F1 2021 HOTS UP Red Bull hits out at Lewis after Max clash

PETRION

4

BRITAIN'S BEST MOTORSPORT WEEKLY

BRITISH GP DRAMA HANNELTON Home hero and Red Bull's villain

Charging recovery brings eighth Brit GP win as Verstappen

rivalry boils over

'The penalty doesn't fit the crime – it was a desperate move'

CHRISTIAN HORNER

'I was fully alongside and he didn't give me any space'

LEWIS HAMILTON

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Now the gloves are really off in Formula 1's latest great rivalry

A Max Verstappen-Lewis Hamilton clash was always going to happen eventually, but it doesn't get much more dramatic than at a high-speed corner in front of a full house at Silverstone.

As we show in our race report on page 14, the incident has split opinion and has definitely increased the tension in the title fight. That Hamilton was able to go on and brilliantly recover to victory despite his 10-second penalty surely only added to Red Bull's ire (p4).

And that raises a key point. Some have suggested that the 'penalty should fit the crime, but what they really mean is that it should fit the consequences of the crime. But it's not necessarily right that because a car ends up in the wall that should mean a harsher penalty. There are too many other factors that come into play that influence the outcome of a clash. You could spin someone around and they simply recover and return to the race, or they might get T-boned and cause an enormous accident. But the offence, the contact, was the same.

Considering how aggressive Verstappen always is - Hamilton has been the one to make sure they don't crash on a number of occasions - it seems a bit rich for Red Bull to be quite so vehement about the clash, which was probably 60-40 Hamilton's fault: he just didn't get the nose into the apex as he did later against Charles Leclerc.

There should be no more recriminations, but what is clear is that we now really do have all the ingredients for a classic F1 rivalry.



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Coates, Dunbar/Motorsport Images

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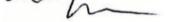
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29 IUI V

FREE WITH THIS ISSUE



ENGINEERING SUPPLEMENT We look back at the story of Superleague Formula, explain DTM's BoP and discuss how historic racing can go green.

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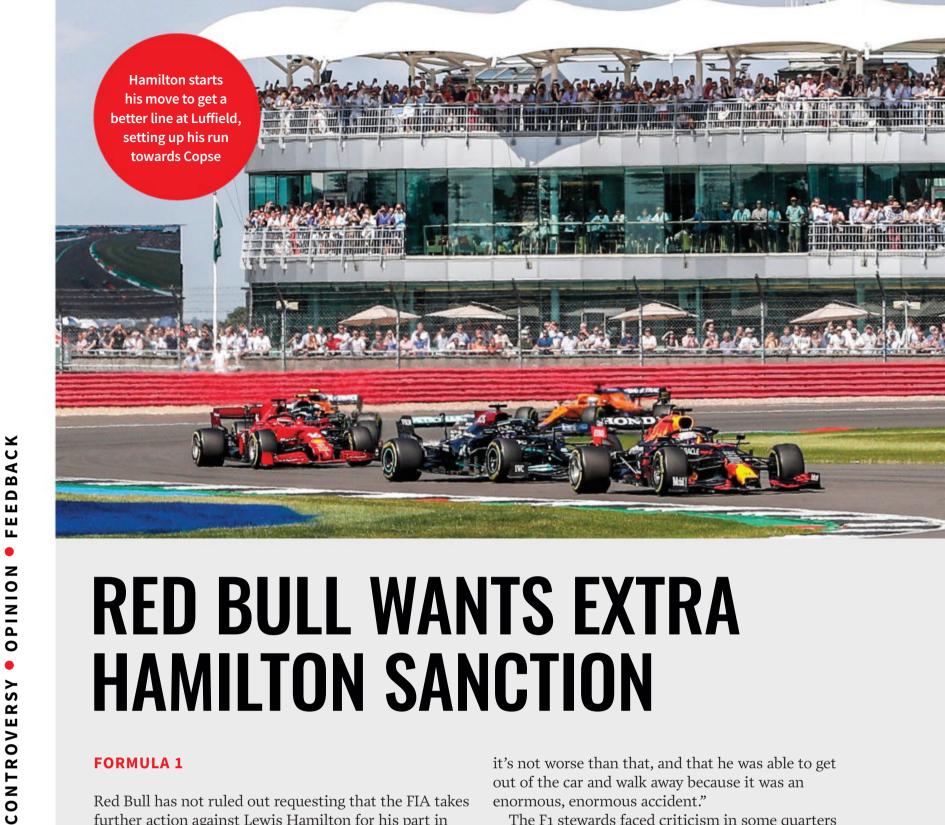
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RED BULL WANTS EXTRA HAMILTON SANCTION

FORMULA 1

Red Bull has not ruled out requesting that the FIA takes further action against Lewis Hamilton for his part in Max Verstappen's crash in the British Grand Prix.

Verstappen spun into the barriers at Copse Corner on the opening lap of the race after clashing with title rival Hamilton's Mercedes. Hamilton got a run on Verstappen on the blast to Copse and drafted alongside the Red Bull on the entry to the corner. But with Verstappen not conceding ground, he clipped Hamilton as he turned in and was pitched off the track.

The FIA ruled that Hamilton was guilty of causing the crash and he was handed a 10-second penalty, from which he recovered to win the race.

Red Bull motorsport advisor Helmut Marko suggested that a regular punishment such as this was not enough for Hamilton, and suggested that the FIA should even consider a race ban.

Red Bull team principal Christian Horner said the team would evaluate its options on whether to take the it's not worse than that, and that he was able to get out of the car and walk away because it was an enormous, enormous accident."

The F1 stewards faced criticism in some quarters about the leniency of Hamilton's penalty, in light of Verstappen's high-speed accident and the fact that the Mercedes went on to win the race. But F1 race director Michael Masi said that it is a fundamental principle that stewards do not take the consequences of an incident into account when giving penalties. He also stressed that the team bosses had been part of the discussion when it was agreed to take that route.

"I think one of the big parts that's been a mainstay for many, many years, and this came through discussions prior to my time between all of the teams, the FIA and F_1 – and the team principals were all quite adamant – is that you should not consider the consequences in an incident," said Masi.

"So when they judge an incident they judge the incident itself, and the merits of the incident, not what happens afterwards as a consequence. And that's been something that the stewards have done for many years." Asked about Red Bull's complaints that the punishment not being harsh enough, Masi said: "I think if you look at it on that basis you'll never find a penalty that will address an imbalance like that. That is why going back a few years, the teams, or team principals, made a clear distinction that they didn't want consequences taken into account, they wanted it based on the incident itself." While Red Bull fears that the RB16B chassis is a write-off, engine supplier Honda believes that the car's powerplant could be salvaged. If it is irreparable, then it could force Verstappen to take the third and final engine of his 2021 allocation at next week's Hungarian GP. That

DEBAT

S

NEW

matter further, although he was sceptical that any effort would be successful. "There are rights that are available to us, but I think unfortunately the result... the stewards are pretty set in their decision," said Horner. "I think it will be meaningless to take things further, but we'll look at it. We'll talk it through shortly, but that would be my initial reaction."

According to the FIA rules, Red Bull would in theory need to find some fresh evidence to have a case for further action. It could also potentially request that the FIA investigates the matter further.

Horner said that Verstappen was 'bruised and battered' after the crash: "It is the biggest accident of his career, a 51g incident, so I'm just grateful that





would then put him on a cycle where he would likely require a fourth engine – and therefore incur a grid penalty – towards the end of the campaign.

Honda F1 technical director Toyoharu Tanabe said he initially feared the worst for the power unit, but that post-race analysis has offered some optimism, although a full inspection will be needed in Japan to be sure.

"When I first saw the images of the car being lifted, I thought there was a lot of damage," said Tanabe. "But in reality it seems that the damage is less than what we first saw. However, the actual damage cannot be known from its appearance when it is installed in the car. So we would like to send it back to HRD in Sakura and check it before making a decision."



Is this the future of F1? Don't bank on it...

FORMULA 1

When Formula 1 unveiled its fullscale model of its 2022 regulation concept ahead of last weekend's British Grand Prix, it did so amid the keen anticipation surrounding the return of a ground-effect formula. Although the holographic livery looked like it belonged more to an early-2000s football sticker than a racing car, the car itself offered a hint of what to expect next season.

Except... the fleet of cars that will eventually grace next year's grid won't entirely look like that model. Although there have been fears that the prescriptive nature of the new generation of F1 cars will result in them looking vastly similar, there's plenty of space for the teams to explore and hone their 2022 challengers into very different machines to each other's.

F1 had to pick its most attractive designs to sell the ruleset to the fans, while F1 teams rarely stop to consider the aesthetic qualities of a design. Pragmatism reigns after all, and the engineers will thus take the opinion that whatever works best in the windtunnel is the most attractive solution for them. To take the example of the nose design, the teams will have to consider whether the wider nose on the F1-approved model or a more slender design will yield the right effect. This will then affect how the rest of the car's aero surfaces are defined. The more stringent regulations

do provide designers less room to manoeuvre, but F1's design departments are stocked with some of the brightest minds in the engineering world. They will therefore naturally find ways to sidestep some of the regulations' intentions.

That's something we've seen before. Back in 2012, the reduction in nose height was met with the stepped-nose solution, where the teams opted to keep the chassis bulkhead as high as possible to reduce the aero impact and create a sudden transition to the nosecone to meet the rules. It wasn't a particularly pretty look, all things considered. And the less said about 2014's cast of 'proboscis' noses, the better...

It's also not the teams' prerogative to completely toe F1's line on abetting close wheel-towheel racing; they'll want their cars to be difficult to overtake. Sensibly, the technical group behind the regulations' creation attempted to think around the wording of them and cover off

HAMILTON SUFFERS RACIST ABUSE

F1 chiefs strongly condemned the racist abuse aimed at Hamilton on social media after the accident. F1, the FIA and Mercedes issued a joint statement on Monday. saying: "[We] condemn this behaviour in the strongest possible terms. These people have no place in our sport and we urge that those responsible should be held accountable for their actions. Formula 1, the FIA, the drivers and the teams are working to build a more diverse and inclusive sport, and such unacceptable instances of online abuse must be highlighted and eliminated." **JONATHAN NOBLE & ADAM COOPER**

P14 BRITISH GP THRILLER

anything that might dilute the desired effect.

At some point, F1's teams will start the usual convergence where the best ideas are implemented on other cars. Either way, it's going to be exciting to see what they come up with, and if those switching their attentions early to 2022 will benefit. We may be having a great F1 season now, but the new rules can potentially yield even better ones.

JAKE BOXALL-LEGGE

Alfa open to new line-up for 2022

FORMULA 1

Alfa Romeo has not ruled out replacing both its Formula 1 drivers next year, with Kimi Raikkonen and Antonio Giovinazzi being urged to lift their game.

In the wake of the Swissbased team's new deal with the Italian manufacturer, which is believed to extend to 2024, boss Fred Vasseur has been given carte blanche to make a call on who he wants at the team in 2022.

Asked at last weekend's British Grand Prix if it was essential to retain at least one driver for continuity, Vasseur said: "It could be a point, but it's not necessary. We'll do the choice when it will be the right time to do it. We could keep the same line-up or we could change, but everything is open. "I think it's also quite comfortable for the team to have everything open. It's good for Antonio and good for Kimi. I don't have the feeling that to be under pressure is fundamentally bad. I think that we need the pressure to perform and I don't want it to be an easy world."

Vasseur confirmed that both drivers are out of contract at the end of this season, and that there is no option on Raikkonen's side for him to lay claim to a seat for 2022. And while he says that Giovinazzi's strong run of form puts him in good stead to carry on, Vasseur was clear that he still wanted to see more from the Italian.

"He is part of the family," he said. "He is improving, he did a good job [at Silverstone] again, and he will be at the top of the list for next

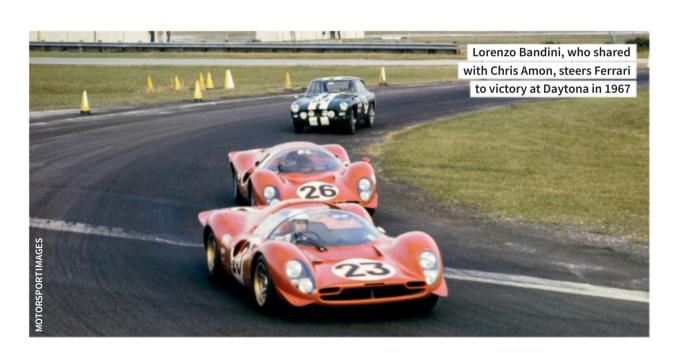


year. Now I want to see more improvement, and more results into the race. "Everybody's under pressure. I am under pressure, the engineers are under pressure, the drivers they have to be under pressure. It's a world of pressure." JONATHAN NOBLE

New Ferrari Hypercar set for IMSA

IMSA

The new Ferrari Le Mans Hypercar scheduled to come on stream in 2023 is "probably" going to race in the IMSA SportsCar Championship. But no plan for the new World Endurance Championship contender to cross over into the North American series has been put in place,



and exactly when it might make it across the Atlantic remains far from clear.

Antonello Coletta, who is heading up Ferrari's return to the pinnacle of sportscar racing in his position as boss of the Attivita Sportive GT, has admitted that an IMSA programme is on the radar. It follows the news earlier this month that the final strands in the process of convergence between LMH and the LMP2-based LMDh formula have been put in place for 2023. Asked if the new Ferrari, which is due to begin testing in the second quarter of 2022,

will race in IMSA, Coletta replied: "Probably.

It is a dream for the fans and for us. I hope we can have this chance, but we will have to assess it in the future."

Coletta described the confirmation that LMH machinery will be able to race in IMSA as "good news for motorsport" and pointed out that the US is "the primary market" for Ferrari. The marque also, of course, has a rich heritage in IMSA: it has won the seasonopening Daytona round on five occasions. But Coletta ruled out an IMSA entry in 2023. "Impossible" was the word he used to describe a North America programme in year one of the Ferrari LMH. "At the moment we are concentrating on our project and our involvement in the WEC," he explained. Coletta suggested that it would be premature to say whether Ferrari would run a full factory operation as in the WEC or team up with one or more customers should it expand its programme into IMSA. No decision has been made on whether the LMH will be available for sale to independent teams.

"We will concentrate on our two factory cars, then we need to decide if we are open to customers," he said. "Now it is too early." GARY WATKINS

Ilott at Le Mans with Iron Lynx

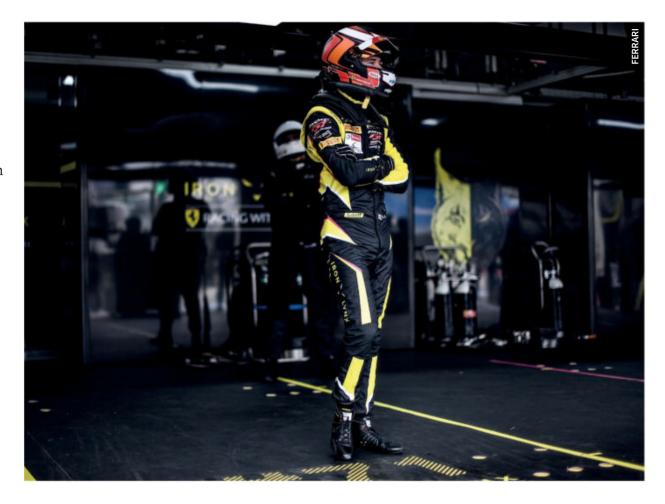
LE MANS 24 HOURS

Alfa Romeo Formula 1 reserve driver Callum Ilott will make his Le Mans 24 Hours debut next month. The Ferrari Driver Academy member will race one of the trio of the Italian manufacturer's 488 GTE Evos fielded by the Iron Lynx squad.

The Briton's (right) maiden sportscar programme with Ferrari this year has been expanded from an assault on the GT World Challenge Europe Endurance Cup with Iron Lynx, as part of an all-factory driver line-up, to include the centrepiece World Endurance Championship round on 21-22 August. Ilott will drive alongside Matteo Cressoni and Rino Mastronardi in place of Andrea Piccini, who will be concentrating on his role as team principal.

Ilott described being chosen to race at Le Mans as "a real honour" and "an opportunity I just couldn't turn down".

Like Ilott, reigning WEC GTE Pro title winner Nicki Thiim will also be racing in the Am ranks at Le Mans. The Aston Martin factory driver has been brought into Paul Dalla Lana's NorthWest AMR Vantage GTE in place of Augusto Farfus, who will be competing for Hyundai in the clashing round of the Pure ETCR series at the Hungaroring. Full-season WEC drivers Dalla Lana and Marcos Gomes will be his team-mates.



Le Mans will be only the second outing at the wheel of an Aston for Thiim this year in the wake of the British manufacturer's withdrawal from the GTE Pro ranks. The Dane will race a factory-backed Vantage GT3 entered in conjunction with the Garage 59 squad in the Spa 24 Hours round of the GTWCE on 31 July-1 August alongside compatriot and 2019-20 GTE Pro cochampion Marco Sorensen, and Ross Gunn.

Sorensen will also be back at Le Mans this year for what will be his seventh

participation. The 30-year-old will make his prototype debut in LMP2 with Danish entrant High Class Racing.

Sorensen will share the team's full-season WEC ORECA with reigning IMSA SportsCar champion Ricky Taylor and team regular Dennis Andersen. High Class has reshuffled its line-up in the #20 entry because Jan Magnussen and Anders Fjordbach are racing the team's Le Mansonly car together with Kevin Magnussen. GARY WATKINS



Keselowski tipped to be his own boss

NASCAR

Brad Keselowski has explained that his "difficult" decision to leave Team Penske's NASCAR Cup squad is motivated by "a new opportunity and challenge" of an as-yet undisclosed nature.

Keselowski, who in 2012 gave Penske its first title in NASCAR's premier division, will become a co-owner in a new Roush-Fenway-Keselowski team, it was announced last week that Keselowski will depart Team Penske at the end of this season, with 2020 Xfinity Series champion Austin Cindric replacing him in the #2 Ford in 2022.

In a statement, Keselowski said his time driving for Penske

included the 2010 Xfinity title.

On the subject of why he is leaving Penske now, the 2020 Cup runner-up said it was to "embrace a new opportunity", without elaborating further.

