, Autosport) and Tim Wright (ex-McLaren, Benetton and Renault engineer) dive deeper into the technical aspects of the 2020 design to see if the car really is a ‘clone’ of last year's Mercedes. Go to bit.ly/RPclone

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Eurosport 2, Sat 1345

NASCAR Cup

Round 3/36

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1 March

TV Live

Premier Sports 2,

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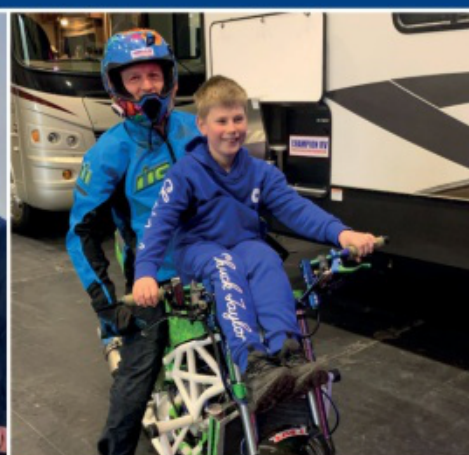
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Number of laps
Dominguez completed
in his Jordan test

MARIO DOMINGUEZ

When the British weather put paid to an F1 ambition

MATT KEW

Imagine the disappointment. You've got two Indycar race wins, but have long held designs on a Formula 1 drive. You're also in advanced talks with sponsors to put together a package for a full grand prix season, but first comes a flight to Europe for your maiden F1 test. Finally you get in the car, but are only permitted a solitary installation lap before your day is run.

That was the case for Mario Dominguez, who was due to extensively test the Toyota-powered Jordan EJ15 ahead of a proposed seat for the 2005 season.

"We spent, like, three days actually negotiating the contract for me to race the whole year for 2005," Dominguez recalls. "At that point, Jordan had no other driver. Tiago Monteiro and Narain Karthikeyan were in their sights, but I was the first one to start the negotiations."

"BY THE TIME I WENT OUT THE DAY WAS VERY CLOUDY AND THERE WAS NO MORE VISIBILITY"

Monteiro was behind the wheel on what was a cold (see right), grey February morning at Silverstone and promptly shunted the car. After long repairs, the weather had closed in and limited visibility to such an extent that the onsite helicopter was no longer permitted to fly.

Dominguez adds: "It took a long time to repair and by the time I went out the day was very cloudy and there was no more visibility. They only let me do one lap and that's it, I had to stop."

The dream hadn't been realised, but it wasn't over either – only put on hold, as the Mexican was due to get his break in another test at Barcelona. However, as the race to sign sponsors gathered pace, Dominguez stayed put at home to convince companies to part with their cash. Yet again he wouldn't get to experience the grand prix machine at full tilt.

"Once I was pretty much set up and locked in to do the full season, Tiago and Narain suddenly showed up with more money than I had. Jordan said, 'OK, with the amount of money you have, you get to be the test driver for the year'. I said, 'There's no way any sponsors want to pay that much to be a test driver'. So unfortunately that was that."

It marked a dispiriting end to Dominguez's incredibly brief taste of F1.



The year before he'd held talks with Sauber and visited the factory, but a deal was never reached. An informal agreement was made for the 2006 season at Jordan, but when Midland took over the team it opted to retain the services of Monteiro and sign Minardi driver Christijan Albers.

That left Dominguez to return Stateside, where he picked up a further three podiums before a series of fleeting FIA GT appearances in a Saleen S7R. 🏆

FINISHING STRAIGHT



FROM THE ARCHIVE

Stirling Moss watches work on his Rob Walker-run Lotus-Climax 18/21 in the pitlane at the 1961 British Grand Prix at Aintree. Moss qualified fifth (and top

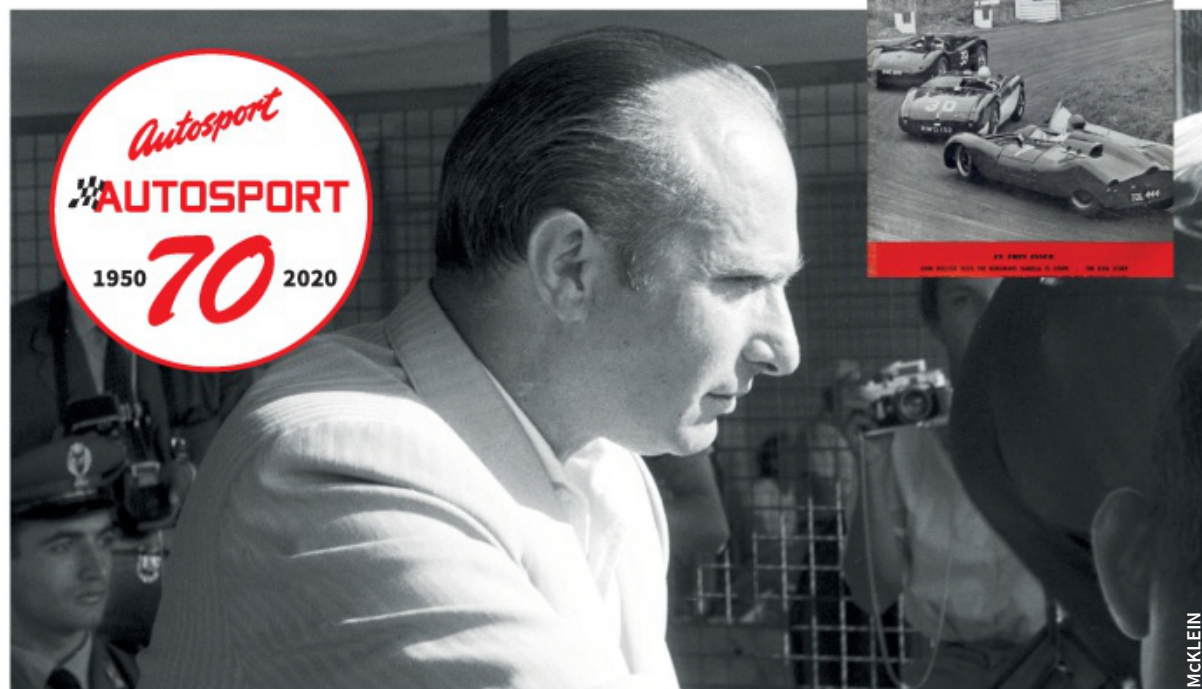
Lotus) but would move up to second in the rain-soaked race, challenging the Ferrari of Wolfgang von Trips for the lead before spinning. Moss recovered but later retired on lap 45 with a brake pipe

failure – for the second time in two races. Von Trips would go on to win comfortably, followed by team-mates Phil Hill and Richie Ginther, who completed the all-Ferrari podium.



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Fangio's Cuban kidnapping

28 February 1958

Juan Manuel Fangio's kidnapping ahead of the 1958 Cuban Grand Prix sportscar race in Havana not only hit Autosport's headlines in what was dubbed as 'three of the most extraordinary days in the history of motor racing', but also headlines around the globe.

Five-time world champion Fangio was taken at gunpoint by rebels – angry with the government for funding such an event – on the eve of the Monday race. Throughout the ordeal, he was taken to three separate properties but was treated well. Security around the event and other drivers was subsequently tightened. The race was delayed, with Maurice Trintignant substituting for Fangio in his Maserati 450S, and only got under way when it was wrongly reported that Fangio had been freed.

The race concluded prematurely, in tragic circumstances. Stirling Moss in a Ferrari 335 Sport led away from the

start but, on lap six the Ferrari 500 TR of Armando Garcia Cifuentes hit a patch of oil and veered into the crowd. Four spectators were killed while others – including the driver – were injured.

Moss was declared the winner, claimed to have never seen so much oil on a track before, and promptly left Cuba. Fangio, meanwhile, was freed on the Tuesday after the race. While he did not receive any prize money for participating, he was given £1785 for arriving in Havana – more than Moss received for winning the race!

Elsewhere in the issue, Autosport identified a number of international motor shows, grands prix and sportscar meetings as ideal events to visit while on holiday, John Bolster test-drove the Elva Courier and the marque's 1.5-litre sportscar, and the idea of automatic gearboxes becoming a threat to the motoring industry was explored.

CRAIG WOOLLARD



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Autosport, ISSN number 0269946X, is published weekly by Autosport Media UK Ltd, 1 Eton Street, Richmond, TW9 1AG, United Kingdom. Airfreight and mailing in the USA by agent named Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Jamaica NY 11431. Subscription records are maintained at Autosport Media UK Ltd, 1 Eton Street, Richmond, TW9 1AG. Air Business Ltd is acting as our mailing agent.

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Seymour Distribution Ltd, 2 East Poultry Avenue, London, EC1A 9PT.

Tel: +44 (0) 20 7429 4000.

Printed by William Gibbons & Sons Ltd, 28 Planetary Road, Willenhall,

Wolverhampton WV13 3XT.

ISSN 0269-946X. Autosport

is published weekly by

Autosport Media UK Ltd,

1 Eton Street, Richmond,

TW9 1AG.

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Trading as Autosport Media

UK. Publishing, trade and

further subscription details

on www.autosport.com.

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The popularity of the Classic Sports Car Club is analysed on page 8

THE SUCCESS STORIES OF CLUB MOTORSPORT

Measuring the success of a particular championship or organising club is never straightforward. Entry numbers on their own can give a good guide to popularity but do not tell the full story. They do not reveal what the paddock atmosphere is like or whether fresh blood has been brought in to the championship, for instance. The pure numbers can also mask limiting factors like the availability of cars and do not account for the budget of the series.