"I am both excited and eager to share the details of what's next for me soon," he said. "Right now, my focus remains on winning more races in 2021



has driven for the team since the end of 2009. Following speculation that he was a "tremendous opportunity" and that he was "proud" of their success together, which also and giving it my all to take down our second championship." CHARLES BRADLEY



Ogier in the running for Toyota Le Mans Hypercar test

LE MANS 24 HOURS

Seven-time World Rally champion Sebastien Ogier is in discussions for a test in Toyota's new GR010 HYBRID Le Mans Hypercar as the next step on the road towards fulfilling his ambition to race at the Le Mans 24 Hours.

Ogier has revealed that talks are ongoing about a try-out in the GR010 developed for this season by his current employer, something that has been confirmed by the Toyota Gazoo Racing Europe squad in Cologne. It has also emerged that he has already driven a Toyota prototype on the simulator: he sampled the outgoing TS050 HYBRID LMP1 car over two days last July.

"Nothing is decided yet," said Ogier. "I have some work [to do] and am going to have a test at some point to see what I can do with this car."

TGRE technical director Pascal Vasselon described a test for Ogier in one of its GR010s as "something that is in discussion, something we are looking at".

Ogier has talked openly about his aspirations to follow in the footsteps of the likes of Jean Ragnotti, Colin McRae and Sebastien Loeb in crossing over from rallying to race at Le Mans. To that end, he has decided against contesting a full WRC programme in 2022.

The most obvious opportunity for Ogier to sample Toyota's LMH will be at the WEC rookie test, which is being revived for this



season and will take place the day after the series finale in Bahrain, on 7 November.

Toyota never discusses plans for its line-ups for the season to come, but it should be taken as read that a 37-year-old driver with only a handful of race starts to his name isn't in contention for a fullseason seat. His hopes of racing for Toyota would appear to hinge on the Japanese manufacturer fielding an additional car at Le Mans, as in 2017. Toyota hasn't ruled that out for next season, but it has stressed that it would only expand its participation in the double-points WEC round if the resources are in place not to compromise its assault. GARY WATKINS & TOM HOWARD

🔁 P38 RALLY ESTONIA REPORT

Energy cut to prevent boring London races

FORMULA E

to regenerate energy.

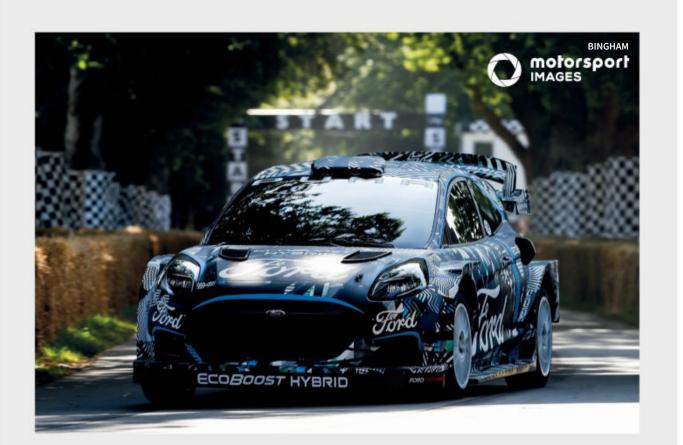


The FIA has deducted 4kWh from the energy total each Formula E car may use in this weekend's London E-Prix double-header to allay fears of processional or crash-strewn racing. A revised layout for the partially indoor ExCeL Centre circuit dispensed with a fast final sector and added a hairpin and chicane. This created bigger braking zones and more chances Team simulations revealed that the usual need to recover 30% energy to finish would be cut to 5%. A strategy stalemate was predicted, while some drivers feared overheating brakes – with lifting and coasting not required – would increase the likelihood of collisions. The wording of the FIA regulations only prescribes an upper limit of 52kWh per race, allowing the governing body to

wind it back for the London races, which will be broadcast live on Channel 4.

An FIA statement read: "As the management of the energy consumption is key to Formula E, and to avoid flat-out races, it has been decided to reduce the total amount of available energy to 48kWh for the races of London."

MATT KEW



Ford steps up M-Sport support

WRC

Ford has stepped up its support of M-Sport's World Rally Championship programme through the development of the all-new 2022 hybrid Puma.

The Blue Oval's interest in the WRC has heightened following the introduction of new hybrid Rally1 regulations in 2022, which has resulted in more input into M-Sport's plans for rallying's new era.

Earlier this month, M-Sport became the first team to officially launch its Rally1 weapon with the unveiling of its Puma at the Goodwood Festival of Speed. The launch signified Ford's renewed interest in the sport, with its global CEO Jim Farley and Ford Performance boss Mark Rushbrook in attendance.

According to Rushbrook, Ford has been heavily involved in the development of the Puma, with its engineers sharing knowledge of hybrid technology and aerodynamics. "Certainly we have increased our support with the development of the new car and being as engaged as we are," Rushbrook told Autosport. "M-Sport are great partners and always have been. Like we complement each other with our partners.

"M-Sport has always been very good at developing new cars and we expect the same in this case. But with the new technology with hybrid we are able to bring in some of our calibration engineers to help with the software strategy, and also aerodynamics and vehicle dynamics simulation are other areas we can contribute to the new car. We have always had a good relationship on the powertrain and all of that continues."

M-Sport has been effectively running a semi-works effort in the WRC since 2013 with Ford an active partner and sponsor, but the operation is not a full factory effort compared to rivals Toyota and Hyundai.

Rushbrook stopped short of saying that the marque would return as a full factory team in the near future. "That is probably not something I would comment on," he said. "We participate in the FIA Technical Working Groups and we were part of that in terms of developing these new regulations. We think it's an exciting change for the sport and we expect the fans to be engaged with it as well as they start to see the performance and technology in the cars."

IN THE HEADLINES

PITSTOP CLAMPDOWN DELAY

The FIA's clampdown on "automatic" Formula 1 pitstops has been postponed from the Hungarian Grand Prix until the Belgian GP. The delay comes after the governing body issued a new technical directive, which takes away some of the minimum time requirements (based on human reaction times) specified for different aspects of the stop sequence. The FIA's goal is still to prevent teams from using automatic signalling in order to speed up their stops. Teams have to demonstrate that the mechanic on each wheelgun manually presses a button that signals that the wheel is safely on, and that the button cannot be held down.

HAUPT BACK IN THE DTM

Tin-top veteran Hubert Haupt is to make his first starts in the DTM for 20 years on 21-22 August at the Nurburgring. The 52-year-old will race an additional Mercedes-AMG GT3 run by his own HRT squad alongside regulars Maximilian Gotz and Vincent Abril. Haupt was part of the factory Audi line-up in 1991-92, then returned with Opel in 2001. It will mean he is the only driver to race in all three main eras of the DTM.

GROSJEAN'S OVAL DEBUT

F1 racer-turned-IndyCar rookie Romain Grosjean is to make his oval racing debut at the Gateway round on 21 August. The Frenchman was wary of ovals, but has decided to "put fear aside" to take up his regular Dale Coyne Racing seat for the event. Grosjean will sample the St Louis track in a test on Tuesday (27 July).

BRITCAR ACE'S BTCC TEST

Britcar championship leader Will Powell got his first taste of British Touring Car Championship machinery when he tested a Team Hard Cupra Leon at Snetterton last week. Powell,

do in any form of motorsport, we try to

TOM HOWARD

who has aspirations to race in the BTCC, was at the wheel of the car recently vacated by Glynn Geddie.



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The prelude to the Hamilton/ Verstappen Silverstone shunt

The new F1 sprint race was designed to be a disruptor – and that's exactly what it was when it came to the title battle at Silverstone. The question is, what happens next?

ALEX KALINAUCKAS

t finally happened. Formula 1 got to see what would've happened had an Ayrton Senna/Alain Prost collision – but *not* Suzuka 1990, to be clear – taken place in the social media age. And the results, unsurprisingly, were utterly, shamefully disgusting. But, leaving behind the opinions of anonymous cowards (who

should be challenged and condemned for the horrendous racist abuse directed towards Lewis Hamilton in the aftermath of the British Grand Prix), F1 can reflect on its fiercest title fight for years arriving at its most contentious flashpoint yet.

Hamilton and Max Verstappen made contact at Imola's Tamburello chicane just after the start. In Spain, Verstappen's aggressive move up the inside of Turn 1 led to Hamilton turning out of contact. Then in the Silverstone sprint race, Verstappen weaved three times down the Wellington straight in a battle that lasted until Hamilton attacked to the outside of Copse and came off second best, any chance of victory in an F1 first gone for good.

The sprint race outcome had a direct bearing on the Grand Prix controversy, precisely because Hamilton realised he'd made a mistake in going left on the approach to Copse and was left feeling he"really regretted" his move. Hamilton did not shy away from the

"The sprint race outcome had a direct bearing on the Grand Prix controversy the following day "

clash at Copse the second time once he'd made it to the inside, and

squeezed him to the inside wall, then come back wider, then turned in again, Hamilton just couldn't make it to the inside as he did with Leclerc because of the high-speed understeer coming from the tighter angle. His hands stayed locked on the wheel.

Therefore, we can assume that the choice was 'back off and lose the chance to pass, or stay committed and face the consequences of possible contact'. It seems he chose the latter, as did Verstappen and what happened, happened.

We can assess the likely reasons why Hamilton made such a choice. There was the context from previous 2021 incidents, where Hamilton had clearly been the one to back out. So, perhaps, this was sending a message: "Don't try it again". But the more obvious motivating factor was the pre-race championship standings. Hamilton was 33 points behind, and likely 41 adrift if Verstappen came out of Copse in the lead. And he knew it.

"Once he's out in the clear, they're too fast," Hamilton explained. "So, when an opportunity comes, I've got to try and take it."

Unlike in previous years when he's been involved in fifty-fifty moves and aggressive overtakes, Hamilton cannot afford to take the'big picture'view on the standings. If he backed out to bank points, he was also conceding them to the already well-ahead Verstappen. If there was contact and both were out, he'd lost no ground. If there was contact and the Red Bull came off worse, he'd likely gain. The logic is sound, if utterly, brilliantly ruthless.

The penalty he received was ultimately correct because it's right that sporting incidents are judged on the move themselves, not the consequences. Otherwise, where does it end? Motorsport is risky and Verstappen took one – and it backfired. To many, this was a racing incident. Live by the sword etc.

What will be interesting for the next phase of F1's title fight is to see how Verstappen responds now that both title contenders have shown where they're willing to go to win this title. He doesn't generally change his approach, at least not publicly, but Verstappen can't afford to come off second best in a collision again, given how Hamilton carved his points lead to eight. There will surely be another flashpoint in this enthralling title fight. There have been three already, plus the arguments over track limits in Bahrain and Portugal (over Verstappen's lost fastest lap point). Now, those all become further considerations that will result in certain decisions being taken at 200mph. And therefore, they may very well decide the circumstances of how the next clash plays out, as they did at Silverstone. **#**

Verstappen is never one to back down in a fight either — as shown in his thrilling, aggressive driving over nine corners last Sunday. The inevitable stewards' investigation concluded that Hamilton was" predominantly at fault" because they noted the space between the Mercedes and the Copse apex. That gap was much smaller in Hamilton's later, very similar move at the same corner with Charles Leclerc. But it's too simple to say that he made a choice in his car positioning versus the Ferrari. In fact, it seems that Hamilton made a different choice altogether when racing his title rival. At Copse with Leclerc, Hamilton had space to take the inside line much tighter and stay at full tilt because the Ferrari was wider, and so there was space for both to get through without contact. At the same point with Verstappen, because the Red Bull had

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OPINION PIT + PADDOCK



Max Verstappen has made overly aggressive moves on several occasions, where crashes have been avoided only because the other party decided to give ground

DANIEL DURRANT

Verstappen's part in the Silverstone clash

I live in Norfolk, where the expression 'you reap what you sow' remains popular. Perhaps it could help provide some context to last Sunday's crash at the British Grand Prix.

Since his arrival in Formula 1, Max Verstappen has made overly aggressive moves on several occasions, where crashes have been avoided only because the other party decided to give ground.

On Sunday, I classed it a racing incident (split 60/40 to Lewis Hamilton, as he was struggling to make the apex), but the seeds to this crash were not sown by Lewis's lunge at Copse, or Max's poor exit from Woodcote. They were sown across the numerous incidents where Max has (largely) got away with questionable moves. To be clear, this is not an anti-Verstappen rant; he's a brilliant driver and amazing to watch. His error lies in expecting other drivers not to adopt the same take-no-prisoners mentality.

Without wishing to sound flippant about a crash that could have resulted in far worse than a precautionary trip to hospital, Max has now had a 51g reminder that they will. Rather than call Lewis unsporting, he might like to reflect on what he would've done had the positions been reversed. I think we all know. **Daniel Durrant**

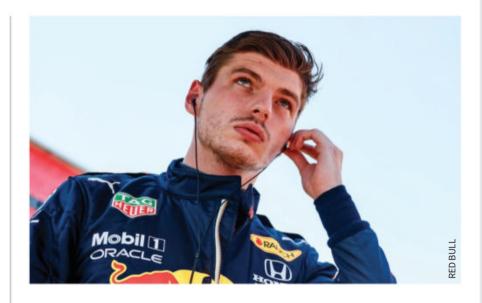
Norfolk

Weak penalty sends out the wrong message

As someone who has followed Lewis since my boys competed against him in karting, I have always been impressed by his fair tactics, but he let emotion get the better of him at Silverstone.

Max was leading the race and had position, and Lewis ran into him with such force that it ripped the wheel and wishbone off. The fact he was then given a soft penalty by the stewards, and was able to come in to have a new nose, tyres etc and 'win' the race gives out the wrong message to youngsters starting racing.

When taking your drivers through their ARDS course we are at pains to point out that ours is a non-contact sport and any



Thanks to UK motorsport's volunteers

As with broader society, the past 18 months have been gruelling for the motorsport community, however the fact that Silverstone have successfully welcomed a capacity crowd back to the venue for the 2021 Formula 1 Pirelli British Grand Prix is a feat of Herculean proportions by all involved in the delivery of the world's largest sporting event in 18 months.

Despite his incredibly successful career, Lewis Hamilton has never forgotten his roots, as he demonstrated when he visited Motorsport UK's new headquarters at Bicester Heritage to open the building and greet all those working incredibly hard.

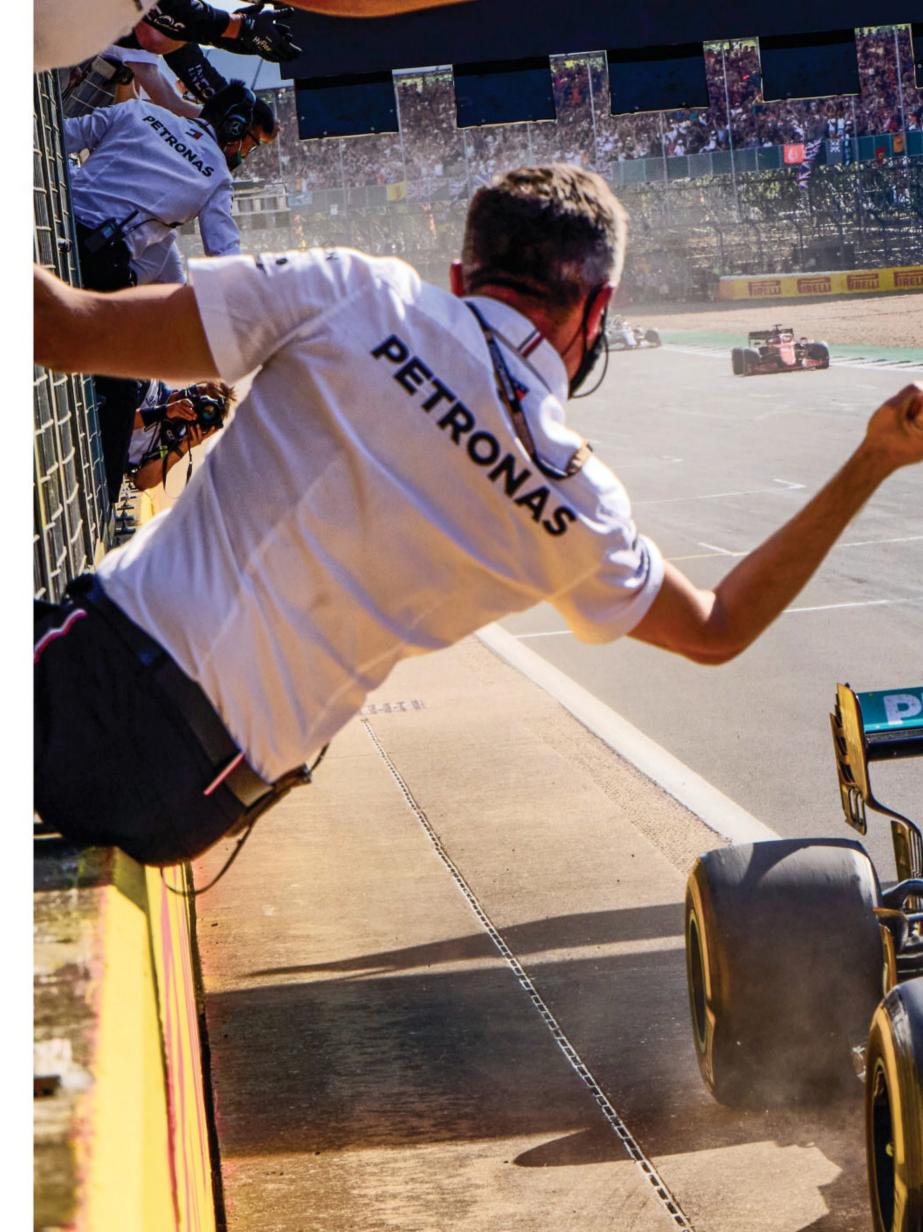
The British GP has always been an incredible feat of organisation, and once again we want to pay tribute to those at the heart of the operation — the army of volunteers without whom none of this would be possible. Current times have called for additional resilience, commitment and attention to detail. Once again, the army of officials rose to the challenge and delivered in spades.

Simply saying thank you seems to fall short, however this weekend you exemplified the strength, passion, commitment, expertise and experience of UK motorsport's greatest asset, our volunteer officials' community. Hugh Chambers, Motorsport UK chief executive Stuart Pringle, Silverstone Circuits managing director

breeches of that will be dealt with by stewards in a robust way and they will not gain an advantage from it. **Richard Ames, race licence holder and ARDS instructor Via email**







Silverstone erupts as Lewis Hamilton leads the vanquished Charles Leclerc home for victory

HAMILTON THE HOME HERO DESPITE CONTROVERSIAL CLASH

A record-extending eighth British Grand Prix win left Lewis Hamilton euphoric. But his clash with Max Verstappen triggered fury at Red Bull

ALEX KALINAUCKAS

motorsport





Hamilton edged up beside Verstappen at the start, but the Red Bull held the lead wide into Abbey

> here's something about Charles Leclerc and Silverstone. In 2015 he was a rookie winner here in European Formula 3; he made his F1 weekend debut in practice for Haas at the track a year later; in 2017, despite a pre-race brake fire and a wing mirror falling off, he won the Formula 2 feature race; and in 2019 he charged to the podium after a feisty battle

with Max Verstappen. Last year, he took the awful Ferrari SF1000 to the podium amid the British Grand Prix drama, and then was excellent again to seal fourth in the 70th Anniversary GP a week



later, when no incidents befell the leaders.

Last Sunday, Leclerc so nearly won the 2021 British GP, his excellent form all weekend rewarded with the race lead when Max Verstappen and Lewis Hamilton controversially collided on the opening lap. He would have been a thoroughly deserving race winner, even without his extra efforts coping with an ailing engine. It just wasn't enough to defy the resurgent, penalised world champion, but here's the story of how Leclerc nearly scored a famous victory, which ultimately went to Hamilton — to home fan joy and Red Bull fury.

FERRARI'S QUALIFYING FORM RETURNS

"If you look at Austria," Ferrari team boss Mattia Binotto explained after the 52-lap Silverstone race had finished, "Lando Norris was on the podium doing a fantastic race. But his race pace in Austria was very similar to ours — we were simply stuck in the traffic. Being ahead from quali and the start is key."

Leclerc satisfied those requirements by taking best of the rest in 'normal' qualifying, setting the fifth fastest lap and then boosted to fourth when Sergio Perez lost his best Q3 time for running too wide out of Stowe Corner. Then Leclerc had a rather lonely, if flat-out,



sprint race, aided by Fernando Alonso's Alpine disrupting the McLarens' progress and Perez falling off in his Red Bull.

Those two excellent performances meant he lined up fourth again for Sunday's Grand Prix, which immediately became third when Valtteri Bottas replicated Mercedes team-mate Hamilton's wheelspin-heavy sprint race start. So, Leclerc steamed through Abbey and Village comfortably following Verstappen and Hamilton, and had a grandstand view of what came next.

THE CHAMPIONSHIP CONTENDERS COLLIDE

BRITISH GP RACE CENTRE



The home heroes did not let the returning Silverstone crowd down during 'normal' qualifying on Friday night.

Lewis Hamilton topped the Q1/Q2/Q3 session ahead of title rival Max Verstappen, while Lando Norris led team-mate Daniel Ricciardo (although lost out to McLaren's constructors' championship rival Ferrari, with Charles Leclerc taking fourth), and George Russell brilliantly took his Williams through to Q3, where he ended up eighth.

The battle for 'not-pole, pole' and Russell's stunning result were the highlights. Hamilton and Mercedes had underplayed the impact of their updated bargeboards, sidepod deflectors and floor when it came to closing the gap to Red Bull on ultimate pace, although they clearly helped. The difference on Friday evening was that Verstappen, who'd comfortably topped practice by 0.8 seconds, was left rueing an understeer issue from not getting sufficient temperature into his front tyres. And into this small opening Hamilton and Mercedes charged.

With Valtteri Bottas, who ended up third, running ahead and giving his team-mate a tow worth up to 0.2s, Hamilton established a 1m26.134s as the Q3 benchmark, while Verstappen's first run put him 0.172s down. On the final fliers, Hamilton was on course to go at least 0.2s quicker after the opening two sectors, but a wild slide catching an oversteer

snap through the second part of Club meant he did not improve. Verstappen did, but still wound up 0.075s adrift.

"I was just hopeful," said Hamilton, who had used the unusual timetable to slot in an extra simulator session at Mercedes' nearby Brackley

"WE MADE SOME CHANGES, THE CAR WAS FEELING GREAT. I KNEW FROM THE FIRST LAP THAT IT WAS GOOD"

base ahead of FP1. "We made some changes and the

Verstappen had maintained first place at the start, but Hamilton got alongside the Red Bull by Abbey, and the polesitter had to pin his car over the exit kerbs and nearly went into the runoff. They then appeared to bang wheels running down the Wellington Straight, at the end of which Hamilton attacked around the outside and Verstappen scampered over the inside kerbs to cheekily run back ahead.

But this decision took him wide out of Brooklands and onto a tight line for Luffield, which meant Hamilton could take a faster, sweeping exit and surge into Verstappen's slipstream down the 'national' pit straight. At Copse, the race's pivotal moment — and the first major flashpoint of 2021's compelling title fight — occurred.

Hamilton had "really regretted not going for the gap that was down the right-hand side" of Verstappen in the sprint race, where he'd attacked to the outside on lap one, so this time dived to the Red »

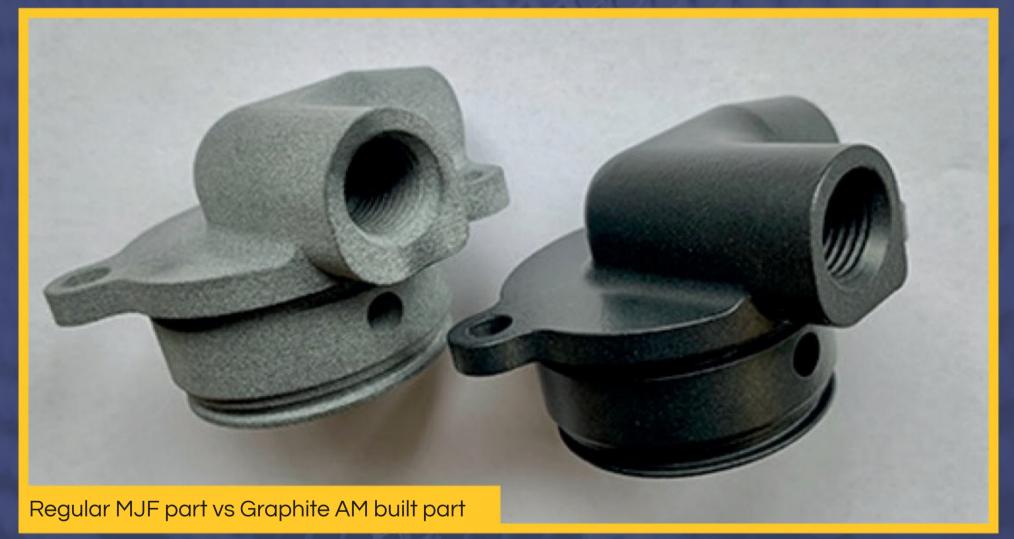
car was feeling great in qualifying, and I knew from the first lap that it was good."

Russell and Williams were far from certain that they would be able to make it out of Q1. But the 23-year-old maintained his record of escaping the opening segment at every race in 2021, then made a "massive step" to sensationally reach Q3 for the second consecutive event.

He then ran an offset Q3 run plan, running solo with over four minutes remaining on his sole effort, cheered all the way by the home fans. His 1m26.971s put him eighth, but Russell actually reckoned fourth was possible given he "probably lost a tenth and a half compared to my Q2 lap" without a tow, and Leclerc ended up 0.143s ahead.



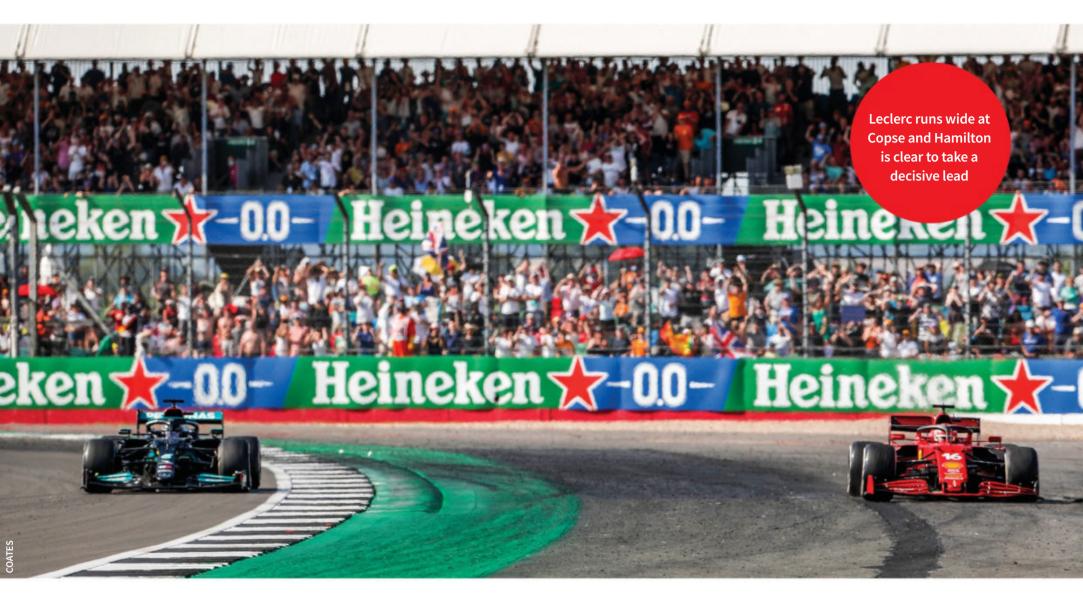
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Bull's inside even as Verstappen had come across to cover it. This got him tight against the pitwall and three quarters alongside his rival at the Copse turn-in point.

Hamilton held his line. So did Verstappen. The result was sporting drama of the highest order.

The Mercedes' left front clipped the Red Bull's right rear, and Verstappen was sent spinning off to a 51g impact, side on with the outside tyre barrier. From there he climbed gingerly from the wreckage, later going to Coventry hospital by helicopter for additional scans, after which he was given the all-clear.

Hamilton had been slowed enough that Leclerc shot into a sensational shock lead approaching Maggotts, with the race suspended — first by the safety car being called — by the time the Ferrari reached Chapel Curve. The race, which had just entered its second lap, was then stopped for almost 30 minutes.

"With the incident with Max's car, having lost telemetry due to the size of [the accident], neither the FIA nor the team could confirm its ERS status," explained F1 race director Michael Masi. "So, even though the light was green, we run a super-cautious approach and send two team members out, which is within the protocols that we have to check the car to make sure that it was safe before it got recovered. And then following that was the obvious repair that had to happen to the barriers."

Inevitably, both sides disagreed over who was to blame for the

"WHEN NOBODY IS PREPARED TO GIVE IN, THIS KIND OF SITUATION CAN HAPPEN. IT TAKES TWO TO TANGO"

Hamilton's wheel, fit a fresh set of medium tyres and send him on his way to take the second standing start between Leclerc and Bottas — with the only other damage, also fixed during the red flag, being a tyre temperature sensor on his front wing that had "got knocked loose so it was waggling", according to Shovlin.

When the lights went out once again, Leclerc led Hamilton away with ease, pleased that his "engineers did an incredible job the last few races" so "now we have very good start performances".

Leclerc leapt clear so that his advantage was 1.2 seconds at the end of the first full racing lap — the fourth tour. But Hamilton, hit with a 10s penalty at the start of the next lap for causing the Verstappen clash, was lurking. And it was still super-fast Silverstone, scorching in the sun, with Ferrari just three races on from a French GP where Leclerc had been lapped after struggling horrendously with front-tyre graining.

The question was how long Leclerc could defy a tyre management master. It was one he initially answered brilliantly.

shunt. "It just felt like a desperate move from Lewis," said Red Bull team boss Christian Horner. "It was a left-front wheel to a right-rear contact, so that's not significantly alongside."

"When nobody is prepared to give in, then this kind of situation can happen," reflected his Mercedes counterpart Toto Wolff. "But, for me, it takes two to tango."

LECLERC ACES THE RESTART FROM LUCKY HAMILTON

Hamilton's contact with Verstappen had "failed the rim" on his left-front wheel, according to Mercedes director of trackside engineering Andrew Shovlin, which "would have been a DNF had it not been red-flagged". As it was, Mercedes could change

FERRARI SURPRISES ITSELF WITH MEDIUM TYRE PACE

Given the freedom to start the race on any tyre compound thanks to the sprint race weekend format rules, all the drivers bar Perez – starting from the pitlane on the hard compound – had chosen the medium Pirellis for the first stint.

"On the medium we were surprisingly good," noted Leclerc. "The car felt incredible there and we were very quick." How quick was demonstrated by him holding Hamilton at bay, and then edging to a 2.3s lead after lap 26 of 52. Mercedes called Hamilton in on the next lap, when his badly blistered left-front was "knocked out". "We looked a lot in the simulators and the simulations with the »

RACE CENTRE BRITISH GP

drivers and the team in terms of tyre management, trying to understand what was wrong and how to address it," said Binotto of what Ferrari has been doing to improve its tyre preservation and wear management since Paul Ricard, although Leclerc suggested that the team was still unsure exactly why it was so strong on tyre life at Silverstone. "What I'm happy and pleased to see is the progress."

But what was additionally so impressive about Leclerc's performance was how he coped with yet more reliability peril. On lap 15, Leclerc reported an engine "cut". Understandably agitated considering his heartbreak in Bahrain two years ago and at home in Monaco this year, he demanded to know what was happening. An engine mapping management problem was to blame, Ferrari hurriedly issuing instructions on how to alleviate the intermittent power loss. Hamilton therefore closed from 1.8s at the end of lap 14 back to a low of 0.8s on lap 17, but after that — despite one more recurrence of the power cut — Leclerc was able to pull away again.

"I thought my race was over," he reflected. "I had quite a lot of things to do on the steering wheel but we managed the situation very well, and we managed to diminish these engine cuts for the rest of the race."

Because Hamilton had to serve his penalty at his stop for hard Pirellis, rejoining behind Norris in fourth, Ferrari could afford to leave Leclerc out for a further two laps — one tour after his team-mate, Carlos Sainz Jr, had suffered a 12.3s stop because of a wheelgun sensor problem, which did not recur when Leclerc arrived.

TRAFFIC AND A "SNAP" COST LECLERC VICTORY

When Leclerc emerged on the white-walled hard tyres, he had a 7.7s lead at the end of lap 30 over Bottas — who'd fallen behind Norris at the second start, in almost identical fashion to the initial getaway versus Leclerc. The Finn was then really gifted second place when a cross-threaded wheelnut on the right rear at Norris's stop meant Mercedes immediately pulled him in to take advantage, even if he then had to briefly, successfully, battle Fernando Alonso's Alpine on his out-lap. But the more important gap for Leclerc on lap 30 was the one to Hamilton: 12.9s.

Over the next 19 laps, the Briton lapped an average 0.634s quicker than the leader — 0.878s faster after being ordered past Bottas at Stowe on lap 40, having already passed Norris with a rather simpler pass ahead of Copse nine tours earlier.



"Honestly, Charles wasn't on my mind when I came out," said Hamilton after clinching his fourth win of the 2021 season. "I was really trying to see if I could catch the cars ahead, just one by one. Then I saw myself catching him, but I was thinking, 'By the time I get to him my tyres will be finished at this pace."

But it was actually Leclerc who was having trouble with the "more fragile" hards, particularly whenever he "started to hit the traffic" as he raced on, with "my engineer telling me Lewis's pace on the hard tyres, and I was like 'that's quick'. I was pushing 200%.

"Behind [the traffic], I could feel the rear of the car was not as stable as I wanted it to be," he added. "And this made us lose the pace a little bit that we had before."

Halfway around lap 49, and Hamilton was within DRS range, which he used to close further in from 0.8s behind at the end of that tour on the following lap. Leclerc and Hamilton raced down the national pit straight, and again the moment came at Copse. **>>**

"I SAW MYSELF CATCHING HIM, BUT I WAS THINKING, 'BY THE TIME I GET TO HIM MY TYRES WILL BE FINISHED"



SPRINT RACE



Formula 1's sprint race certainly hit all the familiar notes – an exciting start, tense-but-uneventful up front thereafter, decent action behind.

Although Max Verstappen looked to be the title rival in most trouble as the lights went out – his left-front brake on fire and leaving him "really worried" before the air from his start movement extinguished the flames – it was Lewis Hamilton who fell behind at the start.

Hamilton "was on target" with his clutch positioning, but he still "had a lot of wheelspin" that slowed his launch, and Verstappen sailed into the lead approaching Abbey. Hamilton closed in on the Wellington Straight, but Verstappen weaved three times to break the tow and stayed ahead on the run to the Brooklands left-hander. At Copse, Hamilton attacked on the outside but had to back off, his momentum loss leaving Verstappen 1.1 seconds clear at the end of the first lap of 17.

From there, the two leaders quickly dropped Valtteri Bottas, one of four drivers to start on the soft tyres. Their pace remained solidly in the low 1m30s – a bracket no one else could reach – as they exchanged fastest laps early on. But Verstappen gradually edged clear as Hamilton didn't "think he was particularly having to push too hard and we were flat-out".

Both leaders had to cope with front tyre graining, which had Red Bull instructing Verstappen to stay off the kerbs in the final laps to the finish. That meant his lead dropped from a maximum of 3s to 1.4s, with Bottas 7.5s back after managing his pace to preserve the softs that Mercedes had hoped would let him launch past Verstappen, and 3.8s clear of Charles Leclerc.

The Ferrari driver had his own near-13s gap to fifth because of Fernando Alonso disrupting things in the pack behind, where it was all going wrong for Sergio Perez.

Alonso had made a scorching start, roaring around the outside of three rivals through Abbey, having made an excellent launch on his softs. He then edged out Daniel Ricciardo and Perez at The Loop and Brooklands respectively, then magnificently steamed around

> Norris eventually repassed a very feisty Alonso

Lando Norris's outside at Copse.

As he chased Alonso and Norris on lap five, Perez lost the rear of his Red Bull getting "caught out in the dirty air" with the low fuel loads for the shorter race, as the pack ran through Chapel. This sent him spinning off at high speed at the top of the Hangar Straight. Red Bull later retired him because "vibrations were so high", according to team boss Christian Horner.

Alonso battled fiercely – "on the dark side", he said - against Norris and Ricciardo, weaving brazenly down the straights in a bid to keep them behind. Norris got ahead of the Alpine with a dive to the inside of Village on lap six, where three tours later his team-mate made a better exit to overhaul Alonso and then defy his repassing attempt into Brooklands. Sebastian Vettel pressured Alonso to the finish, with the Spaniard eventually given a warning for his continued aggressive defending. George Russell finished 2.2s behind Alonso and Vettel, leading home a train of Esteban Ocon, Carlos Sainz Jr and Pierre Gasly. But the Williams driver was later handed a three-place Grand Prix grid penalty for locking up and bumping Sainz off the track at Brooklands on lap one. Sainz was 18th at the end of the opening tour as a result, before putting in a recovery charge.