At the end of last year, Autosport ran an analysis of all the UK circuit racing clubs and worked out the average entries for each of their series and for the club overall. And, using this method, there were two particular clubs that stood out head and shoulders from the rest.

It is those two clubs that we have explored in greater detail in these first two national racing supplements. Last month we looked at the 750 Motor Club, while in this issue Matt Kew

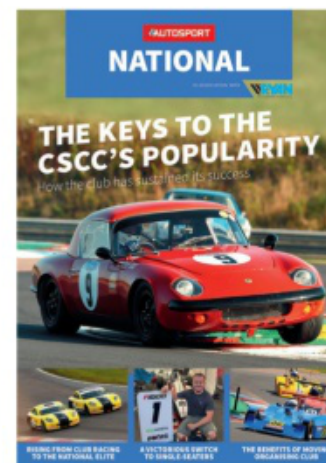
investigates the reasons why the Classic Sports Car Club has proved so successful.

Given the importance of having well-supported grids, it's perhaps no surprise that some categories have decided to switch organising clubs during the winter in an attempt to boost their fortunes. One such is the Clubmans Sports Prototype championship, and in this edition of the supplement we look at why the category's chiefs decided to jump ship amid the search for increased popularity. Following the success theme, we also look at top Ginetta squad Elite Motorsport's story.



Stephen Lickorish

STEPHEN LICKORISH
NATIONAL EDITOR



COVER IMAGES

Jones; Richings;
Motorsport Images/JEP

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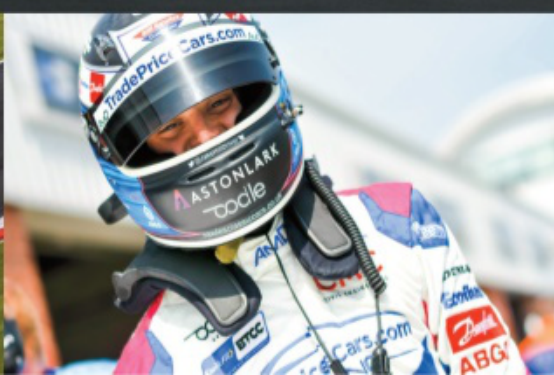


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OPINION TREVOR CARLIN

IN GREAT SHAPE FOR THE FUTURE

The BRDC's British Formula 3 and Formula 4 championships give drivers value-for-money racing, and attract full grids and good crowds

There's now a fully European motor racing scene in junior single-seaters; it's not just a British scene any more. And, of course, with competition there's lower numbers in each market. But I'm pretty pleased with where things are at the moment in the UK, where we will have full teams this year in BRDC British Formula 3 and British Formula 4.

In the 1970s and 1980s, there were many South American drivers and Europeans who would come and race in the UK. They'd come to the Formula Ford Festival, do FF1600 for a full year, then FF2000 in the British and European championships, and then they would move into one of the F3 championships, the most credible at the time being the British. But the German motor manufacturers started investing heavily in motorsport through the DTM, which filtered down and gave them a great platform for F3. And the manufacturers started supporting drivers with engine programmes and things like

“The good guys do one British F4 season and move on because they've had good competition”

that, better circuits were built, and a load of circuits were built in Spain, so a lot of the Latin American drivers would go to Spain and Italy. Before you knew it, the normal route of going to the UK to race was taken away because there were other options.

Now we're going into the fifth year of the 'new' British F3, which is a pleasure to compete in. MSVR, who run it, are just nice people, well organised, dead straight and very similar to the Euroformula Open guys, whose series we also compete in. Giles Butterfield, who runs it, is a racer, and MSV head Jonathan Palmer's a racer. Speed per pound, it's bloody good, fairly quick, not too much downforce



so the car does move around a little bit. It's fairly reliable, and they've done some good updates for this year to make it even better in that respect. It's one of the nicest packages we've ever had as a team.

British F4 is a great platform, because you go to a TOCA weekend and pretty much every circuit you go to is full. It's always got a great atmosphere. People want to be racing in front of a crowd. Alan Gow has done a great job of promoting the whole package, and F4 benefits from that. You've got three races and it's great entertainment.

Some might say we suffer in the UK because we're the only F4 series in Europe that uses the Mygale chassis with the Ford EcoBoost engine, while you can run the Tatuus-Abarth in Germany, Italy and Spain. I can see that, but I do think a lot of these things are fashion. You've got the Premas of this world – they're a great team with a great name, and they put their whole heart and energy behind Italian F4 and German F4, and then other teams jumped on that bandwagon. So you've got a lot of the aspiring kids wanting to go that route, and you've got a 35-car grid in Italy, and about 20 in Germany.

But when you start digging into the reality of the situation, pretty much every German champion and most Italian champions have had to do two seasons of it, and they normally do a ton of testing, so they're spending €700,000 per season to do both series with all the testing, and then the majority of them are doing two years. There's no way that is sustainable. In the British championship, the good guys there have just done one season of it and moved on, because they've learnt so much and they've had good competition on really difficult tracks. And, because there's not 35 cars, they're not running round constantly behind safety cars, so they actually get to have three races a weekend as opposed to three parades. I firmly believe that people who do the British championship get far better value for money. It's about £300,000 for the season and loads of testing. And British F3 is just a bit more, at £330-340,000. So, depending on the amount of testing you do, they're almost exactly the same cost, and if you're good you move up to the next level after one year.

There's also been a turnaround in attitudes. A while back with the old British F3, everyone thought the drivers didn't want to race at Oulton, Snetterton, Knockhill, and just wanted to do grand prix tracks in Europe, so that's where we went. Luckily, some of the driver managers and mentors are now realising that driving on a difficult circuit, where there's risk attached, makes them concentrate more and makes them better drivers.

Look at the Brands Hatch GP circuit – it's super-high speed but a horrifically narrow track, so the drivers learn so much. You've got to have your act together. Once you can drive at Oulton Park and Brands GP, you can drive anywhere. They're effectively high-speed street circuits because the risk is so similar. You don't get that at, say, Hockenheim, where the driver can't make such a difference. ■

SPORTS 1000 SPIRE GT3S

Spire Sports Cars has become the leading constructor in the 750 Motor Club's RGB category with its latest creation

BY STEFAN MACKLEY

PHOTOGRAPHY STEVE JONES

Since it first hit the track at the start of the last decade, the Spire GT3 and its evolution – the GT3S – have dominated the 750 Motor Club's RGB Championship.

Overall drivers' titles in 2012, 2013, 2014, 2017 and 2018 have put the company, founded by Paul Nightingale, at the forefront of the bike-engined category.

"The GT3 was a completely brand-new design [from the GTR]," recalls Nightingale. "There was only really the steering wheel and steering rack that crossed from one chassis to the other.

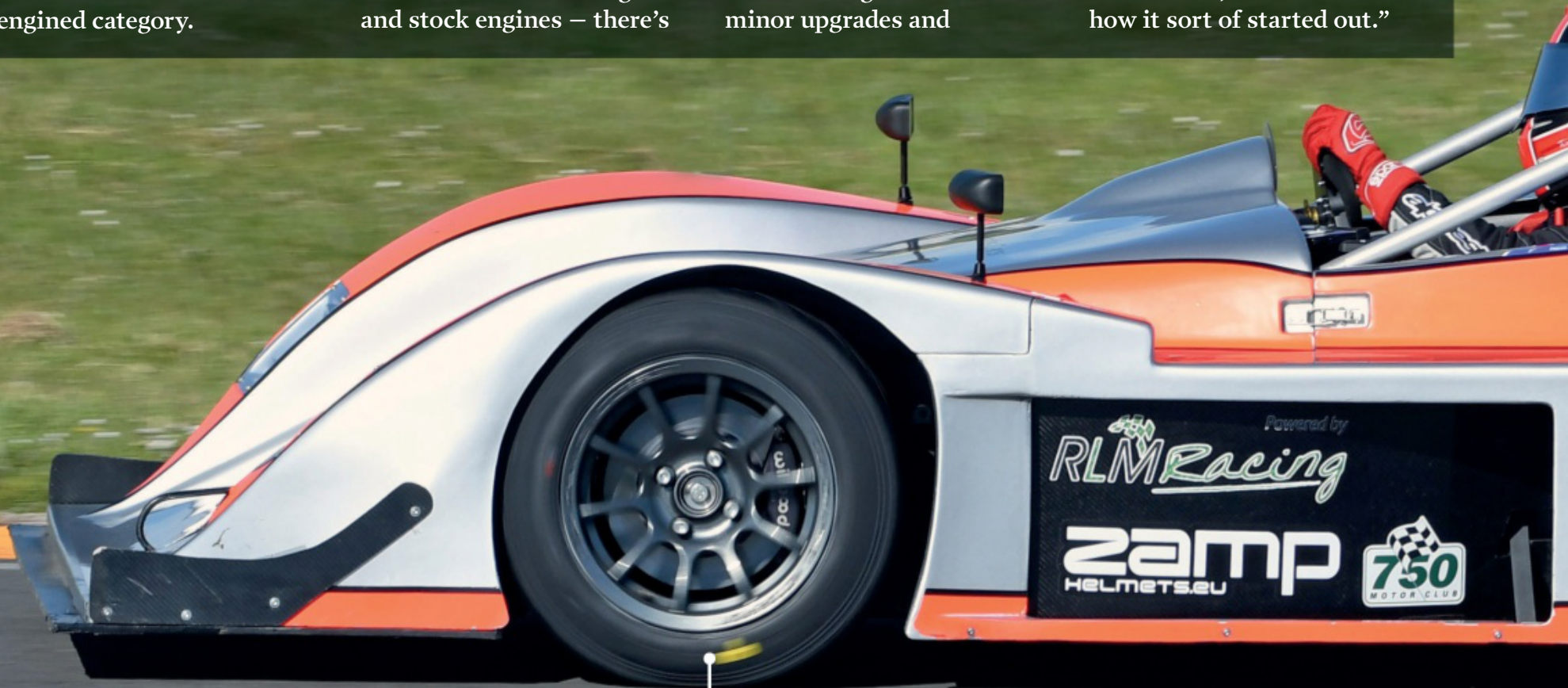
"I don't really know what we can do to make the cars go any faster now because they are on a controlled tyre, flat floor, there's a minimum weight and stock engines – there's

not a lot more that you can do with it. You might find tenths if you spent a lot of time in the windtunnel and messed about that way, but I don't think there's a lot more to be gained out of RGB."

The GT3S – pictured with Richard Morris taking second overall in the championship last season – has undergone several minor upgrades and

refinements including the addition of a Suzuki engine instead of a Honda.

"The GT3S came about as a joke with [RGB stalwart] John Cutmore originally," says Nightingale. "He had a new car and he likes the Suzuki engine rather than the Honda. It was still a GT3 but he called it a GT3S because it had a Suzuki in it, and that's how it sort of started out."



TYRES

For 2020, drivers are limited to using three sets – or 12 tyres – of Yokohama A048Rs for qualifying and the races over the course of the season, while Avon CR28s will be used in wet weather. "They [A048Rs] do last well," says Nightingale. "Last year it was 14 tyres

and they've cut it down to 12 this year on the grounds of economy, which is all right, but if you put a new set on and flat-spot them then you've got a problem.

"When Billy Albone won the championship two years ago I think he only had two full

sets and probably a race on another new set.

"The Avon CR28s are a good tyre when there's standing water, and I know why they've used them, because they didn't want a deeper-grooved wet Avon that you could just go and do a really quick time on."

CHASSIS AND SUSPENSION

All chassis must be constructed using a tubular steel spaceframe or an aluminium or steel monocoque with a minimum ride height of 75mm, while the use of wings is prohibited.

Brake calipers must have a maximum of four pistons, while suspension damper units must be limited to three-way adjustability.

“On the later GT3S, which came in 2016, we actually lowered the whole top area of the car by a good 40mm to

give us less drag and better aero,” says Nightingale.

“We spent a lot of money on CFD and quite a bit of time in the windtunnel with it as well. When we first brought the GT3 out we were about two seconds a lap quicker than the GTR [which preceded it]. We put a different shaped nose on it, which found us another second, and then we’ve just been chivvying away and finding tenths here and at best half a second there.”



ENGINE

Four-stroke motorcycle engines from Honda, Kawasaki, Suzuki or Yamaha can be used, but must remain entirely standard and unmodified with a capacity of 1000cc. These can be positioned either at the front or the rear of the chassis. Power output is

approximately 170bhp, which can produce a top speed of 140mph-plus, says Nightingale.

“For this year they’ve opened the engine ages up on the Suzuki and the Hondas because realistically the later Hondas, certainly up to 2014, are very similar power

output to the earlier ones,” he says. “They’ve not really made a lot of gains on them and the earlier ones were getting harder to come by, they were higher mileage and it was a problem really, so they [750MC] have listened to the competitors a little bit.”



STYLES

NICE GUYS DON'T FINISH LAST

The CSCC prides itself on stellar driving standards and catch-all series, which is why its popularity continues to boom

BY MATT KEW

The Classic Sports Car Club set the gold standard within the national racing scene last year, achieving the highest average grid sizes of any organiser. In a packed market in which some championships could only muster three cars per race, for the CSCC to top 40 entries in its Tin Tops and Magnificent Sevens series on occasion is not to be sniffed at.

That aptly rounded out the previous decade, which will be remembered as a boom period for national motorsport. The monetary values of race cars soared and clubs hit record levels of interest – the CSCC posted an all-time high of 408 entries at Silverstone in 2018.

Modern history is cyclical, however. For every period of economic prosperity, there must be a time of austerity. Peacetime in international relations is followed by wartime. Similarly for club-level racing in the UK, and now particularly in the face

of Brexit and the climate crisis, we're odds-on for a slump in the 2020s.

To pre-empt this, the CSCC has evolved away from the roots of its name. It's not an exclusive home for cars of the 20th century, one that turns its nose up at period-incorrect stickers and non-matching chassis numbers. It's worked hard to become a broad church so that, when a decline hits the club scene, it's well sorted to keep its head above water.

The CSCC was created in 2001 in a partnership between Richard Vos and Richard Culverhouse. The latter had fallen out with the Aston Martin Owners Club, while Vos was part of a group running the now-defunct Anglo-American series.

"The Swinging Sixties – our first series – started as a result of that," says Vos. "That was our first foray into club motorsport. I was coordinator for the Anglo-American series and at the same time the TR Register [for Triumphs]

was having a little bit of difficulty with its members and the guy running it had had enough."

Previously the TR5s and TR6s had been on a fairly even keel, making for sound competition. But as more TR7s entered club racing and benefited from the power of the venerable aluminium Rover V8, they began to dominate. As a result, Vos sought to separate the two.

"That caused lot of internal strife and politics," recalls Vos. "I said, 'Look, if we take you guys over, we'll put the TR7s in our Future Classics series [for sports, saloons and GT cars from the 1970s and 1980s] and keep the TR6s in Swinging Sixties. That was loved by everyone, so they all came over and that's why it was so successful from day one. Now we've built up all the other series, but that was the bedrock of the club. Now I'd imagine it'd be extremely difficult to start afresh."

With the aim of the club to support ►



The eccentric Modsports grid has become a cult favourite on the club scene

NOTABLE CHAMPIONSHIPS AND SERIES



SWINGING SIXTIES

The formula around which the CSCC was created, the Swinging Sixties series made its debut in the inaugural race meeting at Snetterton back in 2003. Close to two decades later, its popularity hasn't relented, with all but two meetings last season requiring the field to be split into two groups to meet demand. Open to all sports, saloons and GT cars from the 1950s and 1960s, races follow the club's popular 40-minute pitstop format. The key selling point is that, unlike Appendix K series, here owners can modify their cars – so long as the engine type and original silhouette remain intact. Entries range from a 1.2-litre Turner-Climax Mk1 in Group 1 up to all 6600cc of Simon Lane's Chevrolet Camaro in Group 2.

NOTABLE CHAMPIONSHIPS AND SERIES



TIN TOPS

How many organising clubs in this country would beg, borrow and steal for a 34-car grid? Lots. Well, that was the smallest entry for the Tin Tops last season, which twice peaked at 41 cars. The series caters for front-wheel-drive hatchbacks with naturally aspirated four-cylinder engines and a maximum capacity of two litres. Modified Honda Integras and well-fettled Peugeot Twingos battle for victory, with the likes of club president and former British Touring Car racer Mike Jordan at the wheel. But the all-encompassing nature of the grid also means that more humble Citroen C2s and Renault Twingos can be found lower down the field in their own tussle for class honours.

and grow grass-roots racing, in 2002 the CSCC was recognised by the Motor Sports Association (now Motorsport UK). Since an inaugural meeting at Snetterton in August 2003, much of the blueprint has remained the same: non-championship, 40-minute races that feature a pitstop for one or two-driver teams.

That marked the CSCC out as something different compared to what else was on offer at the turn of the millennium. As Wos adds: “We were more or less the first people on the scene to run series and 40-minute races. A lot of commentators didn’t like series, because everybody was used to championships and running for 15 minutes. But when I used to race and go to the Nurburgring, you’d always have a long race. We’d come back here and think, ‘What’s going on?’ A 15-minute race is a waste of time.”

From his time competing with a Reliant Sabre Six, Wos could carry those lessons over with his own club. In the early days, the CSCC meetings also catered for the Jaguar Enthusiasts’ Club, among others. They were welcome to stick to their sprint races, but the CSCC’s homemade series would be a longer affair.

For the spectator, they can be a mixed bag. The pitstops mean that a particular dice between two cars can fizzle out at the halfway stage when drivers take their 30-second success penalty for having won earlier that season. Similarly, the second

“We’d come back from racing at the Nurburgring and think, ‘What’s going on?’ A sprint race is a waste”

driver could hop in and be well off the pace. Alternatively, a subdued first 20 minutes can benefit from the half-time shuffle to reach a thrilling climax. But, the truth is, club racing has a limited draw when it comes to packing out the banks at Castle Combe or wherever, so appealing to drivers is the first priority.

An almost inevitable consequence of the well-liked format, however, has been the subsequent copycats – imitation is the best form of flattery, after all. In the words of CSCC director David Smitheram, “there’s no question that there are significantly more 40 and 45-minute pitstops races out there at club level compared to when we started”.

When standing still is as good as going backwards, the club has had to become a class leader in other areas to ensure the retention of its competitors. One such route taken by the CSCC is to impose the highest driving standards.

The club has become renowned for

its clean racing. Part of that is a natural by-product of the format. It makes little sense to lunge for a first-corner do-or-die overtake if you’ve paid for a further 39 minutes of racing and when there are no championship points on offer.

“When it’s a series, the clock resets after each meeting, it’s just one race,” adds Smitheram. “You shake hands and if you’ve had an unlucky race then there’s no hard feelings and it hasn’t ruined your whole season. Off you go again.”

Collisions remain an inevitable consequence of racing, of course, so again the CSCC has worked hard in this area to ensure consistency. Punishments must be hard, with the need to eliminate the risk of any repeat offenders and in a bid to appease the innocent party.