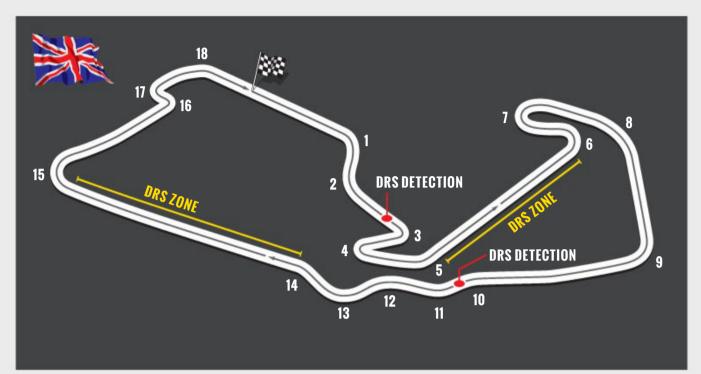
TRACKSIDE VIEW

What a difference a year makes. In 2020, Silverstone's pair of Formula 1 races felt like bizarre in-season, competitive test sessions – albeit with exciting TV race offerings – without fans in attendance to see them. Not so in 2021.

One thing is the same: Autosport's FP1 vantage point. As the COVID-19 pandemic continues to cast its blasted cloud, and with the capacity crowd in attendance last weekend effectively acting as guinea pigs for the UK government's Event Research Programme, trackside access for media is once again restricted to avoid bubble-mixing. We therefore amble out of the paddock to the generally empty plateau above the various sections of Club – the track's final turns.

The scene before us is packed with humanity this year. The grandstand ringing the sequence is full, with plenty more watching from the banks overlooking Vale, down to our left. They make themselves heard immediately. A roar signals the start of the one-hour session, with home heroes Lewis Hamilton, George Russell and Lando Norris loudly cheered into their opening laps.

The breeze at our back is strong, sending a challenging crosswind across Club and producing a decent test for the drivers



"A ROAR SIGNALS THE START OF THE SESSION, THE HOME HEROES LOUDLY CHEERED"

negotiating the sequence throughout FP1, but what stands out is the lack of errors – despite this being the only chance the pack will have to find the limit before 'normal' qualifying.

Valtteri Bottas runs a touch wide heading through the final part of Club with 15 minutes gone, kicking up dust going heavily over the kerbs on the outside, and he and Sebastian Vettel have small lock-ups into the left apex, but it's the Ferrari pair that seem to be struggling most visibly. Carlos Sainz Jr saves a dramatic oversteer snap before the first right apex during the early running, and then both he and team-mate Charles Leclerc (unhelpfully, for trackside observers, running a gorgeous redder helmet than usual for this event) seem to be running wider, with more oversteer out of Stowe – well away to our left. Both Ferraris look more planted later in the session after

bolting on the soft tyres.

Max Verstappen is serene every time he sweeps by, a giant screen next door helping track his progress to the session's best time, and Sainz looping it around at Village after 40 minutes. But the cheers return for the Brits when the chequered flag falls, Norris even earning a standing ovation from some after slotting into second behind Verstappen, weaving on his cooldown lap to show his appreciation to his fans.

Sun, summer, Silverstone. It's good to be back. ALEX KALINAUCKAS





"My heart nearly stopped when I went up the inside," said Hamilton, "because I thought the same thing was going to happen that happened to me and Max."

But this time Hamilton was fully on the apex line through the rapid right-hander and so, even though Leclerc stuck to his own line just as Verstappen had done so much earlier in this dramatic day, the pair did not come close to contact. For a moment, it looked like the Monegasque would defy Hamilton again — at least temporarily. But suddenly the famous victory was lost, or won

"IN A PERFECT WORLD THAT'S WHAT WOULD HAVE HAPPENED EARLIER... DIFFERENT TIME, DIFFERENT DRIVER"



by Hamilton, depending on your perspective.

"I knew Lewis was on the inside," said Leclerc. "I left a space and I think I had stayed in front, but unfortunately in the very end of the corner I got a snap [of oversteer]."

The Ferrari slid left off the track, clattered over the kerb and rejoined in Hamilton's wake, the Mercedes then effortlessly pulling clear to a victory margin of 3.9s, with Bottas — minus a working drinks system for the whole hot race — 7.2s further back.

"Charles was very respectful in terms of leaving a gap," Hamilton said of the race-winning battle. "He stayed committed and just did a wider line. He nearly kept it and that was really great racing. In that moment, I backed out at one point just to make sure that we didn't come together.

"In a perfect world, that's what would have happened in the first attempt but... different time, different place, different driver."

Wolff reckoned Mercedes was "still a little bit down on performance" compared to Red Bull, even with the technical upgrades it brought to the British GP (see page 27), and felt that "whoever is ahead [after Copse on lap one] probably drives it home".

For this reason, as great as Hamilton's performance was in the second stint, and after everything that had gone before on that

opening lap, the moral winner of Silverstone 2021 was clearly Charles Leclerc.

"I was really on it every lap," reflected the valiant runner-up, who didn't think the engine cutting problem was the cause of his defeat.

"I don't think there was one lap where I did a big mistake. But, overall, even when everything felt good, Lewis was just much quicker than us on those hard tyres." #

NEXT F1 REPORT

HUNGARIAN Grand Prix 5 August Issue

Max Verstappen and Red Bull will be out to hit back as the battle with Lewis Hamilton rages on – now with an added edge.

STRONG McLAREN MISSES PODIUM FINISH

A first British Grand Prix podium since 2010 looked possible for McLaren early on following the Max Verstappen/Lewis Hamilton clash, but pitstop woe took Lando Norris out of the equation.

A strong Grand Prix race start aided his ascent into third, and Norris gamely kept Valtteri Bottas at bay. But Norris was forced to endure a longer wait switching his medium tyres for the hard compound, losing four seconds to Bottas due to a cross-threaded wheelnut.

The Mercedes driver pounced on the delay a lap later by pitting and returning to the circuit ahead of Norris, although the two were briefly close. Bottas quickly passed the yet-to-stop Fernando Alonso to pull enough of a gap between himself and the 21-year-old.

Daniel Ricciardo, meanwhile, enjoyed a race-long battle with Carlos Sainz Jr over fifth place, although he received a good dose of pitstop-related fortune to finish ahead. Ricciardo held the advantage before the pitstop phase, but Sainz's medium tyre stint was longer, and he looked set to overcut the Australian. A slow stop for the Ferrari driver due to a wheelgun sensor problem eliminated the advantage, leaving Sainz having to try to pass Ricciardo late on to no avail, even with the aid of DRS.

"On the hard tyre, it was even more difficult to overtake him," Sainz rued. "I was understeering a lot more, and I couldn't keep up with him at high speed."





Red Bull top brass rage over Verstappen clash

Red Bull's senior management made its views on the Max Verstappen/ Lewis Hamilton clash known quickly and loudly once it was clear that the Dutchman had escaped serious injury in his high-speed crash at Copse on lap one of the British Grand Prix.

Team boss Christian Horner and team sporting director Jonathan Wheatley both radioed Formula 1 race director Michael Masi to express their anger at the crash, with Masi pointing Red Bull to the stewards in response. Masi did the same to Mercedes team boss Toto Wolff, who said he'd emailed Masi a document that he suggested needed to be considered when assessing Hamilton for a possible penalty.

The Red Bull anger then spilled out into the media during the 30-minute red flag stoppage, with Horner accusing Hamilton of "dirty driving" on the UK's Channel 4 coverage, and Red Bull motorsport advisor Helmut Marko telling Sky Germany that he thought the world champion "should be punished with a suspension or something" because of "negligent to dangerous behaviour".

Hamilton was handed a 10-second penalty to be served at his pitstop, but was able to battle back in the restarted race to beat Ferrari's Charles Leclerc.

When asked if he was still angry in the aftermath of the Silverstone race – where Sergio Perez in the second Red Bull came home 16th after an unusual three-stop strategy and a late clash with Kimi Raikkonen at Club – Horner said: "Well, putting a fellow driver in the hospital, writing off the car, receiving a menial penalty but still the winning the GP, it doesn't feel like much of a penalty."

But Horner was annoyed at Wolff going to visit the stewards during the red flag, saying: "I don't think the stewards should be interfered with." Wolff said he "went up and gave my opinion", and that he'd "been to the stewards many times in my life".

BIG NUMBER



Laps Charles Leclerc spent leading the British GP before Lewis Hamilton took over with three remaining. That's only one fewer than his season total of 50, which is nearly double that of Baku winner Sergio Perez (26) and comfortably ahead of Valtteri Bottas's 19. Max Verstappen leads the way on 420 (including the Silverstone sprint race), with Hamilton next on 125.



PIERRE GASLY ALPHATAURI DRIVER

Why was it such a tough weekend overall compared to the good ones you've had recently?

I think the format made it tough because, with only one session for practice [before qualifying], either you get it right from the start or you get it wrong, and it's very difficult to come back. It's always risky to go into quali with a lot of unknowns on the car. So, we made a couple of changes but it didn't change the big picture. This weekend we were clearly far away from the Ferraris and McLarens, even slightly behind the Alpines and Astons. And we

Q&A

know that we have a bit more pace than that. So, I think it's format [and maybe] track-specific. I believe in Budapest [for next week's Hungarian GP] we

should be back with a similar performance to what we have shown before.

Does AlphaTauri have a plan to do things differently when the sprint format returns?

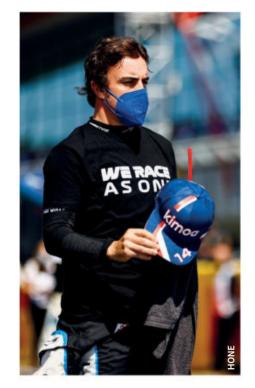
I think we need to question what we did a bit – [in terms] of our preparation. But I mean, it's only a one-off. The car has been really good the whole season and we should not overreact just based on this weekend. But we just need to analyse and understand why we didn't go in the right direction. [Whether it was] our work beforehand, the simulator etc – everything we do – to make sure that we don't end up in a similar situation for the other similar weekends.

What happened with the puncture when you were running ninth?

Honestly, I have no words, because this weekend was clearly the hardest weekend of the season. So, for whatever reason we didn't get it right from the start. And even on a very difficult day, I was really pushing like an animal and we managed to make it back to the top 10. Then I don't know who put gravel at the outside of Turn 7 [Luffield], but it was on the track, I went through there and then got a rear-left puncture.



Vettel returns to old 'Ferrari ways'



FEISTY ALONSO Leads the line For Alpine

Fernando Alonso couldn't quite match his sprint race heroics in the Grand Prix, after scything up to fifth on the opening lap of the first race, and instead had to contend with losing a place to Sebastian Vettel at the main race start before the red flag.

Alonso then battled with Vettel once more at the restart, claiming sixth from the Aston Martin driver, but then lost the place to Carlos Sainz Jr when the Alpine was unable to display the same pace as the top six cars.

From there, Alonso's race involved trying to keep Lance Stroll behind him after the Canadian had enjoyed two typically rapid Grand Prix starts and made his way up to eighth place. Although Stroll wound the deficit to within DRS range of Alonso, the two-time world champion weathered the storm and held onto seventh.

After avoiding a startline clash with Alonso and Vettel, Esteban Ocon eventually finished ninth to complete a double-points race for Alpine, although he benefited from Sergio Perez's and Pierre Gasly's varying degrees of misfortune and late pitstops to shuffle up into the points. "This was the best race so far, probably, of the year," Alonso said after the race. "Seventh was on merit, not on luck or safety car or restart. So I'm happy: happy with the performance and happy with the car."

Sebastian Vettel has looked somewhat re-energised and rejuvenated since joining Aston Martin for this season. But at Silverstone he suffered an ignominious return to his old ways with a spin after battling with Fernando Alonso on the exit of Luffield over sixth place on the restart. His initial Grand Prix start was strong, and Vettel surged ahead of Alonso before the red flag, but their following duel upon the race's resumption proved costly for the four-time world champion.

"The weekend was looking promising and, without all the problems, I should have finished well inside the points," he said. "I'm not sure exactly what happened, but I misjudged it, lost grip and spun. After that, I was right at the back." Vettel then retired from the team's home race with a cooling issue, bringing an end to his day on lap 40 while running in a lowly 17th place.

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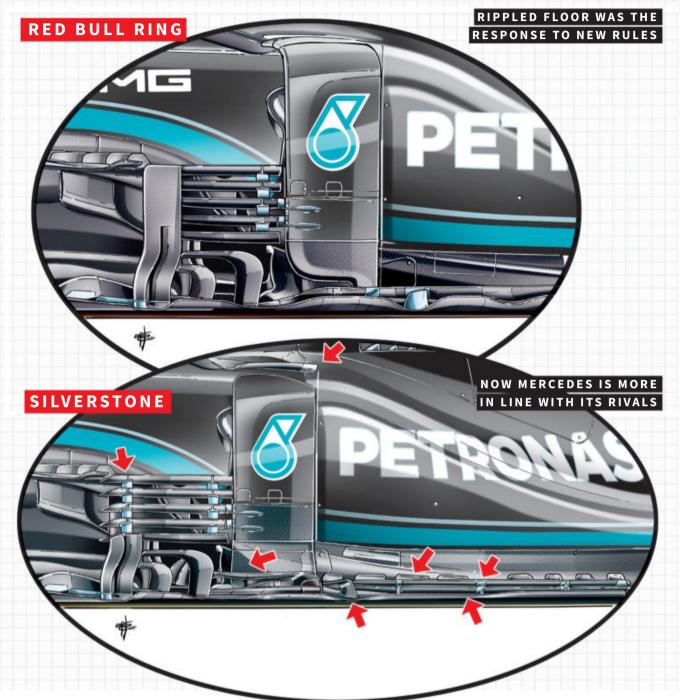
DRAWING BOARD

MERCEDES BRINGS CHANGES TO FLOOR AND BARGEBOARDS...

The different approaches to the 2021 floor regulations prompted multiple solutions across the Formula 1 grid, but it appears the designs have now reached a point of convergence as development begins to end on the current generation of cars. Mercedes, after drawing some curious responses to its rippled floor at the start of the year, introduced a new design for the British Grand Prix that omitted the wave-shaped ridge to the part of the floor parallel to the sidepods.

Instead, the design is more in line with its rivals within the field, as the team perhaps felt that creating the ripple design didn't produce the effect that it needed in driving airflow outwards to work the floor harder.

It also reworked the bargeboards, splitting the vertical and horizontal parts of the loop around the sidepod inlet, and extending that vertical part to the floor. The 'Venetian blinds' that attach to that are now set up differently, extending further forward and featuring exposed tips at the front. All of these changes seem to be affecting the mid-corner downforce of the Mercedes, perhaps an area in which the team feels it lacks compared to Red Bull. When the car turns, the airflow will pass over those components at a different angle, producing downforce for the loaded outboard part of the car. **JAKE BOXALL-LEGGE**



...BUT RED BULL ISN'T STANDING STILL EITHER

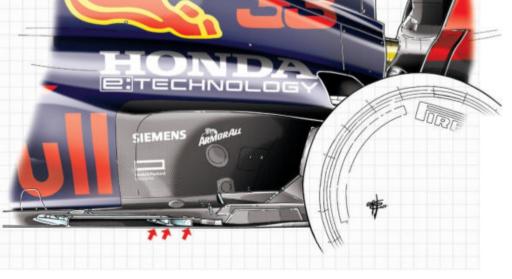
Red Bull introduced some new updates to its floor too, in the form of some 'ersatz' slots towards the rear to reclaim some of the effect that last year's floors produced before this year's reduction in size. Three fins lead into what effectively forms a tunnel comprising three horizontal elements, which help to jettison airflow outwards and push back against any oncoming turbulence that could enter the diffuser space. This should help to keep the underbody flow predictable and generate the right amount of downforce. There wasn't much opportunity to see what the new floor could do in a full-distance race, given Max

Verstappen's chances of victory were wiped out on the first lap, but the top speed difference between Mercedes and Red Bull showed the two different attitudes between the teams. Red Bull is trading straightline performance for more downforce, despite trimming back the rear wing for Silverstone, but it should mean that the team will find more benefit from its philosophy at the upcoming Hungarian Grand Prix. The Hungaroring rewards downforce more than outright speed, and thus the trip to Budapest should be more rewarding for Red Bull after a bruising Silverstone weekend. **JAKE BOXALL-LEGGE**

THREE FINS PUSH AIR OUT FOR PREDICTABLE FLOW

BRITISH GP TECH

×....