“The way we deal with drivers is a two-step process,” says Smitheram. “First and foremost is the clerks. We’re fortunate that, although they retain their independence, we generally have the same team for each meeting. They’re consistent and they understand what we’re trying to do. It’s fun, we have customers, and so there’s no ‘rubbing is racing’. It’s supposed to be clean.”

“The club itself has its own set of driving standards. We retain a black book, which we’ve had for well over 10 years. It allows us to record incidents and track behaviour and deal with it privately. We then take action according to our sliding scale of club disciplinary steps. Much is owed to our ►



Overseas trips
to F1 venues
such as Spa are
a CSCC trope

STALLARD



Life started at Snetterton in the early 2000s
as a home for modified 1960s machinery

STYLES



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NOTABLE CHAMPIONSHIPS AND SERIES



MAGNIFICENT SEVENS

Comfortably the fastest machines on the CSCC's billing are the Magnificent Sevens. As the name suggests, this series – one that has operated since 2009 – is a celebration of Colin Chapman's Lotus design. All manner of Caterhams, Westfields, MKs, Tigers and more are eligible. The top cars have over 260bhp – nothing to be sniffed at in such a lightweight package – and the frontrunners are equipped with carbonfibre front wings. What's more, between the likes of Jonathan and Christian Pittard, Tim Davis (pictured) and Jonathan Mitchell, the pace of the races is frenetic and the series often produces the pick of the wheel-to-wheel dices too. Last season it averaged a mighty impressive 36 entries per race.

volunteers and committee members who give up so much of their time for the drivers."

The pay-off is when these measures are noticed by drivers. Tim Davis splits his time between racing his prized TVR Tuscan Challenge car in the New Millennium series for post-2000 machines and an ultra-fast Caterham C400 in the Magnificent Sevens. Those are two specialist bits of kit, so he can do without regular trips to the bodyshop.

"I started racing in 2008 – me and my mate bought a couple of [TVR] Tasmins and raced in the Dunlop Challenge," explains Davis. "There weren't many rules, which allowed people to bend them. That's why I love the structure of the CSCC. It's firm but fair. The quality of the driving is good and if it's not they sort it out if you do make a complaint.

"The competition is fantastic. I race a Caterham now and there's 10 people going for the lead. It's absolutely epic. But there's also really good standards. Because of the speed of the cars and the agility, you worry a little bit. But it's not like the Caterham Academy and all the other official racing series, where if you don't come back with all your wings missing then you haven't really tried hard enough. We're not into that, with carbonfibre wings at £500 a throw. Over the last two years, I've still got the same mudguards on."

Having established solid foundations

"It's significantly easier if you can look after your existing drivers rather than finding new ones"

around clean, long-form racing, the CSCC has had an opportunity to be more adventurous. A trope of the club's calendar is the inclusion of overseas rounds. An annual trip to Spa has become something of a mainstay, so each year the CSCC tries to add a more ambitious location.

Over its near two-decade history, the club has twice raced on the banking at Daytona. There's been action on the Nurburgring Nordschleife, trips to Dijon, Magny-Cours and more. For 2020, it will make its debut on the Le Mans Bugatti layout in what's thought to be a first for a whole UK club, rather than just a travelling single series. It's something that Smitheram has been working on for three years, and reckons ideas for the calendar are sketched out through until 2024.

"We've recognised over the years that getting the balance between stability and offering something new every year is important," says Smitheram. "Like with any kind of business, it's significantly

easier if you can look after your existing drivers rather than trying to find brand-new ones. If you only ever offer the same tracks, apart from the camaraderie in the paddock and the eligibility of your car, why would you want to keep coming back for the next five years if nothing ever changes?

"Every year the CSCC committee discusses what we're keeping the same, what's brand new, and something that we haven't done for a few years. That's the format we tend to run – a night race every few years, perhaps a TV race, and we rotate visits to Anglesey, Mallory Park, Castle Combe and so on."

Taking a couple of hundred competitors abroad requires a large financial outlay, and so these meetings are closer to breaking even rather than operating as some sort of cash cow. That's a sacrifice that should pay off, however, and in turn ensure that names keep signing up for the experience both at home and away.

One of the biggest differences since that first meeting in 2003 is the number of series the CSCC now runs in-house. Over the years it has operated races for various clubs and championships, but more and more it's moved to have full autonomy. This season it will launch its 11th creation – the Slick Series, for all saloon, hatchback, sports and GT cars with doors that race on slick tyres or racing wets.

Starting a new series cannot be done on a whim. It's not a case of sticking your



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CSCC grids are awash with diverse machinery



finger in the air and feeling which way the wind is blowing. That's not sustainable in the long term, and is why there's no set formula for how the CSCC decides what's coming next.

As Smitheram says: "We come up with something new for a whole host of different reasons. Most of it in recent years has come from us in the office or from Richard Wos. He's good for ideas, he chucks grenades at us and he's got his finger on the pulse and what's going on more on the classic side. It's a combination of awareness of the marketplace and always looking for a niche. Each of the recent series that we've done – Turbo Tin Tops, Slicks or the RX-8 Trophy – they've all come about a slightly different way."

In the case of the Slick Series, that has partly come off the back of interest from the club's pre-existing racers. As Davis will attest, his TVR Challenge car is a bona-fide racing machine, not a modified road car. To maximise its capabilities necessarily entails full racing rubber. What's more, he expects the first year – comprising four races ahead of an expanded calendar in 2021 – to be a hit.

"I think that's an epic one to do," Davis says. "Everyone's sort of asking, 'Why can't you use slicks or race wets?' The CSCC always listens, that's the good thing. You can chat to them on a level and say, 'We think this' and they put it to a vote. They've listened to the members."

"I've invited all my TVR mates to come and race. I think all the Sagaris boys that

"We're not trying to make money. We're there to give the drivers a good and new experience"

aren't really allowed anywhere else are going to come and race on slicks. I think that's going to be probably the biggest one they've got. The beauty of this is there's something for everybody and that underlies the CSCC."

And here's the thing. You wouldn't bet against the Slick Series from succeeding, and a large part of that comes from the way Smitheram, fellow director Hugo Holder and race administrator Hannah Gardin understand the scene.

They've all done their fair share of racing with other clubs. That gives them a first-hand perspective that feeds back in to an understanding of what the CSCC competitors desire.

"It's a corny phrase, but they've got petrol running in their veins," says Wos. "They're serious enthusiasts and they draw strength from each other. This is a fantastic team. Hugo [chairman of the Association for British Motor Racing Clubs] has got that knowledge and experience. David is great on the modern end. It's a really balanced team."

"Other clubs try to make money out of the system, but we're not like that. We're there to give the drivers a good experience, a new experience at different tracks. It's what we do. If we have a good meeting then it subsidises the next one. It's for the benefit of the members."

What this shows is that it's wrong to read too much into a name. In its attitude and its expanding portfolio of series, the CSCC drifts further away from its 'Classic' roots. The way in which it looks after its marshals by offering evening activities and financial incentives to offset the trend of ailing numbers, the way it's making grids sustainable and by looking after existing competitors, this is a club well set to take on the looming challenges of the forthcoming decade. It's not rested on the merits of its recent success, and has instead worked to be flexible and pragmatic.

There's something else, too, that comes from none of the CSCC's grids being purely one-make. Those watching on can see a Maserati Gran Turismo MC GT4 car take to the track alongside a Volkswagen Beetle RSi. The mad-dog creations that find a home in the Special Saloons and Modsports series range from the ex-Gerry Marshall Baby Bertha to Ian Hall's Darrian Wildcat T98 GTR. Or there's the club's kingpin: the Lotus Elans and Austin-Healeys of the Swinging Sixties. That epitomises the incredibly rich and diverse nature of national racing in this country – its strongest asset. ■

FROM A HUMBLE CLUB SERIES TO THE NATIONAL RACING ELITE

Elite Motorsport began life as a team competing with the 750 Motor Club but has now grown to be one of the leading outfits on the British Touring Car support bill

BY STEPHEN LICKORISH

There is not a great deal in common between the 750 Motor Club's Sport Specials Championship and Ginetta Junior. One is a club-level series that features a diverse range of sports-racers, many of which are one-offs or have been built by small organisations, while the other is a one-make category that appears alongside the premier circuit racing championship in the UK and requires a much larger budget. But there is a very close link between the two championships for one of the leading Ginetta squads.

Prior to becoming the team to beat

in Ginetta Junior, Elite Motorsport was a regular in 750MC competition and ran its own Elite Pulse car in Sport Specials in 2014. The squad was founded by Eddie Ives, who had built kit cars as a teenager, and was focused around his own racing. That included the creation of the Elite Pulse, which Ives raced in the Classic Sports Car Club's Magnificent Sevens series in 2013 prior to taking the Class C title of Sport Specials the following year.

Ives explains he wanted the Pulse to be different to the plethora of other Caterham Seven-style machines on the marketplace.

"Lots of the Sevens out there racing are

variants of road Sevens converted to race," says Ives. "We thought there was a gap in the market to have an out-and-out racing Seven – we built a single-seater-esque car with a Seven chassis.

"We built that in 2012/13 and took it to some shows. There was a bit of interest in it but it was a bit expensive for what it was."

Despite being very successful – Ives was only defeated six times in Sport Specials all year in 2014 – it was at this point the team realised the Pulse was not going to be a commercial success when competing against more established



JEP/MOTORSPORT IMAGES

brands such as Caterham and Westfield.

“We got to the point where realistically, although it was very successful and beat everything in the same class with the same power, it was going to be hard as a business,” recalls Ives. “Then we decided to head down the race team route.”

But, even at this stage, there was no hint of Ginetta Junior on the horizon, as Elite was set to head in a very different direction.

“We went to the launch of the new British Formula 4 car and planned to go down that route,” says Ives. “It was supposed to be an entry-level

single-seater series with dads and lads racing. But at the launch we saw the old F3 teams were there and thought it would be hard going against them.

“We ended up having a meeting with Ginetta a week later and our first Ginetta Junior was bought. It wasn’t planned, it wasn’t the end goal it was just a sequence of events.”

Given the massive change in direction for Elite, 2015 was always going to be a challenging season for the team. Despite signing reigning Fiesta Junior champion Geri Nicosia, running as a single-car team in a championship as competitive as Ginetta Junior was never going to be easy and ultimately that first season was all about Elite finding its feet.

“It was all a bit new!” says Ives, who was only aged 22 himself at the time. “We were up against some great teams like HHC, Douglas and JHR but we managed to get our foot in the door with one car.”

For the following year, Elite expanded to two cars, running Harry King and Tom Wood, and that was when success started to follow. And, in a stroke of good fortune for the team, it coincided with a major changing of the guard in the championship.

“There was a lot of luck and lots of things came into place,” says Ives about the team’s sudden expansion. “We had just started winning during 2016 – we won at Snetterton and had a 1-2 at Rockingham and that was all positive. Harry was running near the front and that coincided with HHC deciding not to carry on in the championship having been, in my eyes, the main team to beat – they were the pacesetters. And JHR had their unfortunate circumstances [the team was suspended from Ginetta competition amid accusations of illegal engines] so they weren’t part of the championship.

“That coincided very well with when we were running at the front. There was a lot of luck but we were in the position [to capitalise]. We grew rapidly and ran six Ginetta Juniors in that following



King and Hedley won titles with Elite last year

JEP/MOTORSPORT IMAGES



Prior to becoming a Ginetta frontrunner, Elite ran its own Pulse car in Sport Specials



year. It was super successful.”
And, if anything, that was an understatement. From the moment JHR refugee Tom Gamble joined the squad for the final three events of 2017 (and won four of the nine races en route to the title), there has been no shortage of Ginetta Junior success for Elite. Adam Smalley and Louis Foster swept all before them to finish first and second in the championship in 2018, as

Elite drivers won 17 of the 26 races. Then James Hedley crushed the opposition to take a very dominant title last year.
But Ives never expected he would enjoy such triumphs so soon after the team joined the Ginetta ranks.
“We were pretty level-headed – we were very ambitious but also very realistic,” he recalls. “We never imagined that [level of success].”

It was not just in Ginetta Junior that the squad enjoyed title glory last year, either. In 2018, the team expanded into the Ginetta GT4 Supercup with King and he finished third in the points. But last year he emerged on top of a close fight with Will Burns to add a second Elite crown.
King is now moving on to pastures new after winning the Porsche GB Junior shootout but has fond memories of his

ELITE'S GINETTA JOURNEY

2015
Ginetta Junior driver Geri Nicosia
Wins 0 (best result sixth)
Best championship position 15th (Nicosia)
This was a year when Elite was very much finding its feet on the British Touring Car Championship support bill. Running a single car meant it did not benefit from large amounts of data so progress was limited. Nicosia's best result was sixth at Snetterton.



2016
Ginetta Junior drivers Harry King and Tom Wood
Wins 2
Best championship position 8th (King)
An expansion to two cars and the signing of promising rookies King and Wood meant Elite's sophomore Ginetta Junior campaign was much stronger. From mid-season onwards, the duo were regularly challenging at the front and the team even achieved its first ever 1-2 finish at Rockingham, shortly after King took its first win.

2017
Junior drivers Harry King, Greg Johnson, Louis Foster, Emily Linscott, Isa Deen, James Hedley, Tom Gamble and Fin Green
Wins 5
Best championship position 6th (King)
King was back for a second season but struggled to find consistency over the first half of the year. The team added rookies Foster, Linscott, Deen and Hedley to end the year running seven cars after JHR refugees Gamble (below) and Green joined – Gamble's form with Elite enabling him to take the title.





JONES

four seasons with Elite.

“It was a defining four years I spent with the team, I saw it go through a lot of changes [as it expanded] and I’m proud to have been a part of that process,” he says. “It really provided me a platform to get me to the position I am in today, and without that I wouldn’t have had the opportunities I’ve received so far.”

While Ives says a slice of luck played its

part, there are obviously a lot of factors that have contributed to Elite becoming a frontrunning team.

“I think the success is partly down to the dedication and determination of the team and, as a result, the growth certainly surpassed anybody’s expectations,” says King.

That growth includes a completely new series for the team in 2020 as it moves into the Mini Challenge JCW series for the category’s first season on the BTCC support bill. One of Elite’s new recruits for its first Mini foray, Renault UK Clio Cup runner-up Max Coates, has already been impressed by the dedication and attention to detail that King talks about.

Coates joined the team as it made one of its traditional pre-season visits to the Calafat circuit in Spain recently and saw the level of preparation Elite puts in.

“When you go to Spain you see why they’ve had the success in Ginetta Junior,” says Coates. “The kids that have gone out there have done full races. They’ve done race starts, safety car restarts, they’ve had experience of close combat racing. They learn other things like how to defend and what it’s like to attack.

“It just means when they come into it [and race] for the first time, it’s not a fresh experience.”

For Coates himself, the team’s track record of success was one of the big factors in him joining Elite as he moves into the Mini Challenge.

“That was initially the reason [he joined] – they’re a team that’s more than capable of doing a very good job in running racing cars,” he says. “The

results speak for themselves.”

But Coates – who is joined by Lewis Galer and Max Bird in Elite’s three-car Mini line-up – also picks out the staff Ives has recruited to help with the team’s first season of Mini competition as being another compelling factor. On the team’s books are Richard Skeels and Martin Poole, who were integral members of Eurotech’s Mini success with Brett Smith in 2017.

“While it’s a new team to the championship, it isn’t [because of the Mini Challenge experience it contains],” says Coates, who highlights the friendly atmosphere within the team as also being important. “That’s part of Eddie’s success, he’s got good people around him to come and do the job.”

Ives feels the move into the Mini Challenge is a perfect fit for his team as he seeks to expand its reach.

“I want to provide a ladder for our Junior drivers,” he explains. “With Ginetta Junior you build up some lovely relationships and it’s a shame after two years not to have something for them to fall into. To have a front-wheel-drive touring car-style option is no bad thing ▶



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Ives (l) enjoys helping his drivers improve



JEP/MOTORSPORT IMAGES

2018

Junior drivers Adam Smalley, Louis Foster, Greg Johnson, James Hedley, Fin Green and Jonny Wilkinson

Wins 17

Best championship position 1st (Smalley)

Ginetta GT4 Supercup driver Harry King

Wins 4

Best championship position 3rd (King)

This was when Elite really hit its stride in Ginetta Junior as Smalley and Foster were the drivers to beat for much of the season. The team ran six cars for most of the year and also moved into the GT4 Supercup for the first time with King (above).

2019

Ginetta Junior drivers James Hedley, Joel Pearson, Tom Emson, James Taylor, Tom Ward, Suleiman Zanfari and William Aspin

Wins 10

Best championship position 1st (Hedley)

Ginetta GT4 Supercup drivers Harry King, Reece Somerfield and Tom Emson

Wins 11

Best championship position 1st (King)

Ginetta GT5 Challenge drivers Adam Smalley

and Wesley Pearce

Wins 4

Best championship position 4th (Smalley) Another super-successful season as Hedley and King’s titles meant its drivers won two of the five BTCC support series crowns. For most of the season, Elite just ran three drivers in Ginetta Junior but it also expanded into the GT5 Challenge for the first time. Smalley (below) stayed with the team, progressing into GT5 and was a title contender.



JEP/MOTORSPORT IMAGES

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King's prowess at Brands finale allowed him to beat Burns (r) to GT4 title

and all three of our Mini drivers started out in Ginetta Junior.

"It [Mini Challenge] is oversubscribed and the cars seem very good. It's an exciting thing to be part of with its first year on TOCA."

Ives has made it clear that his existing Ginetta operations will not be diluted down to incorporate the extra work of running in the Mini Challenge, saying that new staff like Skeels and Poole have been recruited to specially work on that programme. But he also acknowledges that the presence of someone with the experience of Coates means there is pressure to perform in the new series from the start.

"Max wouldn't have come to us if he didn't feel confident," says Ives. "It adds a bit of pressure but we're going to try and win more than two

championships this year!"

To do that, Elite will have to make history in Ginetta Junior. No rookie has won the championship before but in 2020 Elite's six-car line-up is entirely made up of first-year drivers. Despite this, Ives describes it as being a "strong" team and is keen to maintain the run of success.

"They're all rookies but in no way does that faze us," he adds. "We've done some really good winter testing and I'm quite confident that our rookies can run at the front."

Another key factor that Ives believes has contributed to success in Ginetta Junior is the friendly environment he tries to create within the team for the youngsters.

"You need to have the right atmosphere – with Ginetta Juniors, you've got to remember they're kids and they've got

to have fun," he explains. "If they don't enjoy it, they won't [perform]."

Away from Ginetta Junior, Ives has also got high hopes for his GT4 Supercup and GT5 Challenge drivers, which will be announced in the coming weeks, as the team seeks to expand upon its 2019 glories.

But, as for the future, Ives is not getting carried away by the success of recent seasons and is remaining level-headed.

"The key thing with motorsport is to see what opportunities arise," he says when asked about what is on the horizon for Elite. "We had some cool opportunities this year with other series, which we haven't taken and might in the future. The key thing is reacting quickly to what's best at the time."