20 Perez #11	the second	18 Schumacher #47		16 Tsunoda #22		14 Stroll #18		12 Russell #63	
•		•		•	*	•		•	A
-	19 Mazepin #9	-	17 Latifi #6		15 Giovinazzi #99		13 Raikkonen #7		11 Gasly #10

QUALIFYING

FREE	PRACTICE 1			FREE	PRACTICE 2	
POS	DRIVER	TIME	1.11	POS	DRIVER	TIME
1	Verstappen	1m27.035s		1	Verstappen	1m29.902s
2	Norris	1m27.814s		2	Leclerc	1m30.277s
3	Hamilton	1m27.815s		3	Sainz	1m30.507s
4	Leclerc	1m27.828s		4	Ocon	1m30.707s
5	Bottas	1m27.897s		5	Perez	1m30.800s
6	Sainz	1m27.923s		6	Norris	1m31.030s
7	Vettel	1m28.062s		7	Ricciardo	1m31.034s
8	Perez	1m28.163s		8	Hamilton	1m31.131s
9	Ricciardo	1m28.211s		9	Bottas	1m31.180s
10	Ocon	1m28.415s		10	Gasly	1m31.188s
11	Gasly	1m28.449s		11	Russell	1m31.237s
12	Tsunoda	1m28.600s		12	Giovinazzi	1m31.263s
13	Giovinazzi	1m28.827s		13	Alonso	1m31.289s
14	Alonso	1m28.873s		14	Raikkonen	1m31.328s
15	Raikkonen	1m29.220s		15	Latifi	1m31.337s
16	Latifi	1m29.227s		16	Tsunoda	1m31.404s
17	Schumacher	1m29.227s		17	Vettel	1m31.593s
18	Stroll	1m29.597s		18	Stroll	1m32.041s
19	Mazepin	1m29.808s		19	Mazepin	1m32.474s
20	Russell	1m29.857s		20	Schumacher	1m34.017s
WEATH	EP Sunny air 24-25	C track 42-45C	WE	ATHE	R Sunny air 24-250	track 41-45C

POS	DRIVER	TIME
1	Hamilton	1m26.134s
2	Verstappen	1m26.209s
3	Bottas	1m26.328s
4	Leclerc	1m26.828s
5	Perez	1m26.844s
6	Norris	1m26.897s
7	Ricciardo	1m26.899s
8	Russell	1m26.971s
9	Sainz	1m27.007s
10	Vettel	1m27.179s
QUALI	FYING 2	
11	Alonso	1m27.245s
12	Gasly	1m27.273s
13	Ocon	1m27.340s
14	Giovinazzi	1m27.617s
15	Stroll	1m27.665s
QUALI	FYING 1	
16	Tsunoda	1m28.043s
17	Raikkonen	1m28.062s
18	Latifi	1m28.254s
19	Schumacher	1m28.738s
20	Mazepin	1m29.051s
WEATH	ER Sunny, air 25-26	C track 36-40C

SEASON STATS

CHAN	ERS' IPIONSHIP	PTS	BEST FINISH	BEST QUAL
1	Verstappen	185	1	1
2	Hamilton	177	1	1
3	Norris	113	3	2
4	Bottas	108	2	1
5	Perez	104	1	2
6	Leclerc	80	2	1
7	Sainz	68	2	4
8	Ricciardo	50	5	6
9	Gasly	39	3	4
10	Vettel	30	2	8
11	Alonso	26	6	9
12	Stroll	18	8	10
13	Ocon	14	7	5
14	Tsunoda	10	7	7
15	Raikkonen	1	10	14
16	Giovinazzi	1	10	10
17	Russell	0	11	8
18	Schumacher	0	13	15
19	Latifi	0	14	14
20	Mazepin	0	14	18

CONSTRUCTORS' CHAMPIONSHIP

1	Red Bull	289
2	Mercedes	285
3	McLaren	163
4	Ferrari	148
5	AlphaTauri	49
6	Aston Martin	48
7	Alpine	40
8	Alfa Romeo	2
9	Williams	0
10	Haas	0

QUALIFYING BATTLE

-			
Hamilton	7	3	Bottas
Perez	1	9	Verstappen
Ricciardo	3	7	Norris
Vettel	6	4	Stroll
Alonso	6	4	Ocon
Leclerc	7	3	Sainz
Gasly	10	0	Tsunoda
Raikkonen	2	8	Giovinazzi
Mananin	1	•	Calumna altan

NEATHER	Sunny.	air 24	-25C	track	42-45C

WEATHER Sunny, air 24-25C track 41-45C

SPRINT RACE (17 LAPS – 62.15 MILES)

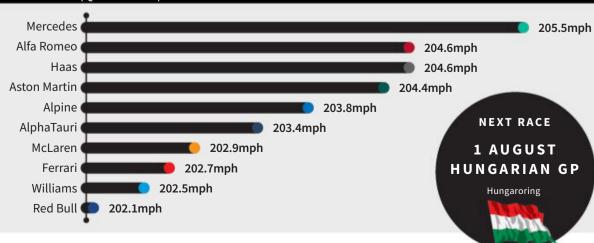
POS	DRIVER	FINISH TIME	LED	TYRE	FASTEST LAPS
1	Verstappen	25m38.426s	17	Mn	1m30.013s
2	Hamilton	+1.430s		Mn	1m29.937s
3	Bottas	+7.502s		Su	1m29.958s
4	Leclerc	+11.278s		Mn	1m30.163s
5	Norris	+24.111s		Mn	1m30.566s
6	Ricciardo	+30.959s		Mn	1m30.640s
7	Alonso	+43.527s		Sn	1m31.773s
8	Vettel	+44.439s		Mu	1m31.687s
9	Russell	+46.652s		Mn	1m32.208s
10	Ocon	+47.395s		Sn	1m32.183s
11	Sainz	+47.798s		Mn	1m31.991s
12	Gasly	+48.763s		Mn	1m32.072s
13	Raikkonen	+50.677s		Sn	1m32.139s
14	Stroll	+52.179s		Mu	1m32.210s
15	Giovinazzi	+53.225s		Mn	1m32.457s
16	Tsunoda	+53.567s		Mn	1m32.270s
17	Latifi	+55.162s		Mn	1m32.143s
18	Schumacher	+1m08.213s		Mn	1m32.567s
19	Mazepin	+1m17.648s		Mn	1m33.462s
20	Perez	16 laps-DNF		Mn	1m31.465s



WEATHER Sunny, air 27-28C track 47-49C

WINNER'S AVERAGE SPEED 145.43mph FASTEST LAP Hamilton 1m29.937s, 146.53mph

SPEED TRAP (QUALIFYING)



Mazepin 1 9 Schumacher 10 Russell Latifi 0 Qualifying head-to-head taken from usual Q1/Q2/Q3 session, not the result of sprint race POLEPOSITIONS WINS Verstappen 5 Verstappen 4 Hamilton Hamilton 3 4 Perez 1 Leclerc 2 Bottas 1 FASTESTLAPS Pole scores taken based Verstappen 4 on qualifying results, not Hamilton the result of any sprint 3 races (official F1 scores Bottas 2 would be Verstappen 5, Perez 1 Hamilton 2)



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								STAR	FING GRID —
10 Sainz #55	-	8 Vettel #5	-	6 Ricciardo #3		4 Leclerc #16	-	2 Hamilton #44	
•		•		•		•		•	
The second second	9 Ocon #31	Series.	7 Alonso #14		5 Norris #4		3 Bottas #77	3	1 Verstappen #33

GRA	ND PRIX RESULTS RO	DUND 10/23 (52 LAPS	- 190.27 MILES)			FAST	TESSITLIAARBS			
POS	DRIVER	TEAM	FINISH TIME	LED	TYRES	POS	DRIVER	TIME	GAP	LAP
1	Lewis Hamilton (GBR)	Mercedes	1h58m23.284s	3	M u, M u, H n	1	Perez	1m28.617s	-	50
2	Charles Leclerc (MCO)	Ferrari	+3.871s	49	M n, M n, H n	2	Hamilton	1m29.699s	+1.082s	45
3	Valtteri Bottas (FIN)	Mercedes	+11.125s		Mu, Mn, Hn	3	Gasly	1m30.266s	+1.649s	52
4	Lando Norris (GBR)	McLaren-Mercedes	+28.573s		M n, H n	4	Bottas	1m30.524s	+1.907s	45
5	Daniel Ricciardo (AUS)	McLaren-Mercedes	+42.624s		Mn, Hn	5	Leclerc	1m30.569s	+1.952s	45
6	Carlos Sainz Jr (ESP)	Ferrari	+43.454s		Mn, Mn, Hn	6	Tsunoda	1m30.826s	+2.209s	51
7	Fernando Alonso (ESP)	Alpine-Renault	+1m12.093s		Mn, Mu, Hn	7	Sainz	1m31.223s	+2.606s	51
8	Lance Stroll (CAN)	Aston Martin-Mercedes	+1m14.289s		M u, M u, H u	8	Ricciardo	1m31.284s	+2.667s	51
9	Esteban Ocon (FRA)	Alpine-Renault	+1m16.162s		Mn, Mn, Hn	9	Norris	1m31.420s	+2.803s	44
10	Yuki Tsunoda (JPN)	AlphaTauri-Honda	+1m22.065s		Mn, Hn	10	Alonso	1m31.698s	+3.081s	48
11	Pierre Gasly (FRA)	AlphaTauri-Honda	+1m25.327s		Mn, Hn, Sn	11	Raikkonen	1m31.895s	+3.278s	48
12	George Russell (GBR)	Williams-Mercedes	-1lap/+0.359s		Mn, Mn, Hn	12	Stroll	1m31.992s	+3.375s	48
13	Antonio Giovinazzi (ITA)	Alfa Romeo-Ferrari	-1lap/+4.751s		Mn, Mn, Hn	13	Russell	1m32.049s	+3.432s	49
14	Nicholas Latifi (CAN)	Williams-Mercedes	-1lap/+6.334s		Mn, Mn, Hn	14	Ocon	1m32.210s	+3.593s	48
15	Kimi Raikkonen (FIN)	Alfa Romeo-Ferrari	-1lap/+7.452s		Mn, Mn, Hn	15	Giovinazzi	1m32.346s	+3.729s	49
16	Sergio Perez (MEX)	Red Bull-Honda	-1lap/+12.392s		Hn, Mn, Mn, Su	16	Latifi	1m32.477s	+3.860s	51
17	Nikita Mazepin (RUS)	Haas-Ferrari	-1lap/+1m06.539s		Mu, Hn	17	Schumacher	1m32.862s	+4.245s	50
18	Mick Schumacher (DEU)	Haas-Ferrari	-1lap/+1m08.109s		Mu, Hn	18	Mazepin	1m32.909s	+4.292s	51
R	Sebastian Vettel (DEU)	Aston Martin-Mercedes	40 laps-cooling		M u, H u	19	Vettel	1m33.059s	+4.442s	35
R	Max Verstappen (NLD)	Red Bull-Honda	0 laps-accident		Mn	20	Verstappen	notime		

WEATHER Sunny, air 31-29C track 48-52C

WINNER'S AVERAGE SPEED 96.43mph FASTEST LAP AVERAGE SPEED 148.71mph

TYRES

KEY: H - Hard M - Medium S - Soft I - Intermediate W - Wet n - New set u - Used set

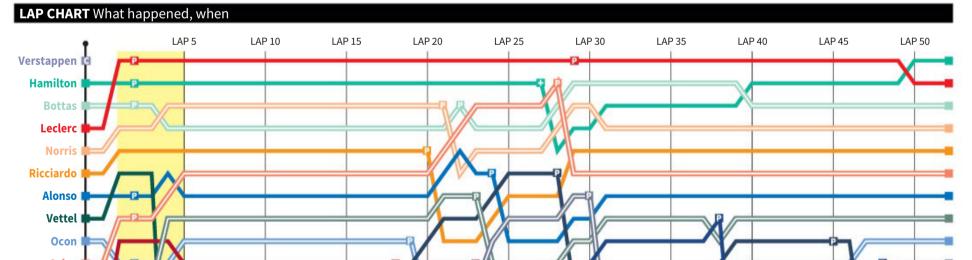


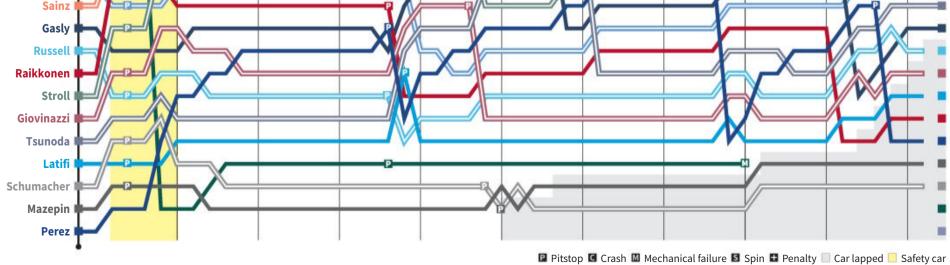
RACE BRIEFING

QUALIFYING/SPRINT RACE RUSSELL Three-place grid drop for GP and one licence point for causing a collision with Sainz PEREZ required to start from the back of the grid for additional power elements used, then required to start from the pitlane for further changes under parc ferme conditions

RACE PENALTIES

HAMILTON 10-second penalty and two licence points for causing a collision with Verstappen





LECLERC'S MAXIMUM **STANDS ALONE**

Ferrari's ace gave it everything to pull off what would have been a victory to remember, but keeps his top score despite a late slip at Copse

ALEX KALINAUCKAS

MERCEDES



Started **2nd** — Result **1st**

A travesty that he isn't recorded as the Silverstone pole scorer. After his excellent Friday, he didn't make a clean sprint race start, then chose the wrong side attacking Verstappen at Copse. Marked down for being 51% to blame in the clash, but score is bumped up for winning pace versus Leclerc and Bottas.

ASTON MARTIN

SEBASTIAN VETTEL

Started 8th



Started 3rd — Result 3rd

Paid the price for Mercedes failing to find him a tow in qualifying, where he dutifully gave Hamilton a vital slipstream. Did all he could on the softs in the sprint race, but it's his two bad starts in the grand prix, where he did well with nothing to drink in the scorching sun, that cost him dearly here.

RED BULL



Started 20th Result 16th

Scores low because his sprint race spin was a massive error - and led to his GP DNF with severe vibrations. Ended up making three stops that brought him in and out of the points. Said he and his team "hardly had a plan". Also gifted Leclerc fourth in qualifying with a slide at Stowe.

ALPINE



Started **7th** — Result **7th**



Started 9th — Result 9th

Behind Alonso

MCLAREN



Started 6th — Result 5th

Marked down versus Norris as he was behind all weekend in

sessions that counted. In qualifying he was frustrated to be just 0.071s from Leclerc and was then mugged by Alonso early in the sprint race. In the GP he struggled for pace, but was "mistake-free" to hold off Carlos Sainz to the flag.

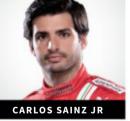
FERRARI



Started 4th — Result 2nd

Keeps the





LANDO NORRIS

Started 5th — Result 4th

Another really

but marked down for losing

out to a McLaren rival

in qualifying, then to

outside-Copse attack

Passed Bottas at the

second GP start, but

"destroying" his tyres

battling Alonso again

after his slow stop

costs him here.

Alonso's audacious

in the sprint race.

good weekend,

Started 10th – Result 6th



Did well to reach

-Result **R**



Started 14th – Result 8th

Ended up 15th in







Started 1st -–Result **R**

understeer on

cold tyres in

qualifying for

Blamed

his Friday defeat to

Hamilton, but it felt

lacking given he has

the season's fastest

package. Was brilliant

and ruthless early in

the sprint race, then

faultless. He wasn't

the most to blame for

his Copse crash, but

must cop some.

Q3, but qualified behind Russell's slower Williams. Decent sprint race, gaining ground before coming up against Alonso's defence. But GP restart lap spin all by himself was just so poor, reminiscent of the Ferrari memories he'd banished of late. Retired with a cooling problem while 17th.

qualifying with oversteer in Q2 after "technical difficulties" in Q1. Made little progress in the sprint race. But on Sunday he was excellent, gaining five spots in the two starts (two to the Verstappen and Vettel incidents). Chased Alonso, while stopping later than many for hard tyres.

in qualifying, but was otherwise excellent. Lit up the sprint with his lap one passes, then was cheeky in his weaving defence. On Sunday he was feisty with Vettel and Ricciardo, then led Stroll home. Loses a point for going off on his way to the first grid and damaging his diffuser.

all weekend, but made solid progress up the order in the sprint race, also producing a strong first lap on the softs. He lost out to Raikkonen at the start of the Grand Prix by locking up at Village, but rescued his starting spot and two points despite struggling with tyres.

maximum despite the slip off in his late battle for the win. Bettered Ferrari's qualifying 'maximum', maintained fourth in the sprint, and was exceptional in the GP to be so rapid despite his engine problems. So nearly pulled off a win against a master in tricky conditions.

behind Russell was so costly, as it meant that when Russell locked up on the sprint race first lap he was forced off. Recovered well from 18th, and in the GP managed tyres well. Would have overcut Ricciardo but for the botched pitstop, then understeer set in behind the McLaren.

BRITISH GP RACE CENTRE



ALPHATAURI



Started 11th - Result 11th

Struggled to find a suitable car balance in the one practice session where set-up changes could be made. Maintained his position in the sprint race traffic, then on Sunday ran long in the first stint to move into the points. Couldn't pass Stroll; picked up a late puncture running over gravel at Luffield.

YUKI TSUNODA

Started 16th - Result 10th

Getting knocked out in Q1 and being set to finish behind his team-mate before Gasly's puncture explains the difference in their scores. Finished where he started the sprint, then earned 10th in GP with great tyre management in a long stint, and capitalised with Perez/ Raikkonen clash.

ALFA ROMEO



Started 13th Result 15th

Another Q1 elimination, but in the sprint race he was another lap-one star – key to his 2021 highest grid spot for the main race – with a great Copse pass on Stroll. Made another brilliant start on Sunday to run in the points. Fell back to fringes of the top 10 until the Perez clash. Neither was blamed.

AFTER ROUND 10

9.0

8.0



Started 15th Result 13th

Made Q2 again, then in the sprint he made a poor start and was pinched on the inside

of Abbey by Stroll. Felt he couldn't do much about the Aston. In the main race he rued getting overcut and then finding himself stuck behind Russell, when he had been ahead of Tsunoda, who scored a point.

HAAS



Started 19th · Result 17th

Fractionally marked down to team-mate for qualifying defeat

and because he edges more blame for their sprint race contact, which sent him spinning. On Sunday, pulled off "probably my best overtake in the last three years" on Schumacher at Club, after which he stayed ahead.



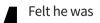
Started 18th-Result 18th

The lead Haas in qualifying and the sprint race, during which he clashed with his team-mate at Village. On Sunday, he led Mazepin until just after their stops, when he couldn't push as much without his tyres dropping off. Might have defended harder against Mazepin, but likely best he didn't.

WILLIAMS



Started 17th - Result 14th





Earns this high

TOP 10 AVERAGE RATINGS AUTOSPORT'S RATING

READERS' RATING AFTER ROUND 10

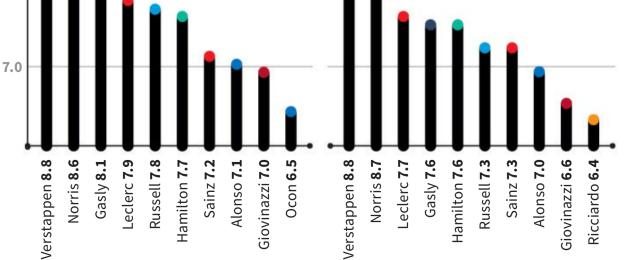


GIVE **YOUR DRIVER** RATINGS



down on power in qualifying, then struggled to hang on to (slower) cars around him in the sprint race, where his team-mate held his own against faster opposition. On Sunday felt he made two bad starts, and struggled when running in dirty air in the pack and while being lapped.

mark because of his sensational qualifying form to reach Q3, when Williams had feared not escaping Q1. In the sprint race he clumsily clashed with Sainz and deserved his penalty, then in the GP suffered a poor first start. Even with a "really good" second attempt he was still down overall.