"We're very happy being among the support package for TOCA. I think they are the best championships to be in in the UK. It's the place to be, and look at the people that have come through those categories over the years."

As for his own driving career, Ives is more than happy to have switched to the team management role and stresses he does not miss racing himself.

"Every now and then I think I might do a guest round in something but I get just as much satisfaction – if not more – from working with our drivers," he says. "It ticks all of the boxes for me."

And it is a role that Ives has proved perfectly suited to having taken his team from its humble Sport Specials beginnings to becoming one of the most successful operations on the BTCC support bill. ■



Ives (r) does not miss his own racing days



It's a new decade
and a new start for
Clubmans as it
joins MSVR's stable

A NEW DAWN FOR CLUBMANS

Switching organising clubs has provided a boost for the long-running prototype series

BY STEPHEN LICKORISH

Brave. That's how one of the Clubmans Sports Prototype competitors describes the Clubmans Register's decision to end a 50-year association with the British Automobile Racing Club and move the series to be part of MotorSport Vision Racing's stable for 2020.

And it's difficult to argue with that assessment. Putting decades of shared history aside and jumping ship is a bold move from the championship's promoters. It was not the work of a moment or undertaken lightly. But the early signs, at least, suggest it could pay off handsomely.

While Clubmans, first launched back in 1965, featured a wealth of up-and-coming star drivers in its early days, the same cannot quite be said of recent years. There's no denying its illustrious history. Among those to have cut their teeth in the category have been British Touring Car champions Will Hoy, Frank Sytner and Chris Hodgetts, and multiple Le Mans 24 Hours winner Derek Bell. And even a future Formula 1 design hero was involved in the category, as Patrick Head worked on Clubmans cars long before his Williams days. Now, Clubmans wants to try to get back on the map again.

"I don't believe there's any formula in the UK where you can go racing in such a quick car at such a reasonable price, but we're under the radar for a lot of people," says Clubmans Register vice-chairman Peter Richings. "They know we're around but they don't think of us

as a potential class to go racing in.

"Yet the CSP1 top-class cars are seriously quick cars – 200bhp, 460kg, that's a pretty good power-to-weight ratio. And you can actually run a car like that – an ordinary working bloke can run one of those on a sensible budget if he's prepared to do a bit of work himself. But we feel we've been hidden away a little bit and we needed to break out and show what we can do."

Richings says the final round of last season was an interesting case in point. Instead of running as part of a BARC meeting as normal, the curtain closer was held at a British Racing & Sports Car Club Silverstone event in October. "Suddenly there were a whole bunch of different race categories alongside us and it was interesting how some of the competitors from other series were coming over and saying, 'These cars are interesting, they're quick, how much does it cost to run one of these?'" Richings recalls.

This experience, combined with the BARC being increasingly unable to offer Clubmans "races at the circuits we wanted to go to at the time we wanted to go to them", led category bosses to begin exploring other possible options and speak to alternative organising clubs. "What we found with MSVR, and what surprised us, was they were really enthusiastic to talk with us," continues Richings. "They were immediately so enthusiastic and said they would love us to come and race with them: 'Here's the calendar we can offer you, where would you like to come and race?' They offered us a calendar which looked good but they had us going to Snetterton twice.

"We said there's nothing wrong with Snetterton but we'd rather go elsewhere. They said, 'Where would you like to go?', and we said we like Croft, as it's a super circuit and one of our favourites and they said, 'We've got an arrangement with the Darlington & District Motor Club and they can run a race for us.' So we did ►

"We feel we've been hidden away a little bit and we needed to break out and show what we can do"

RICHINGS



The majority of the grid is made up of Mallocks, like this Mk27, but other manufacturers are represented

RICHINGS

that deal and it was just so easy.”

While he says “I’m not knocking the BARC, they’ve done a lot for us and have been great”, Richings adds that the improved calendar offering from MSVR was a key factor in deciding to jump ship. “Getting the right circuits and right spread throughout the year is really important,” he explains. But it was still a big decision to take as the Register will now be promoting the championship itself and buying the track time.

Early indications suggest that the move has proved to be a popular one. Autosport reported earlier this month that registrations had surged to 42, that figure including six drivers brand new to the championship and a further six who have decided to make a comeback. And that’s with still nearly two months to go until the Donington Park opener.

One of those returnees is Steve Chaplin. In more recent years he has been sharing a Peugeot 309 and an MG Midget with his son but, now that his Phantom P79’s engine has been replaced, he is ready to make a first Clubmans outing for over two years.

“The MSVR move is a brave move and it deserves supporting,” says Chaplin about his return to Clubmans competition. “MSVR have done some seriously good things over the years and I’ve been impressed with the upgrades to the circuits they own so I’m more than

“Clubmans is unique because everyone is really pushing to get everyone back out on track”

happy to be racing with them. There’s a buoyancy about the club [the Clubmans Register] and a fresh energy, and I wanted to be involved in it.”

Last year grids averaged 18 cars, but both Chaplin and Richings are confident that the changes will lead to higher entries, and not just registrations, this time around. Chaplin says the potential to boost grids is significant. “There are lots of Clubmans cars in garages and we need them back out on track – even if they only do one or two rounds,” he states.

For Chaplin, Clubmans was where he made his car racing debut in 2001. Since then he has raced a variety of other machinery including a Lola T332 F5000 car – which he describes as “a bit of a beast” – but still feels Clubmans stands out compared to other series. And not just because of the look of the cars. Many of the quirky prototypes feature tall rear wings and it is also one of the increasingly rare

series that is not one-make – the grid may predominantly feature Mallock models but cars from much smaller operations like Vision, Phantom and Gem are in action too.

Chaplin feels the paddock atmosphere also sets Clubmans apart from other classes. “Having experienced other championships, there’s friendships there but a substantial amount of rivalry,” says Chaplin. “Clubmans is unique because everyone is really pushing to get everyone out on track. Numerous times I’ve been in the paddock and they’ve had the head off a car and are replacing a valve. People muck in and I love it for that. The social side is also brilliant – it’s a great group of people. They’re down-to-earth racers and preparers and engineers.”

Richings, who first began racing in Clubmans back in 1979, and has spent fewer than 10 years away in Formula 3 and GT3 categories since, agrees. “Clubmans is a really close-knit community – it’s hard racing on the track but we’re all friends off it,” he adds. “If someone breaks a car, then everyone mucks in to fix it.

“Mike Evans, our chairman, had a startline accident at Thruxton last year. The car looked dreadful on the Saturday but by Sunday morning it had bits from three or four other people on it – someone’s wing, someone’s this, someone’s that and someone’s steering



Chaplin is excited to make a return to Clubmans racing with his Phantom



Richings (left) enjoys the camaraderie in the paddock



Sports 2000 is another series joining a new club

rack — and he was back on the grid and won the next morning. We really just want to build on that.”

Another of the ways Clubmans is looking to expand on its popularity is by trialling a new race format this year. “Over the last few years we’ve run a format where we have a two-day weekend,” explains Richings. “We qualify in the morning and race on Saturday afternoon. We then have another race on Sunday morning and one on Sunday afternoon. That’s been the format we’ve used for the last five years or so, which has proved pretty popular. But one or two of our competitors have said we could back off a little bit.

“So, what we’re doing this year is four weekends like that and two where it’s just a single day — qualify in the morning and two races in the rest of the day. We’re prepared to see how that goes and if the one-day format is more popular we will perhaps do three and three next year.”

While it’s not a radical change, it is an important example of a series organiser listening to its competitors and making appropriate changes. All of these tweaks, right from the appointment of a regular clerk of the course to the fundamental one of switching organising club, are designed with the competitor’s experience in mind, to try to boost popularity. And the Clubmans Register is keen to spread that

message as far as it possibly can.

“People have said we’re the best-kept secret in motorsport, but we don’t want to be a secret — we want people to know about what we’re doing,” says Richings. “This is a real opportunity for us to show what we are capable of.”

Clubmans is far from on its own in making this journey as an unprecedented number of championships have reached a similar conclusion and have decided to move elsewhere. Of the other eight categories to swap organising club for 2020, a particularly noteworthy one is Sports 2000. It features similar cars to Clubmans and it too has moved to MSVR. Richings believes the two series could complement each other nicely — after all, Sports 2000 was one of the categories at that October Silverstone meeting that generated such interest in Clubmans. “They seem to be a very similar bunch of people to us — a lot of owner-drivers, enthusiastic club racers,” he says.

Along with those other eight series, the new season marks a turning point in Clubmans’s history and Richings is very excited to be a part of it. “It’s a new decade and I’m convinced we’re going to do something quite special,” he concludes. “It’s a new dawn for Clubmans, if you like.”

A new dawn that seems to be getting off to a bright start. ■

BUILDING YOUR OWN SUCCESS

Matthew Booth runs his car himself with help from his dad, but that didn't stop a rookie F1000 title victory

BY STEFAN MACKLEY



Booth took five wins on his way to the F1000 title in his maiden season

The F1000 Championship is known as a competitive and unforgiving category, especially for newcomers to single-seater racing. Throw into the mix trying to run your own Jedi Mk6/7 car and for most drivers it would be a baptism of fire, with thoughts of a title challenge far from their mind.

But Matthew Booth not only survived in 2019, but he thrived, becoming just the second driver in the category's 22-year history to win the title in his first season. It's a success few would have believed possible at the start of the year – even with the absence of double and reigning champion Michael Watton – as 2013 champion Lee Morgan returned full-time and perennial race winner Dan Clowes was part of a strong field.

Championship success was nothing new for Booth, who won the 750 Motor Club Sports Specials crown in 2016 at the wheel of an MK Indy RR that he and his father Darryl had built themselves.

And when, in Booth's words, "the stars aligned" as F1000 moved from the British Racing & Sports Car Club to the 750MC at the end of 2018, he felt the time was right to switch to single-seaters having considered other bike-engined categories such as Bikesports and Sports 1000.

"I think within two weeks we'd gone and



STYLES



Thunder Saloons outings in ex-Triple Eight Vauxhall Astra

READ



JONES

Sports Specials outright title came in 2016 for Booth

bought the car and were getting ready for the season – a bit of a quick decision, but I knew it was the right one,” says Booth.

The right decision it certainly seemed to be from as early as the opening round at Brands Hatch, where he took two second places and just missed out on victory in his very first F1000 race by 0.06 seconds. Booth didn't have to wait long for his first win, which he described as the “high point of the season” and came in the second round at Silverstone. He followed that up with a brace at Croft to sit at the top of the standings.

But just when it seemed like a title tilt would be possible, off-track problems had arisen for the 25-year-old. “I think the low point of the season was not actually on circuit, it was just after Croft – the engine didn't sound that great when we fired it up, so we took it to the dyno to figure out what was going on and it dropped a valve,” says Booth. “That was about two weeks before Cadwell Park [the next round] so at that point I thought, ‘That's it, the season is done, we might end up doing one of the races at the end.’ It was quite disheartening.

“We managed to source an engine straight out of a scrap bike, dropped that in the car and took it to Cadwell and won a race. Going from that massive low of thinking the year was done to

getting a win at a circuit that to be honest I absolutely hate, that was the biggest challenge for me.”

Unlike many drivers in F1000 who have cars maintained by teams including JFK Racing, Jedi Racing Cars and Mittell Cars, Booth services his own machine with help from his dad and Tony Tait. It was through Tait that Booth worked on and drove a former British Touring Car Championship Triple Eight Vauxhall Astra in Thunder Saloons in 2018 and at the start of 2019.

With attention often focused on preparing the Jedi, Booth believes his performances on track have suffered to an extent, so there's still plenty more within him that remains untapped. “You see some drivers using sims and stuff like that – I do none of that,” he says. “When I'm at home all I do is work on the car, I don't actually work on myself as a driver because I don't get the time. I'm doing it [car maintenance] all myself.

“It was tough and I think it would have been better to prepare myself more for races because it's the easiest component to improve in the racing car. But then when it goes well and you're getting wins before I do that, it makes you smile even bigger because we're putting so much time and effort in; it paid off.”

Paid off it did indeed, as a win and two

second places in the penultimate round at Donington Park put him in prime position to win the title in the final round at Snetterton. But there was one final twist in his rollercoaster season as a clutch cable snapped during the penultimate race of the season when the title was within his grasp.

“It was all right on the upshift because it's a got a flatshifter, but on the downshift it was struggling so I had to ram it through the gears and rev-match it – it was a bit harsh on it [the engine],” he recalls. “I managed to get it around to the end, but there was oil absolutely everywhere on the back end of the car.”

Third place was enough to give him the title with a race to spare, and for 2020 he plans to return and win the title again, even though he will be focusing on finishing a part-time degree during the first half of the season.

And despite the success, Booth is keeping level-headed when considering his long-term objectives in racing. “I just see motorsport as what it is and it's what I enjoy,” he says. “It's my hobby and I think if I don't overstretch myself financially, then I can enjoy it much more than if I tried doing something else [a different series], which I don't see happening as there's no ladder to anywhere. I would rather just enjoy what I do and be happy with that.” ■

HOW A THRUXTON DEBUT LEFT A LASTING IMPACT

The personal story of the BARC Finals event in 1973 that fired the imagination of a teenage motorsport fan

BY MARCUS PYE

PHOTOGRAPHY  **motorsport**
IMAGES



South (40) and Manning battled for Formula Ford honours



iving barely 25 miles from Thruxton circuit was exciting but frustrating for a petrolhead too young to hold a driving

licence, thus reliant on parental availability and transport. The Hampshire airfield had reopened its gates to racing in March 1968, 18 months after Goodwood's closure obliged the British Automobile Racing Club to seek a new home, yet I missed most of its first six years. When I did get there for the first time, for the 1973 Championship Finals, I was blown away. A new chapter of my life began that day.

28 October 1973 is a date indelibly printed in my memory. Although my father had taken me to British Grands Prix at Silverstone and Brands Hatch since we moved from south London in 1962, and we'd visited Castle Combe with my godfather in the interim, Thruxton remained tantalisingly outside our orbit. Cruelly, my brother and I even saw action there from the west country trunk road on a wet family expedition to Salisbury!

When our neighbour, Peter Roderick, dropped into conversation that he was planning to take his son to the cathedral of speed on Sunday, and "would you like to come, to explain what it's all about?", I didn't need a second invitation. Talk about counting the hours, and keeping everything crossed that it wasn't going to be tipping with rain. Fortuitously it was a beautifully sunny autumn day and, although we didn't arrive in time to witness practice, the 'debut' experience was sensational. Far more than I'd dared to hope for.

The first thing I remember as we approached the track crossing, beside the footbridge after the Club chicane,

“The first thing I remember was the sight of John Jordan's wrecked McLaren M6B being towed”

was the sight of John Jordan's wrecked ex-John Woolfe McLaren M6B being towed forlornly home on an open trailer, following a contretemps with the scenery that put the Biggleswade flour miller in hospital. Only in recent weeks has Jordan's faithful mechanic Dave Finnigan called me to say that more than 46 years later the car's rebuild is nearing completion!

In the pre-Sunday-shopping epoch of large audiences – with not much else besides church vying for punters' time – and what look now like absurdly low entry fees for competitors and prize money, the Wella Formula Ford combatants were ►



on track first at 1330. American Ted Wentz had already wrapped up the championship in an Elden, although he would be stunned when the Basingstoke-based hair care giant title sponsor unveiled a new Formula Atlantic March rather than a painting and some money at the prizegiving weeks later.

Roger Manning (Air Call Elden Mk10) and Stephen South (in one of former Chequered Flag team mechanic Bert Ray's eponymous cars) duelled for victory and runner-up spot in the table. Manning's scarily quick traverse of the chicane on the final lap earned him the race and the place from South, who had taken the slip road, and Wentz. The latter's compatriot and team-mate Denny Shattuck staved off future Sports 2000 champion and Historic F1 Williams racer Richard Eyre and upwardly focused Colin Vandervell in Dulons. Elden designer Peter Hampsheir still attends Historic FF1600 races, incidentally, although brother Brian died recently.

The Forward Trust F3 title had been secured ahead of time by Ian Taylor in Chris Andrews's Baty Group March 733, now raced by Andy and Adrian Langridge in Classic F3 events. Newbury man Taylor, future king of Sports 2000 in Howden Ganley's Tigas, would play an enormous part in Thruxton's future as principal of its racing drivers' school, until his untimely death in a Rover 216 GTi at Spa in 1992.

“Manning’s scarily quick traverse of the chicane on the final lap earned him the Formula Ford win”

Richard Roberts qualified his Myson March 733 second but overcame the similar car of pseudonymed Brazilian ‘Teleco’ and Taylor in the short eight-lap race, which lost Mike Wilds (Dempster 733) whose engine blew in practice. Best of the rest was American Tony Rouff, whose GRD finished well clear of irrepressible Yorkshireman Barrie Maskell (Hesketh Racing Dastle Mk10B).

Future F2 race winner Alex Ribeiro's UK debut was over when he crashed his hired March in the morning, but Glenn Eagling enjoyed Teddy Savory's Team Modus 733. Essex man Roberts, who equalled the brilliant Tony Brise's points tally in the ‘rival’ MCD F3 series, albeit with two wins to Brise's three, found backing for an F1 Brabham drive for 1974, but Ensign graduate Rikky von Opel's deeper pockets meant Roberts was dropped after three races.

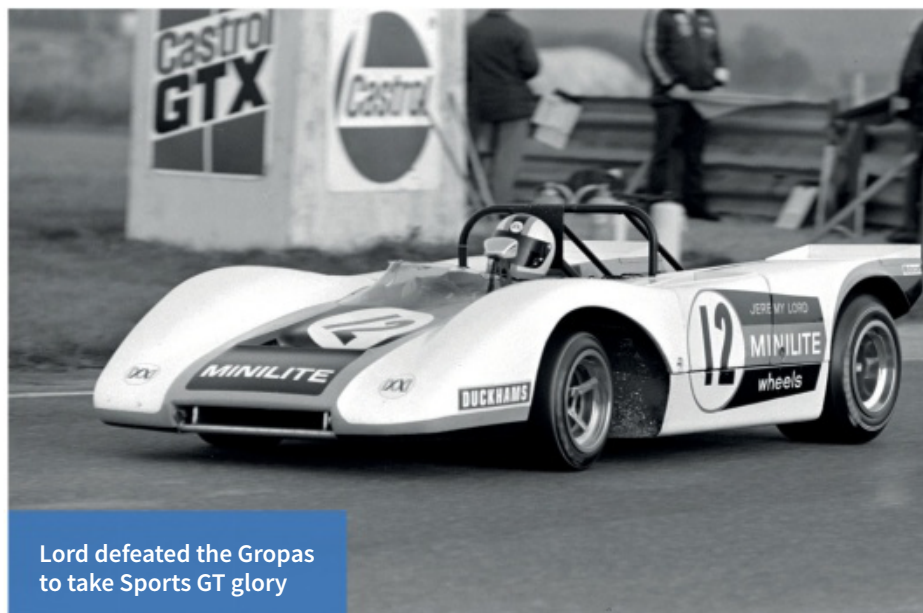
Special Saloons always commanded

a big following, particularly when Gerry Marshall was in action for Dealer Team Vauxhall and his fan club turned up in support. The Forward Trust championship thus reached a rousing climax with spectators waving their programmes.