RACE CENTRE WEC MONZA

Toyotas prove fallible, but are still unbeaten

Kobayashi, Conway and Lopez took victory at Monza, despite a major scare along the way, while the sister GR010 lost heaps of time

GARY WATKINS

PHOTOGRAPHY

AISIN

Motorsport IMAGES

uite hectic and very entertaining." That was margin of almost exactly a minute, but it was far from plain sailing for Toyota in the final

right-handers and the Ascari chicane right at the start of the penultimate hour. He needed to bring the car to a complete halt to undertake the necessary full reboot. For the briefest of moments, Glickenhaus suddenly emerged as a contender for race honours in only its second WEC start. Romain Dumas swept past the stricken Toyota and into the lead. It stayed there for one sector of the 3.60-mile Autodromo Nazionale di Monza: the only one of the Pipo-engined 007LMHs left in the race was on its in-lap. The car that Dumas shared with Richard Westbrook and Franck Mailleux was experiencing higher than expected brake

* 豊田自

GR

Toyota Gazoo Racing Europe technical director Pascal Vasselon's take on last Sunday's Monza round of the World Endurance Championship as the Japanese manufacturer made it three wins from three starts with its Le Mans Hypercar. 'Hectic' because both GR010 HYBRIDs ran into problems over the course of the six hours, and 'entertaining' because there were moments, however fleeting, when Alpine and Glickenhaus looked like potential winners. Mike Conway, Jose Maria Lopez and Kamui Kobayashi ended up winning by the healthy round of the WEC before the Le Mans 24 Hours next month. The winning car spent a minute or so parked at the side of the track with an electronic glitch, while the sister entry of Sebastien Buemi, Brendon Hartley and Kazuki Nakajima was delayed in the pits for more than hour on the way to the chequered flag as the last classified finisher. Toyota didn't look like it was going to follow up on its wins at Spa in May and then the Algarve circuit last month when an error message on the dashboard forced Kobayashi to pull over onto the side of the track on the run between the Lesmo

WEC MONZA RACE CENTRE



wear. The team had no choice but to undertake a change of pads and disc at the had made its fifth stop 12 laps previously. Kobayashi, told to abandon any fuelsaving efforts, was able to take a second a lap out of Lapierre. By the time the Alpine made its final stop, the gap was just 7s, Vaxiviere in front of Conway. The Japanese car, unlike the French one, was able to pit for the final time during a virtual safety car or full-course yellow, which drew a line under the battle and allowed the #7 GR010 HYBRID to cross the line an unrepresentative 61s ahead. Things could have been worse for Tovota, however. Kobayashi sustained a puncture after his on-track delay. A decrease in pressure was detected as he entered the

Parabolica on his in-lap, and no time was lost. There was then a scare for Toyota after

front. The eight minutes lost in the pits wiped out any chance of a Glickenhaus victory and meant the car could finish no better than fourth, four laps in arrears of the victorious Toyota and behind the LMP2 class winner.

The pitstop for the Glickenhaus put Kobayashi back in the lead, though he fell to second when he made an on-schedule pitstop five laps after having to play with all the buttons. He resumed 46 seconds behind the Alpine-Gibson A480 grandfathered LMP1 car shared by Nicolas Lapierre, Matthieu Vaxiviere and Andre Negrao, which its final time in the pits. Race control revealed that it was investigating the stop for a potential procedural infringement and eventually issued a warning. It turned out that the mechanic in charge of the right front, the only wheel to be changed, was holding it at an incline. The tyre was in contact with the ground behind the allimportant white line, but the top was leaning out over it. Vasselon accepted that Toyota was at fault, but suggested it would have been harsh if the car had received a penalty. Conway reckoned he was "really happy with the job we've done in our car". "I am »

RACE CENTRE WEC MONZA

happy with the pace we had; we were able to pull away when we had to," he said. "At the end it was a bit touch and go obviously with the problem that Kamui had and also the puncture, but it didn't change the result — it just made it a bit more interesting."

The reigning WEC champions were finally able to chalk up a first victory in the GR010 after near misses at Spa in May and then the Portimao 8 Hours in June. They were undoubtedly the quicker of the Toyota crews at Monza. Conway was able to edge away from Buemi from the start into a lead that stood at just under 10s when they got out of their respective mounts after the second cycle of pitstops. Vasselon explained that #8 was affected by a "balance issue".

The #8 Toyota also had the lion's share of the team's misfortune last week. Hartley was back in the pits straight away after taking over from Buemi when he lost power as the result of a fuel pressure problem. Four and a half minutes were lost with the car parked in the garage, without the team being able to identify the root cause of the problem. All it managed to do was create another one.

Somehow the left-front wheel had not been tightened correctly in all the drama. Hartley had multiple lock-ups and had returned to the back of the garage after five laps. A new front-left corner was required because the loose wheel had damaged the hub. Eighteen minutes were lost before another 48 went west while the fuel system was changed. The car was back on track in time to be able to complete the 75% distance required for Buemi, Hartley and Nakajima to score 12 points for fourth in the Hypercar class, enough to keep them in the lead of the championship.

The Alpine didn't have the pace at Monza to resist the Toyota's post-glitch charge. At Spa and then in Portugal, the ORECA design that started life as the Rebellion R-13 was



more or less a match for its rivals. This time it wasn't, and by design.

The French marque opted for a new strategy at Monza. At the opening two rounds of the season, it pushed flat-out and made additional pitstops courtesy of a fuel tank too small to take the full energy allocation allowed in the Hypercar class. This time, the drivers engaged in some serious fuel saving, lifting and coasting into Monza's heavy braking zones, to try to stretch out the mileage. The Alpine could manage three laps fewer than the LMHs, compared with a seven or eight-lap deficit at the admittedly shorter Algarve circuit. One real safety car and two of the virtual kind were enough to ensure the Alpine completed the race on the same number of stops as the #7 Toyota.

It was a different way to skin the cat, though the result was more or less the same. Monza gave the Signatech-run Alpine team its third podium of the year, and each time it has been about a minute behind the winning Toyota. "We reduced our pace to go longer on the fuel," said Lapierre. "We always knew it was going to be more efficient to do that here than in Portimao. We knew we weren't going to beat Toyota, but it would have been closer but for the last FCY."

Alpine may not have had enough in the tank — metaphorically and literally — to get on terms with Toyota, but there is evidence to suggest that Glickenhaus could have done

NIELSEN, ROVERA AND PERRODO GO BACK TO FRONT



Nicklas Nielsen, Francois Perrodo and Alessio Rovera claimed GTE narrowly missed out on the class pole, from the back and into the lead in the space of 32 laps. The car stayed at or near the front through bronze-rated Perrodo's mandatory stints on the way to a 44-second victory. Augusto Farfus stole second place on the final lap in an all-Aston Martin Vantage GTE battle between the NorthWest

AMR car he shared with Paul Dalla

Lana and Marcos Gomes and the

TF Sport-run D'Station entry

driven by Tomonobu Fujii (who was in the car at the end), Andrew

Am win number two of the season in what looked like a bit of a cakewalk barring the fact that they started from the back of the grid after a rideheight infringement. It was actually far less straightforward than it looked for the AF Corse trio as the result of a gearbox electronics glitch that required constant resets. Rovera hauled the Ferrari 488 GTE Evo, in which Perrodo had Watson and Satoshi Hoshino. Ben Keating was leading the class in the sister TF car as the two-hour mark approached when a flat-spotted front-left Michelin gave up the ghost on the lap he was due to pit. The damage to the car he shared with Felipe Fraga and Dylan Pereira required an extended spell in the pits and robbed the crew of what Keating was convinced was a sure victory.



so. The fourth-placed car was only 0.4s or so off the winning Toyota on average race pace and could run the same 30-lap stints. There were times, most notably when Dumas was at the wheel in hour four, that the team's #709 entry was the fastest car on the track. It wasn't to be, although Monza proved beyond all doubt, in the words of the engineer who headed up the design of the 007, that "Glickenhaus is not a joke".

"It was a good race for us, a good weekend, in fact," said Luca Ciancetti, technical director of the Podium Advanced Technologies organisation at the heart of Glickenhaus Racing. "We have proved the car is fast and we know there is more time to gain."

Glickenhaus, running two cars for the first

"I pushed and was quicker than the Alpine and was able to hold the gap to the Toyota"

UNITED SCORES AGAIN IN ITALY



The United Autosports ORECA was the fastest LMP2 car through the Monza 6 Hours and finished 57.7 seconds up the road from its nearest competitor. It would be hard to argue that Phil Hanson, Filipe Albuquerque and Fabio Scherer weren't deserving class winners, but they had a massive slice of luck along the way. Series newcomer WRT could have won and would have done so but for a mid-race tactical gaffe.

The WRT ORECA-Gibson 07 shared by Robin Frijns, Ferdinand Habsburg and Charles Milesi had pitted out of the lead just before the only full safety car of the race right at the beginning of hour three. The rest of the sharp end of the P2 pack hadn't stopped – but needed to — when the yellows flew. That meant they had to make so-called emergency stops, in which they could take on a 5s splash of fuel and then stop again when the pits opened as the race went green.

The WRT ORECA, with Habsburg at the wheel, should have been able to take advantage of the drive-around to gain the better part of a lap. The Belgian team, new in the WEC this season, failed to exploit the rule and came out of the safety car period down in fifth in class. "The safety car should have helped us, but we made a mistake," said WRT team boss Vincent Vosse. "We are still on a learning curve and we learned a lot today: you can be sure that we will not make this mistake again."

Vosse insisted that he was still happy at the end of a weekend in which the team notched up its maiden WEC podium and a first series pole, claimed by 20-year-old Milesi. "All three drivers performed well, it's our first season, so I cannot be disappointed," he said.

The WRT ORECA was definitely a competitive proposition at Monza. There was little to chose between it and the winning United example on pace. Just 0.1s separated them on the averages. That WRT was in the lead in hour two resulted from bad luck on United's part. Hanson had nipped past Frijns at the first chicane on the opening lap and led through his opening stint, but a wheel gun failure when he handed over to Albuquerque cost the car 12s and the lead.

A sixth WEC class win in 11 races since United joined the series full time in 2019-20 has moved reigning champion Hanson back into the points lead ahead of Portimao 8 Hours winners Anthony Davidson, Antonio Felix da Costa and Roberto Gonzalez. They were unclassified

time, showed form in qualifying when Pipo Derani got within o.8s of Lopez's pole time, and again in the race. Two-time Le Mans winner Dumas, who ended up with the fastest Glickenhaus race lap, was in buoyant mood afterwards. "When I jumped in the car I pushed and was quicker than the Alpine and was able to hold the gap to the Toyota," said the Frenchman. "I'm really happy with what I did out there."

The Podium-led team, bolstered by Joest Racing, had learned the lessons from **>>**



after an electronic problem cost their Jota ORECA over an hour in the pits. First the problem had to be chased, then the loom had to be replaced.

Third in P2, and the pro-am sub-class winner, was the Racing Team Nederland ORECA in which Frits van Eerd was partnered by former team-mate Nyck de Vries and Paul-Loup Chatin. They stepped in after Job van Uitert and then Giedo van der Garde were independently ruled out after receiving positive COVID tests.

its debut one-car assault on the Portimao 8 Hours. Most significantly it worked out how to get more from its Michelin tyres, which had either blistered in double quick time in Portugal or failed to come into the operating window. "We're learning how to use the car as we gain more information," said Ciancetti.

"This track helped us show more. The nature is much closer to Le Mans"

"This track definitely helped us show more. The nature of the circuit is much closer to Le Mans than Portimao, which means it is more in line with the philosophy of the car."

Ciancetti wasn't too downbeat about the need to change brakes, insisting that the problem was not the result of a design flaw. "It is something particular to the car here at Monza," he explained. "It is probably an assembly issue or maybe a component issue. We don't think it is a design problem."



The second car, in which Derani was joined by Gustavo Menezes and Olivier Pla, was in trouble from the get-go. The Brazilian was struggling with a lack of power, was passed by Westbrook on lap two, and was in the garage after 17 laps for attention to the engine. It turned out that a spark plug had failed. The offending item was changed but the gearbox had been damaged, almost certainly as a result of the electrical issues affecting the gear cut, and the car never quite made it to the halfway mark.

Glickenhaus knows there is more to come before Le Mans, delayed by COVID until August 21-22. It was upbeat about the work it has to do in the lead-up to the centrepiece race of the season. Toyota, less so, as it investigates the reliability issues that afflicted its cars in Italy. "We are worried, but that's business as usual for a racing team," said Vasselon. "We know we have some work to do." *M*

PORSCHE GETS THE BETTER OF FERRARI

The final results of the Monza 6 Hours show that Kevin Estre and Neel Jani gave Porsche a 32-second GTE Pro victory over the Ferrari of Alessandro Pier Guidi and James Calado. The margin of victory reveals nothing about a close-fought race in which these two cars were more often than not separated by a couple of seconds.

That the margin went out to half a minute resulted from a late gamble by the AF Corse Ferrari squad. Porsche brought the leading 911 RSR with Estre at the wheel in for its sixth pitstop during the late full-course yellow. AF left Pier Guidi out in the best of the 488 GTE Evos in one last roll of the dice.

Ferrari's strategy got Pier Guidi back on Estre's tail after he'd slipped all of 7-8s back prior to the yellows. The Italian was shaping up to make a move before ducking into the pits with two laps left. There would be no repeat of the Portimao win for the drivers of the #51 Ferrari.

Estre and Jani, class winners of the Spa series opener back in May, led the majority of the way, 173 of the 190 laps, though seldom with much in the way of a margin. Calado overtook Jani for the lead at the first chicane in the third hour, but quick work by the Manthey-run Porsche factory squad got the Swiss out in front at the following round of stops. The 911 then edged away from the Ferrari for the first time in the race into a lead of 6s, which Estre could maintain and slightly extend prior to Ferrari's late-race gamble.

"That was a proper race," said Jani. "Early on I think the Ferrari was a bit quicker than us, but when there was a bit of cloud cover that helped us to make the tyres last, especially the left rear."

Gianmaria Bruni and Richard Lietz finished third in the second Porsche, 51s behind their team-mates. A different tyre strategy, described as more aggressive, didn't pay dividends, while they also lost time in the pits courtesy of the absence of some regular members of their crew as a result of the flooding in Germany. Miguel Molina and Daniel Serra were once again no match for their AF Ferrari team-mates on the way to fourth and last in class. They lacked consistency, while also complaining of a downon-power engine.

Estre/Jani car leads the four-car GTE Pro battle



Relive this race at Motorsport.tv



RESULTS ROUND 3/6, MONZA (ITA), 18 JULY (204 LAPS – 734.319 MILES)

	DRIVERS	ТЕАМ	CAR	CLASS	TIME
1	Mike Conway (gbr) Kamui Kobayashi (JPN) Jose Maria Lopez (Arg)	Toyota Gazoo Racing	Toyota GR010 HYBRID	Hypercar	6h01m12.290s
2	Andre Negrao (BRA) Nicolas Lapierre (FRA) Matthieu Vaxiviere (FRA)	Alpine Elf Matmut (Signatech)	Alpine-Gibson A480	Hypercar	+1m00.908s
3	Phil Hanson (GBR) Fabio Scherer (CHE) Filipe Albuquerque (PRT)	United Autosports	ORECA-Gibson 07	LMP2	-4 laps
4	Richard Westbrook (GBR) Romain Dumas (FRA) Franck Mailleux (FRA)	Glickenhaus Racing	Glickenhaus-Pipo 007 LMH	Hypercar	-4laps
5	Robin Frijns (NLD) Ferdinand Habsburg (AUT) Charles Milesi (FRA)	Team WRT	ORECA-Gibson 07	LMP2	-4 laps
6	Nyck de Vries (NLD) Frits van Eerd (NLD) Paul-Loup Chatin (FRA)	Racing Team Nederland (TDS)	ORECA-Gibson 07	LMP2	-4 laps
7	Alex Brundle (GBR) Jakub Smiechowski (POL) Renger van der Zande (NLD)	Inter Europol Competition	ORECA-Gibson 07	LMP2	-5 laps
8	Stoffel Vandoorne (BEL) Sean Gelael (IDN) Tom Blomqvist (GBR)	Jota	ORECA-Gibson 07	LMP2	-5 laps
9	Juan Pablo Montoya (COL) Henrik Hedman (SWE) Ben Hanley (GBR)	Dragonspeed USA	ORECA-Gibson 07	LMP2	-5 laps
10	Loic Duval (FRA) Esteban Garcia (CHE) Norman Nato (FRA)	Realteam Racing	ORECA-Gibson 07	LMP2	-6laps
11	Tatiana Calderon (COL) Sophia Florsch (DEU)	Richard Mille Racing Team (Signatech)	ORECA-Gibson 07	LMP2	-6laps
12	Anders Fjordbach (DNK) Jan Magnussen (DNK) Dennis Andersen (DNK)	High Class Racing	ORECA-Gibson 07	LMP2	-7 laps
13	Oliver Jarvis (GBR) Ryan Cullen (IRL) Felipe Nasr (BRA)	Risi Competizione	ORECA-Gibson 07	LMP2	-8laps
14	Oliver Webb (GBR) Miro Konopka (SVK) Matej Konopka (SVK)	ARC Bratislava	Ligier-Gibson JSP217	LMP2	-13 laps
15	Kevin Estre (FRA) Neel Jani (CHE)	Porsche GT Team (Manthey)	Porsche911RSR	GTE Pro	-14 laps
16	Alessandro Pier Guidi (ITA) James Calado (GBR)	AFCorse	Ferrari 488 GTE Evo	GTE Pro	-14 laps
17	Gianmaria Bruni (ITA) Richard Lietz (AUT)	Porsche GT Team (Manthey)	Porsche911RSR	GTE Pro	-14 laps
18	Miguel Molina (ESP) Daniel Serra (BRA)	AFCorse	Ferrari 488 GTE Evo	GTE Pro	-14 laps
19	Alessio Rovera (ITA) Francois Perrodo (FRA) Nicklas Nielsen (DNK)	AFCorse	Ferrari 488 GTE Evo	GTEAm	-17 laps
20	Paul Dalla Lana (CAN) Augusto Farfus (BRA) Marcos Gomes (BRA)	Aston Martin Racing (Prodrive)	Aston Martin Vantage GTE	GTEAm	-17 laps
21	Tomonobu Fujii (JPN) Satoshi Hoshino (JPN) Andrew Watson (GBR)	D'Station Racing (TF)	Aston Martin Vantage GTE	GTEAm	-17 laps
22	Egidio Perfetti (NOR) Matteo Cairoli (ITA) Riccardo Pera (ITA)	Team Project 1	Porsche 911 RSR	GTEAm	-17 laps
23	Christian Ried (DEU) Jaxon Evans (NZL) Matt Campbell (AUS)	Dempsey-Proton Racing	Porsche 911 RSR	GTEAm	-18 laps
24	Andrew Haryanto (IDN) Marco Seefried (DEU) Alessio Picariello (BEL)	Dempsey-Proton Racing	Porsche 911 RSR	GTEAm	-18 laps
25	Francesco Castellacci (ITA) Thomas Flohr (CHE) Giancarlo Fisichella (ITA)	AFCorse	Ferrari 488 GTE Evo	GTEAm	-18 laps
26	Sarah Bovy (BEL) Rahel Frey (CHE) Michelle Gatting (DNK)	lron Lynx	Ferrari 488 GTE Evo	GTEAm	-19 laps
27	Michael Wainwright (GBR) Ben Barker (GBR) Tom Gamble (GBR)	GRRacing	Porsche 911 RSR	GTEAm	-19laps
28	Christoph Ulrich (CHE) Simon Mann (USA) Toni Vilander (FIN)	AFCorse	Ferrari 488 GTE Evo	GTEAm	-19 laps
29	Roberto Lacorte (ITA) Giorgio Sernagiotto (ITA) Antonio Fuoco (ITA)	Cetilar Racing (AF Corse)	Ferrari 488 GTE Evo	GTEAm	-20 laps
30	Anders Buchardt (NOR) Dennis Olsen (NOR) Maxwell Root (USA)	Team Project 1	Porsche911RSR	GTEAm	-21 laps
31	Pierre Ehret (DEU) Christian Hook (DEU) Jeroen Bleekemolen (NLD)	Rinaldi Racing	Ferrari 488 GTE Evo	GTEAm	-22 laps
32	Ben Keating (USA) Dylan Pereira (LUX) Felipe Fraga (BRA)	TF Sport	Aston Martin Vantage GTE	GTEAm	-29 laps
33	Sebastien Buemi (CHE) Kazuki Nakajima (JPN) Brendon Hartley (NZL)	Toyota Gazoo Racing	Toyota GR010 HYBRID	Hypercar	-43 laps
NC	Roberto Gonzalez (MEX) Antonio Felix da Costa (PRT) Anthony Davidson (GBR)	Jota	ORECA-Gibson 07	LMP2	112 laps
R	Pipo Derani (BRA) Gustavo Menezes (USA) Olivier Pla (FRA)	Glickenhaus Racing	Glickenhaus-Pipo 007 LMH	Hypercar	90 laps-gearbox
R	Andrea Piccini (ITA) Claudio Schiavoni (ITA) Matteo Cressoni (ITA)	lron Lynx	Ferrari 488 GTE Evo	GTEAm	37 laps- overheating
NS	Brendan Iribe (USA) Ollie Millroy (GBR) Ben Barnicoat (GBR)	Inception Racing	Ferrari 488 GTE Evo	GTEAm	accident

In each car, first-named driver started race. Winners' average speed 121.978 mph. Fastest lap Conway 1m36.951s, 133.661 mph.

LMP2 Albuquerque 1m39.602s, 130.103mph.

1m48.403s; 27 Bovy 1m48.437s; 28 Dalla Lana 1m48.457s; 3 Gelael/Vandoorne/Blomqvist 53; 4 Scherer/

GTE Pro Estre 1m46.339s, 121.860mph. GTE Am Rovera 1m46.917s, 121.202mph.

QUALIFYING 1 Lopez 1m35.899s; 2 Hartley 1m35.961s; 3 Lapierre 1m36.121s; 4 Derani 1m36.686s; 5 Westbrook 1m38.323s; 6 Milesi 1m38.527s; 7 Albuquerque 1m38.557s; 8 Hanley 1m38.663s; 9 de Vries 1m38.726s; 10 Nasr 1m38.829s; 11 Davidson 1m38.890s; 12 Duval 1m39.472s; 13 van der Zande 1m39.491s; 14 Florsch 1m39.905s; 15 Fjordbach 1m40.026s; 16 Webb 1m40.413s; 17 Vandoorne no time; 18 Estre 1m45.412s; 19 Pier Guidi 1m45.477s; 20 Bruni 1m45.844s; 21 Molina 1m46.214s; 22 Keating 1m47.272s; 23 Lacorte 1m47.950s; 24 Perfetti 1m48.057s; 25 Ulrich 1m48.227s; 26 Flohr 29 **Hook** 1m48.700s; 30 **Ried** 1m48.766s; 31 **Hoshino** 1m49.128s; 32 **Haryanto** 1m49.211s; 33 **Wainwright** 1m49.244s; 34 **Buchardt** 1m51.051s; 35 **Schiavoni** no time; 36 **Perrodo** no time.

CHAMPIONSHIP

Hypercar drivers

1 Hartley/Nakajima/Buemi 75; 2 Lopez/Kobayashi/ Conway 69; 3 Negrao/Vaxiviere/Lapierre 60; 4 Westbrook/Dumas 33; 5 Ryan Briscoe 18; 6 Mailleux 15. Hypercarmanufacturers

1 Toyota Gazoo Racing 90; 2 Alpine Elf Matmut 60; 3 Glickenhaus Racing 13. LMP2 drivers

1 Hanson 74; 2 Davidson/da Costa/Gonzalez 56;

Albuquerque 51.

LMP2 ProAm drivers

1 Nato/Garcia 71; 2 van Eerd 68; 3 Hanley/Montoya/ Hedman 60; 4 Fjordbach/Magnussen/Andersen 47. GTE drivers

1 Estre/Jani 76; 2 Pier Guidi/Calado 74; 3 Serra/Molina 54; 4 Bruni/Lietz 45; 5 Michael Christensen 24; 6 Fuoco/Sernagiotto/Lacorte 21.5. GTE manufacturers 1 Ferrari 128; 2 Porsche 121. GTE Am drivers 1 Fuoco/Sernagiotto/Lacorte 54; 2 Rovera/Perrodo/ Nielsen 52; 3 Farfus/Gomes/Dalla Lana 44; 4 Castellacci/Fisichella/Flohr 41.

At just 20, Kalle Rovanpera made history on Rally Estonia with his first WRC win

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Finland's new rally hero Rovanpera makes history

It's been coming —and in Estonia Kalle Rovanpera delivered, to beat the record of his own Toyota team boss and become the WRC's youngest rally winner. He did it in style, too

TOM HOWARD

PHOTOGRAPHY McKLEIN

hatever Kalle Rovanpera achieves in his rally career, this year's Rally Estonia will be forever etched in his mind as the event where he truly announced himself on the World Rally Championship stage.

Rovanpera's prodigious talent has been known for some time, and the son of former WRC rally winner Harri Rovanpera has been knocking on the door of the winners' circle, but in Estonia his knocks were answered. The 20-year-old produced arguably the drive of his burgeoning career to date to claim a maiden WRC victory and in doing so became the youngest ever winner in the championship's history.

At times Rovanpera was simply untouchable at the weekend, combining outrageous speed in his Toyota with controlled and measured drives to seal a dominant triumph across Estonia's 24 fast and flowing gravel stages.

The event was something of a home round for Rovanpera given the Baltic nation is his place of residence, and he has grown up around these frighteningly fast jump-laden roads. Many were licking their lips at the prospect of Rovanpera going head to head with the most famous person in Estonia: Ott Tanak, the 2019 WRC champion and winner of Rally Estonia last year.

It's hard to believe that Rally Estonia is only in its second year as a WRC event, as crowds flocked to the event during a summer heatwave. But that is the power of the WRC and Tanak. The rally is Estonia's answer to Euro 2020, and fans throw all their support behind a rapid blond-haired Hyundai hero, akin to England's obsession with 'football coming home'.

Although boosted by an engine upgrade, the bad luck that has been following Tanak and Hyundai around like a bad smell struck again, when three punctures in the space of two Friday morning stages spelt early retirement, robbing fans of Rovanpera versus Tanak. The misfortune handed the advantage to Royanpera, who ran with it. Despite facing a challenge from Hyundai's Craig Breen, he turned his Friday night 8.5-second lead into a 50.7s advantage







"I've got the car to the end of the stage, but I don't know what to say. I am fed up"

on Saturday. That margin extended on Sunday to almost a minute over the impressive Irishman, who was competing in his first WRC gravel event since last year's Estonia visit.

In hindsight, Rovanpera's triumph in the opening superspecial on Thursday night was perhaps more of a warning sign than everyone first thought. It was the calm before the storm.

The WRC doesn't seem to do quiet Fridays of late. It took just a morning loop of stages to turn the rally upside down. The hopes of a nation went from joy to despair in a heartbeat as Tanak went from taking the rally lead after winning stage two to early retirement by stage four.

After fitting his only spare tyre, following a failure while at full bore in stage three, two more punctures hit after Tanak slid wide at a right-hander and almost rolled. He elected to dive into a field rather than fight his car back onto the road immediately. The damage had been done, and Tanak was left to pull up on an access road and watch his title aspirations surely evaporate. It appeared that punctures were like buses for Hyundai as another one turned up for Thierry Neuville, who saw his left rear go, also on stage four, losing 15s in the process. The third Hyundai, driven by Breen, had been flying in second overall, but even it had its wings clipped, this time by M-Sport's Gus Greensmith. The Briton suffered an engine issue that limited the Ford Fiesta to a crawl, throwing dust into the windscreen of Breen. "Same God damn thing as the rest of the year," said Greensmith of the problem. "I've got it to the end of the stage, but I don't know what to say. I'm fed up." >>>



NO ADS. JUST MORE PERFORMANCE





Breen was equally fed up, and his anger boiled over on the next stage when Greensmith pulled over again and retired. A marshal then stood in the middle of the road to slow the oncoming Irishman, despite Greensmith car's being safe and well off the road. "I went into road mode and everything and saw someone at the top of the crest but the car was pulled in," said Breen. "People need to be switched on — if it's not a danger then don't f***** worry about it."

Luckily for Breen, officials handed him notional times for the two stages where he was held up, leaving him just 0.2s adrift of new leader Rovanpera.

Toyota also had its fair share of drama when Takamoto Katsuta and co-driver Daniel Barritt were forced to retire from third place after stage four. Barritt reported neck and back pain caused by the landings from harsh jumps and crests, and was taken to hospital. He was later released but advised to rest up, forcing the pair that finished second in Kenya to withdraw.

As the dust literally settled, the remainder of the day was dominated by an enthralling tussle between Rovanpera and Breen. Despite limited time in the car this year, Breen offered a stern test to his rival, but six outright stage wins ensured that the day





"Once Kalle had done that it was a different objective for the rest of the rally. Hats off"

belonged to Rovanpera, who built up an 8.5s lead.

Neuville managed to recover from his puncture to overhaul road-sweeper and Toyota's championship leader Sebastien Ogier, who amazingly found himself briefly in third, while Elfyn Evans, struggling to click with his Yaris, was fifth, having overshot two junctions and stalled on stage three.

Another turning point of the event came on Saturday's first stage, a brand new test for the field. In what will likely go down in rally folklore as one of the great drives, Rovanpera, who had done his homework, stamped his authority on the event. He was 10.7s faster than the returning Tanak, and 14.3s quicker than his nearest rival Breen, nearly trebling his overall lead over the Hyundai driver. WRC All Live commentator Julian Porter summed the performance best by saying "you needed a visa to join Rovanpera in stage 10".

Rovanpera's pace sent a message that was heard loud and clear,

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even if he didn't think the drive was worth writing home about: "I was trying to do my job — it didn't feel anything special. We knew the first stage this morning was the most difficult stage of the rally, a really technical stage with brand new pacenotes, and we prepared really well for that knowing that we could make some difference."

Breen knew what had hit him, and finishing second became the target. "It was very impressive and something very special," said Breen. "I honestly did my best stage that I could. Once he [Kalle] had done that it was a different objective for the rest of the weekend. Hats off to him."

From there, Rovanpera drove superbly while backing off to gradually increase the lead to 50.7s by the finish of stage 18 at the end of the day. Tanak did his best to delight home fans with a »

string of six consecutive stage wins to tease onlookers with what could have been, but the rally was firmly in Rovanpera's grasp.

Neuville and Ogier rattled off stage wins to end the day in a comfortable third and fourth, while Evans's confidence struggles continued in fifth. M-Sport's Teemu Suninen was sixth — he'd recovered from a puncture, only for his Fiesta to develop a mechanical issue. Pierre-Louis Loubet was the last remaining WRC driver to have completed the distance thus far in seventh.

Rovanpera's pace combined with calm management triggered high praise from Toyota boss Jari-Matti Latvala, who claimed "Kalle could not have been better today, it was a 10-out-of-10 day from him."

"It keeps up the Finnish tradition, after Henri Toivonen held the record before me"

Six stages stood in the way of Rovanpera and a record-breaking WRC triumph on Sunday. Despite huge pressure on his shoulders, the Finn remained cool, calm and collected as he navigated his way to the finish and a truly memorable win by 59.9s over Breen, who equalled his best WRC result. "For sure when we finished it was a really big relief and you finally get the win," said Rovanpera. "You feel the pressure releasing a bit so for sure that is a nice feeling."

As for Latvala having to concede his youngest ever winner record, the Finn was only happy to see Rovanpera add that accolade alongside his trophy. "It keeps up the Finnish tradition, after Henri Toivonen held it before me," he said. "Kalle did such a fantastic job this weekend."

Hyundai enjoyed a double podium with Neuville third, while a disappointed Tanak sparked wild scenes from the fans by winning the powerstage to salvage five bonus points. "When you are not fighting for anything, it's difficult to have the same focus as you usually would, so we have just concentrated on getting to the end of this rally," said Tanak.

There were suggestions that Hyundai could pull a strategic move to swap Breen and Neuville to benefit the Belgian's title hopes, but it failed to materialise. That scenario may not have been helped by technical issues striking Neuville's starter motor, resulting in him



copping a 10s penalty for checking in late to the penultimate stage, leaving only an 11.6s gap to Ogier in fourth.

That was the least of Neuville's worries after revealing that he was far from feeling 100% on Sunday. "I'm struggling with a lot of pain in my right eye since this morning and it is getting a little bit better," he explained. "Even [co-driver] Martijn [Wydaeghe] was driving on the road section because I could not see anything. I didn't feel well all day but at the end the job is done."

The FIA then handed Neuville and Wydaeghe a suspended one-event WRC ban and a €2500 fine for speeding after being clocked at 190km/h in a 90km/h road section.

Outside of the podium spots, the metronome that is Ogier finished fourth and extended his championship lead to 37 points over Evans, who came home fifth.

The record books will show that Tanak, who rejoined under restart rules on Saturday, scored 11 fastest times to Rovanpera's eight, but even the Estonian favourite would have been hard pressed to deny the new flying Finn the win.

While he may be outside of the title fight, Rally Estonia belonged to Rovanpera. Finland's latest in a long line of rally heroes brought rallying home, ending the WRC-mad nation's long drought since Latvala's win at Rally Australia in November 2018.





HARRI ROVANPERA'S TEARS OVER SON'S MAIDEN WRC WIN



of emotion for his son

While Kalle Rovanpera was the definition of calmness personified on his way to becoming the youngest ever WRC winner, the same could not be said for his father, former rally driver Harri Rovanpera.

Rovanpera Sr, a former factory SEAT, Peugeot and Mitsubishi WRC pilot, was stageside to witness his 20-year-old son Kalle score a record breaking win at Rally Estonia. A WRC winner himself in 2001, Rovanpera was close to tears at the finish, having overseen Kalle's rise up the rally pyramid to become a genuine challenger in rallying's top tier.

Rovanpera Jr only joined the WRC's top flight last year with Toyota after winning the 2019 WRC2 Pro title as an 18-year-old.

"It has been an incredible weekend -I can't keep talking because I will cry all the time," said Rovanpera Sr. "It is wonderful after four bad events but that came at the right time. All the time you have to stop [on events], that is very disappointing, but now everything is changing I hope by the end of the season.

"I don't know how my heart is still working. It was very hard [to watch]."