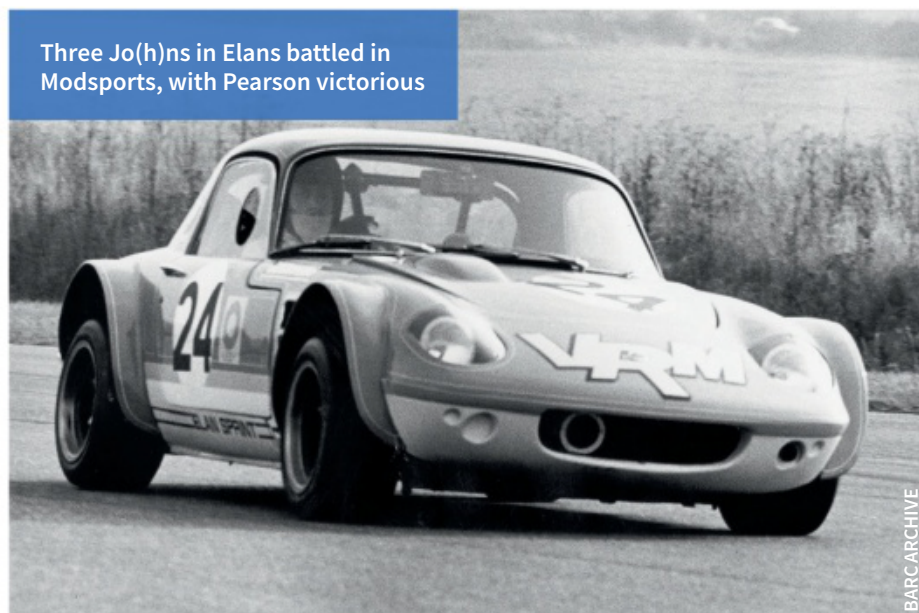
Two of the best ‘hybrids’ sandwiched Marshall's Firenza on the front row of the 3-2-3 grid, Tony Hazlewood's DAF-Oldsmobile 55 coupe and local hero Brian Cutting's F1 Martin V8-engined Ford Escort, with considerable power advantages but less nifty handling.

The lead scrap lost Cutting to a smoky retirement, but continued unabated. Hazlewood grabbed the twitchy DAF by the scruff of its neck and boldly snarled past Marshall up Woodham Hill on lap six to gasps from the gallery, only to become mired in traffic at Allard, which enabled Marshall to pounce decisively. Two laps later Hazlewood took the chequered flag 1.4s shy, but immortalised in Thruxton lore as the first saloon car driver to lap at 100mph (1m24.6s, 100.26mph). That very week featured the announcement of a Super Saloon championship for 1974 in which Hazlewood and Capri V8 star Mick Hill were centrally involved and Marshall would bring out the ill-starred Ventora-Repcos ‘Big Bertha’ among the cream of the British Isles' no-holds-barred tin-tops.

More conventional ‘Specials’ still comprised the majority of the fields,



Lord defeated the Gropas to take Sports GT glory



Three Jo(h)ns in Elans battled in Modsports, with Pearson victorious

BARC ARCHIVE



Motoring News editor Mike Cotton presents Lord his trophy



Wentz had secured FF1600 title prior to Thruxton finale

with Mini Cooper Ss often to the fore. At Thruxton, John Watts finished a 1300cc class-winning third overall from Ian Briggs and Phil Winter, taken too soon in a road accident. The 1000cc class was the domain of Hillman Imps as usual with Ray Payne, doyen of engine builders at Team Hartwell in Bournemouth, uncatchable as a phenomenal 90mph lap record attested. Peter Crouch was best of the 850cc brigade in his Mini.

My recollections of the Britax Production Saloon race are slim beyond the Chevrolet Camaros of the ambitious Richard Lloyd and Stuart Graham blasting away from the rest in classes set by purchase price. Reading Robert Fearnall's Autosport report reminds me that *Motor* magazine editor Roger Bell and FFord racer Donald Macleod headed the chase in closely matched BMW 3.0Si models.

With Gerry Marshall as tail-gunner in a similar Hillman Hunter, veteran Bernard Unett – later a triple British champion in Chrysler products – claimed a class, as did Ivan Dutton (Ford Escort Sport) and former F1 driver Tony Lanfranchi (in a Russian Moskvich 412, de rigueur in the under-£800 class). Dutton, a leading Bugatti specialist and connoisseur of obscure competition cars, was difficult to topple in Escorts. He continues to compete occasionally in Lotus and TVR cars.

The Castrol/*Motoring News* Sports GT

race boasted an eclectic mix of machinery, over which future British F3 Championship prime mover Jeremy Lord prevailed in the Tech-Del/Minilite wheels 1600cc Lola-FVA T212, long resident in New Zealand. The Bournemouth solicitor was pursued by a pair of Gropas (Andrew Mylius's Graphics Racing Organisation Prototype Automobiles, in case you are wondering) powered by two-litre BMW M10 engines, in the hands of John Markey and former Lotus 7X Clubmans ace Tim Goss, both useful drivers.

Fourth was 'Lee Kaye' – a commentator-friendly moniker chosen by Pole Leopold Kasprowicz – in Tony Birchenough's red and white Dorset Racing Lola T290 HU22, the ex-Guy Edwards car that contested five Le Mans 24 Hours and is now in Pink Floyd drummer Nick Mason's collection. First of the tiddlers after Racing Gearbox Centre proprietor Mike Andrew's Alexis retired was Lyndon Thorne's swift Aldon.

Lotus Elans ruled the roost in the Blue Circle Modsports arena, John Pearson in the Victor Raysbrook Motors example heading recent HGPCA Brabham and Historic FF1600 Titan racer John Evans and Rochdale's finest Jon Fletcher in a podium lockout. Fletcher's car started life as one of Graham Warner's Chequered Flag 26Rs, raced by the likes of Jackie Stewart. Elsewhere in the varied pack, running to more rigorous regulations than the Special

Saloons, Guy Bedington's Jaguar E-type V12, Andy Fraser (Marcos 3-litre) and Roger Cowdry (Ginetta G4) were class winners.

The day was overshadowed by a ghastly accident that claimed the life of Brian Hough, whose ex-Ted Worswick/Richard Taft 5.4-litre TVR Tuscan spun and hit the bank at Kimpton. Long-time racer Hough's Mayfield Motors business was the TVR dealership in Wallasey. Ironically, eight months later, Chris White died when he crashed the other big Modsports Tuscan at Oulton Park's Knickerbrook corner.

That first visit to Thruxton sealed my fate. I started attending events regularly in 1974, particularly enjoying F2 and F5000 features, and Super Saloon races. I even walked there once from Andover rail station. After signing up as a BARC junior racing assistant, I lap-charted for Autosport publisher Simon Taylor in the commentary box at Club, grid-marshalled and became closer to the action. Having made my race debut there in 1981 in Pine City Racing's Van Diemen RF80, I've raced in FF2000, two-litre TOJ and Chevron sportscars, and finished a neck-sapping third in a BOSS Formula race in an ex-Damon Hill F3000 Lola with a 3.5-litre Cosworth DFZ F1 engine. Now I commentate and report from my local track and continue to love every second. ■



FROM THE ARCHIVE

David Ellis developed his own Aston Martin V8 for many years, creating one of the fastest club racers of the 1980s. Here he is in the interestingly

titled '1275 GT Centre Howley Racing Sports/Saloon Challenge' at Mallory Park in September 1988, a race in which he "simply blasted the opposition away", according to Autosport.

The Aston Martin Owners Club eventually banned the car and it would be more than a decade before Ellis returned with an even more outrageous Aston special.



Have we missed something? Let us know:
autosport@autosport.com



CLUB GUIDE

Interested in competing and want to take the next step?
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ALL PICS: JONES



500 Motor Racing Club of Ireland

kirkistown.com
028 4277 1325

750 Motor Club

750mc.co.uk
01332 814548

Aston Martin Owners Club

amocracing.com
01865 400400

Bentley Drivers Club

bdcl.org
01295 738886

British Automobile Racing Club

barc.net
01264 882200

British Racing & Sports Car Club

brscc.co.uk
01732 780100

Castle Combe Racing Club

ccracingclub.co.uk
01249 784160

Classic & Modern Motorsport Club

cmmotorsportclub.com
01225 777606

Classic Sports Car Club

classicsportscarclub.co.uk
01225 810655

Darlington & District Motor Club

darlingtondmc.com
01429 869407

Equipe Classic Racing

equipeclassicracing.com
01279 883292

Fifties Sports Car Racing Club

fiscar.org

Formula Junior Historic Racing Association

formulajunior.com
07871 046031

Goodwood Road Racing Club

goodwood.com/grr
01243 755057

Historic Racing Drivers Club

hrdc.eu

Historic Sports Car Club

hsc.org.uk
01327 858400

Lydden Hill Motorsport Club

lyddenhill.co.uk
01304 830557

Masters Historic Racing

mastershistoricracing.com
01234 713800

MG Car Club

mgcc.co.uk/motorsport
01235 555552

Mondello Park Sports Club

mondellopark.ie
+353 (0)45 860200

Motor Racing Legends

motorracinglegends.com
01379 678101

MotorSport Vision Racing

msvracing.com
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Caterham SV 2.0 Duratec	£850.00	£650.00	£500.00

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