Reflecting on the achievement, Kalle admitted it was special to claim the youngest ever winner mantle from now Toyota WRC boss Jari-Matti Latvala,

RESULTS ROUND 7	12, RALLY ESTONIA	, 15-18 JULY
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POS	5 DRIVER/CO-DRIVER	TEAM / CAR	TIME	
1	Kalle Rovanpera (FIN)/Jonne Halttunen (FIN)	Toyota Gazoo Racing WRT / Toyota Yaris WRC	2h51m29.1s	
2	Craig Breen (IRL)/Paul Nagle (IRL)	Hyundai Shell Mobis WRT / Hyundai i 20 Coupe WRC	+59.9s	
3	Thierry Neuville (BEL)/Martijn Wydaeghe (BEL)	Hyundai Shell Mobis WRT / Hyundai i20 Coupe WRC	+1m12.4s	
4	Sebastien Ogier (FRA)/Julien Ingrassia (FRA)	Toyota Gazoo Racing WRT / Toyota Yaris WRC	+1m24.0s	
5	Elfyn Evans (GBR)/Scott Martin (GBR)	Toyota Gazoo Racing WRT / Toyota Yaris WRC	+2m07.1s	
6	Teemu Suninen (FIN)/Mikko Markkula (FIN)	M-Sport Ford WRT / Ford Fiesta WRC	+7m07.3s	
7	Pierre-Louis Loubet (FRA)/ Hyundai 2C Competition / Hyundai i20 Coupe V Florian Haut-Labourdette (FRA) Hyundai 2C Competition / Hyundai i20 Coupe V		+8m48.3s	
8	Alexey Lukyanuk (RUS)/Yaroslav Fedorov (RUS) Skoda Fabia Rally2 Evo		+10m16.1s	
9	Andreas Mikkelsen (NOR)/Ola Floene (NOR)	Toksport WRT/Skoda Fabia Rally2 Evo	+10m29.9s	
10	Mads Ostberg (NOR)/Torstein Eriksen (NOR)	TRT World Rally Team / Citroen C3 Rally2	+10m46.6s	
OTHERS				
31	Ott Tanak (EST)/Martin Jarveoja (EST)	Hyundai Shell Mobis WRT / Hyundai i20 Coupe WRC	+1h02m46.9s	
32	Gus Greensmith (GBR)/Chris Patterson (GBR)	M-Sport Ford WRT / Ford Fiesta WRC	+1h20m36.1s	
R	Takamoto Katsuta (JPN)/Daniel Barritt (GBR)	Toyota Gazoo Racing WRT / Toyota Yaris WRC SS	5-co-driverinjury	

STAGE TIMES				
STAGE	FASTEST	LEADER	SECOND	
SS1 Tartu 1 (1.24 miles)	Rovanpera 1m42.8s	Rovanpera	Breen+0.1s	
SS2 Arula 1 (7.87 miles)	Tanak 6m32.1s	Tanak	Breen+0.3s	
SS3 Otepaa 1 (11.34 miles)	Breen and Rovanpera 8m30.	6s Breen	Rovanpera+1.0s	
SS4 Kanepi 1 (10.26 miles)	Rovanpera8m10.5s	Rovanpera	Breen+0.2s	
SS5 Kambja 1 (11.09 miles)	Rovanpera9m39.7s	Rovanpera	Breen+4.8s	
SS6 Arula 2 (7.87 miles)	Rovanpera 6m27.9s	Rovanpera	Breen+6.2s	
SS7 Otepaa 2 (11.34 miles)	Rovanpera8m19.5s	Rovanpera	Breen+7.9s	
SS8 Kanepi 2 (10.26 miles)	Breen 8m00.2s	Rovanpera	Breen+6.7s	
SS9 Kambja 2 (11.09 miles)	Rovanpera9m27.7s	Rovanpera	Breen+8.5s	
SS10 Peipsiaare 1 (14.64 miles)	Rovanpera 12m47.4s	Rovanpera	Breen+22.8s	
SS11 Mustvee 1 (7.70 miles)	Tanak 6m26.2s	Rovanpera	Breen+25.6s	
SS12 Raanitsa 1 (14.14 miles)	Tanak 10m58.7s	Rovanpera	Breen+36.0s	
SS13 Vastsemoisa 1 (4.18 miles)	Tanak 4m17.6s	Rovanpera	Breen+35.7s	
SS14 Peipsiaare 2 (14.64 miles)	Tanak 12m45.3s	Rovanpera	Breen+39.5s	
SS15 Mustvee 2 (7.70 miles)	Tanak 6m24.8s	Rovanpera	Breen+45.6s	
SS16 Raanitsa 2 (14.14 miles)	Tanak 10m46.6s	Rovanpera	Breen+45.2s	
SS17 Vastsemoisa 2 (4.18 miles)	Neuville4m16.2s	Rovanpera	Breen+46.3s	
SS18 Tartu 2 (1.24 miles)	Ogier 1m41.9s	Rovanpera	Breen+50.7s	
SS19 Neeruti 1 (4.85 miles)	Tanak and Neuville 4m48.3s	Rovanpera	Breen+51.2s	
SS20 Elva 1 (7.28 miles)	Tanak and Neuville 6m00.2s	Rovanpera	Breen+54.4s	
SS21 Tartu vald 1 (4.64 miles)	Neuville 5m58.4s	Rovanpera	Breen+54.2s	
SS22 Neeruti 2 (4.85 miles)	Tanak4m46.7s	Rovanpera	Breen+54.4s	
SS23 Elva 2 (7.28 miles)	Neuville 5m55.1s	Rovanpera	Breen+54.6s	
SS24 Tartu vald 2 (powerstage) (4.64 miles)	Tanak 5m52.2s	Rovanpera	Breen+59.9s	
DRIVERS' CHAMPIONSHIP 1 Ogier 148; 2 Evans 111; 3 Neuville 96; 4 Rovanpera 82; 5 Tanak 74; 6 Katsuta 66; 7 Breen 42; 8 Greensmith 34; 9 Dani Sordo 31; 10 Adrien Fourmaux 30.				
MANUFACTURERS' CHAMPIONSHIP 1 Toyota Gazoo Racing YPRES RALLY BELGIUM 19 AUGUST ISSUE				
WRT 315 ;2 Hyundai Shell Mobis WRT 256;3 M	Belgian classic takes its bow			

whose record had stood since 2008.

"The feeling was nice in the car and I didn't feel much pressure, it was quite calm, it was enjoyable," said Kalle. "For sure it is something special but it is not something I think about much, all these records. But of course it was nice when Jari-Matti came to say to me that he wanted me to be the guy that is taking his record from him."

Asked if he shed any tears, he replied: "I don't think so, I think dad [Harri] was doing that part quite well."

Μ WRT 315; 2 Hyundai Shell Mobis WRT 256; 3 M-Sport Ford WRT 125;4 Hyundai 2C Competition 36.

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as a round of the WRC

WORLD OF SPORT

Zhou ends drought with Silverstone success

FIA FORMULA 2 SILVERSTONE (GBR) 17-18 JULY ROUND 4/8

Guanyu Zhou's FIA Formula 2 title challenge was beginning to waiver as last Sunday morning rolled around — he had failed to bag points in four straight races, a run stretching back to his third place in the first Baku sprint contest. But he reignited his championship hopes with a victory in the feature race at Silverstone.

Alpine F1 junior Zhou arrived in Britain as the points leader, but spun into retirement in the first sprint race last Saturday, and couldn't get into the points from the back of the grid in the second sprint. Now he was down to fourth in the standings. But he qualified his UNI-Virtuosi car second for the feature race, and passed polesitter Oscar Piastri off the line to set up his third triumph of the 2021 campaign and move from fourth to second in the championship.

While Zhou launched ahead of Piastri at the start, fourth qualifier Dan Ticktum passed second-row partner Richard Verschoor into third. By the end of lap six of 29, Zhou had a 2.1s lead, and Ticktum became the first to pit, switching from the medium option tyre to the hard prime.

Piastri pitted his Prema Racing car next time around in order to try to get an undercut on Zhou, but the ploy backfired. As he rejoined, he fell victim to Ticktum, whose Carlin car's tyres were warmer. Zhou was in a lap later and, by the end of his first lap on the hards, he was 2.9s up on Ticktum.

Ticktum and Piastri continued to battle it out as they both looked to clear the cars that were on an alternate strategy, and running long on the hard Pirellis. Ticktum was more successful in this — he cleared Matteo Nannini, but Piastri became stuck behind the Italian for several laps.

Eventually Zhou crossed the finish line almost 4s ahead of Ticktum, who finished runner-up at his home event. Piastri faced pressure from Verschoor for third for the last two laps, with the pair tussling into the final tour, but the Australian held his position — and a five-point series lead over Zhou. Behind MP Motorsport racer Verschoor, it was Prema's Robert Shwartzman in fifth, ahead of Felipe Drugovich (Virtuosi) and Juri Vips (Hitech GP), who led for several laps mid-race on the alternate strategy before claiming seventh.

Shwartzman had taken his second win of the year in the first sprint race, with a great start putting him into the lead from fourth on the grid. The Russian survived three safety car restarts to add to his success in







the first sprint race in Baku. He led every lap and won ahead of Vips, with Christian Lundgaard completing the podium.

The first safety car was prompted by Zhou spinning at The Loop. Seconds later, Roy Nissany's race was also curtailed when he ran into the gravel after contact with Lundgaard. The second safety car came after Alessio Deledda spun and was stranded in the middle of the track, and the final intervention arrived when Guilherme Samaia hit the kitty litter.

Verschoor led the second sprint race from lights to flag, converting pole position into his first F2 win. Behind him, Marcus Armstrong finished second to take his first podium of the season with DAMS, while Ticktum chalked third.

This race took a long time to get going, owing to two lengthy early safety car periods. The first was triggered when Ralph Boschung spun across the track at The Loop and was heavily collected by Deledda, with Zhou having a narrow escape as he swerved around the incident. Not long after the restart, Jehan Daruvala lost the rear end of his car and collected the unfortunate Bent Viscaal, putting the Dutchman out of the race and causing another caution. That left time for 11 laps of green-flag racing, with most attention on the efforts of Piastri to demote Liam Lawson from fourth place, which he finally managed with four laps remaining. There was one other change in the top 10, with Shwartzman sent spinning after catching a kerb on the penultimate lap, sending him down from ninth into an eventual 15th.



RESULTS ROUND 4/8, SILVERSTONE (GBR), 17-18 JULY RACE 3 (29 LAPS – 106.071 MILES)

POS	DRIVER	TEAM	ТІМЕ	QUALIFYING
1	Guanyu Zhou (CHN)	UNI Virtuosi Racing	51m07.552s	1 Piastri 1m39.854s;
2	Dan Ticktum (GBR)	Carlin	+3.828s	2 Zhou 1m40.075s; 3 Verschoor 1m40.259s;
3	Oscar Piastri (AUS)	Prema Racing	+19.342s	4 Ticktum 1m40.408s;
4	Richard Verschoor (NLD)	MP Motorsport	+20.128s	5 Pourchaire 1m40.419s;
5	Robert Shwartzman (RUS)	Prema Racing	+24.775s	6 Drugovich 1m40.451s; 7 Shwartzman 1m40.452s;
6	Felipe Drugovich (BRA)	UNI Virtuosi Racing	+25.469s	8 Nissany 1m40.486s;
7	Juri Vips (EST)	Hitech Grand Prix	+25.836s	9 Vips 1m40.491s;
				10 Lundgaard 1m40.556s;
8	Theo Pourchaire (FRA)	ART Grand Prix	+26.651s	11 Lawson 1m40.679s; 12 Daruvala 1m40.683s;
9	Lirim Zendeli (DEU)	MP Motorsport	+27.421s	13 Zendeli 1m40.772s;
10	Jehan Daruvala (IND)	Carlin	+27.677s	14 Armstrong 1m40.895s;
11	Liam Lawson (NZL)	Hitech Grand Prix	+39.951s	15 Boschung 1m40.915s;
12	Marcus Armstrong (NZL)	DAMS	+40.516s	16 Nannini 1m41.050s; 17 Viscaal 1m41.185s;
13	Bent Viscaal (NLD)	Trident	+44.372s	18 Beckmann 1m41.295s;
14	Ralph Boschung (CHE)	Campos Racing	+47.641s	19 Aitken 1m41.306s;
15	David Beckmann (DEU)	Charouz Racing	+47.812s	20 Samaia 1m41.758s; 21 Sato 1m41.790s;
16	Roy Nissany (ISR)	DAMS	+49.492s	22 Deledda 1m43.734s.
17	Jack Aitken (GBR)	HWA Racelab	+51.977s	
18	Matteo Nannini (ITA)	Campos Racing	+52.326s	
19	Marino Sato (JPN)	Trident	+53.708s	
20	Guilherme Samaia (BRA)	Charouz Racing	+1m02.605s	
21	Christian Lundgaard (DNK)	ART Grand Prix	+1m30.203s	
22	Alessio Deledda (ITA)	HWA Racelab	-1lap	

Winner's average speed 124.482mph. Fastest lap Daruvala 1m42.767s, 128.229mph.

SPRINT RACE 1 (21 LAPS - 76.787 MILES)

GRID RACE 1 Decided by result of qualifying, with top 10 reversed.

1 Shwartzman 42m34.300s; 2 Vips +0.971s; 3 Lundgaard +2.534s; 4 Drugovich +5.041s; 5 Pourchaire +5.594s; 6 Piastri +8.403s; 7 Lawson +11.640s; 8 Ticktum +12.365s; 9 Armstrong +12.795s; 10 Verschoor +13.640s; 11 Zendeli +14.222s; 12 Daruvala +16.694s; 13 Beckmann +17.215s; 14 Boschung +19.347s; 15 Nannini +20.113s; 16 Viscaal +21.048s; 17 Aitken +22.670s; R Sato 17 laps-mechanical; R Samaia 11 laps-accident; R Deledda 3 laps-spun; R Nissany 0 laps-accident; R Zhou 0 laps-spun.

Winner's average speed 108.222 mph. Fastest lap Piastri 1m42.498s, 128.566 mph.

SPRINT RACE 2 (21 LAPS - 76.787 MILES)

GRID RACE 2 Decided by result of race 1, with top 10 finishers reversed.

1 Verschoor 42m38.809s; 2 Armstrong +1.202s; 3 Ticktum +2.350s; 4 Piastri +7.726s; 5 Lawson +12.161s; 6 Vips +14.879s; 7 Drugovich +15.522s; 8 Beckmann +16.562s; 9 Zendeli +18.150s; 10 Pourchaire +18.619s; 11 Zhou +19.583s; 12 Nissany +21.141s; 13 Lundgaard +21.893s; 14 Nannini +23.047s; 15 Shwartzman +24.329s; 16 Sato +26.701s; 17 Samaia +33.083s; 18 Aitken +35.937s; 19 Daruvala +42.390s; R Viscaal 5 laps-accident; R Boschung 0 laps-accident; R Deledda 0 laps-accident.

Winner's average speed 108.032mph. Fastest lap Piastri 1m42.846s, 128.131mph.

CHAMPIONSHIP 1 Piastri 108; 2 Zhou 103; 3 Shwartzman 91; 4 Ticktum 89; 5 Vips 85; 6 Pourchaire 65; 7 Drugovich 59; 8 Lawson 58; 9 Daruvala 56; 10 Verschoor 50.

MEGAN WHITE





Powell pounces in closing minutes for home win

W SERIES SILVERSTONE (GBR) 17 JULY ROUND 3/8

Set against the backdrop of a capacity crowd on a beautiful summer's day, Alice Powell capped a dream W Series weekend at Silverstone, converting pole position at her home race to take her second victory of the season.

Passing Fabienne Wohlwend for the win just five minutes before the chequered flag, Powell recaptured the championship lead in front of roaring grandstands, with the biggest crowd the series has ever witnessed after it joined the Formula 1 support package for this year.

A good start allowed Liechtensteiner Wohlwend to edge in front and initially it looked as though Racing X driver Powell might have missed her victory chance. But Powell kept the pressure on and, following a brief safety car period, Wohlwend locked up into the first part of the Club complex, causing her to run wide on the exit. Powell jumped ahead on lap 12 of 16 before edging away to a 1.9-second victory, setting the fastest lap on the penultimate tour.

"It's an amazing feeling to win on home soil," said Powell. "I've experienced lots of British Grand Prix weekends but never from this side and I want to thank every single fan out there for the amazing support. To race and win in front of this crowd is the stuff that dreams are made of and it was extra special to have my family here too.

"It wasn't the best of starts for me, I got a bad launch and was behind Fabienne. But I knew I had the pace. Luckily she made an error, which let me sneak through and I managed to bring it home from there."

Second place was still Wohlwend's best finish in the series and helps her to fourth in the points standings.

Reigning champion Jamie Chadwick completed the podium, but lost her lead in the table, while Emma Kimilainen and Nerea Marti came home fourth and fifth.

Before the race got under way, 2019 championship runner-up Beitske Visser was forced to make a last-minute engine change due to a mechanical issue. The Dutch driver then endured a bad start from fourth, slipping back to seventh, but managed to finish sixth. That represented her first points of the season after a torrid start to her campaign at both races in Austria.

Five of the six Brits in the field finished in the points. Sarah Moore took seventh and British F4 driver Abbi Pulling, who is mentored by Powell, bagged an impressive eighth place on her series debut.

Abbie Eaton finished ninth, while

Wohlwend led Powell for much of the contest prior to critical Club error



Jessica Hawkins crossed the line in 10th but was demoted six spots after receiving a 20-second penalty for a last-lap collision with Belen Garcia, forcing the Spanish rookie's retirement. The only other driver not to finish was Miki Koyama, who stalled on the grid before eventually getting off the line as marshals ran to help her. She then ground to a stop on lap nine with a technical issue, prompting the safety car. Powell leads the standings by six points from Chadwick, with Moore completing the trio of Brits at the top of the table. MEGAN WHITE

Lightning strikes for Almirola

NASCAR CUP NEW HAMPSHIRE (USA) 18 JULY ROUND 22/36

Ford Mustang racer Aric Almirola won a NASCAR Cup race at New Hampshire Motor Speedway last weekend that almost didn't happen and, when it did, then failed to run for the full scheduled distance.

Kyle Busch started on pole and led the first six laps until he spun and backed into the wall as a heavy mist picked up quickly at the track before NASCAR could throw the caution. Denny Hamlin and Martin Truex Jr were both collected in the incident.

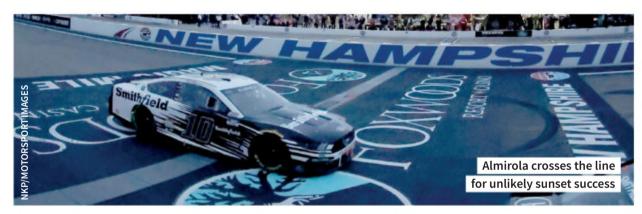
After waiting through a 102-minute rain delay, the action resumed but, because the Loudon venue isn't equipped with floodlights, NASCAR wasn't certain it could complete the planned 301-lap distance.

With darkness closing in, Almirola led for the first time on lap 246 and, after a round of green flag pitstops and a battle with Brad Keselowski, he returned to the front. Officials then indicated they might shorten the race due to darkness or weather and if that decision followed, there would be 10 laps remaining and no overtimes.

They then elected to halt the contest after 293 tours and Almirola — who entered the race 27th in the standings — earned his first win since 2018, the third of his top-flight career, and locked himself into the playoffs.

It marked a surprise result given the struggles of the Stewart-Haas Racing team, which will exit the series at the end of the season. "We've been through so much and I've just stood the test and kept the faith," said Almirola. "The team, everybody they've just been working so hard. There have been so many who have continued to support us through the crappiest year ever. This feels so good for them."

Christopher Bell, who won Saturday's NASCAR Xfinity Series race, was second ahead of Keselowski. Joey Logano rallied from a two-lap penalty to finish fourth and Ryan Blaney rounded out the top five. JIM UTTER



WEEKEND WINNERS

W SERIES

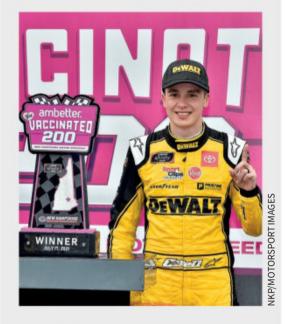
SILVERSTONE (GBR) Alice Powell Racing X

NASCAR CUP

NEW HAMPSHIRE (USA) Aric Almirola Stewart-Haas Racing (Ford Mustang)

NASCAR XFINITY SERIES

NEW HAMPSHIRE (USA) Christopher Bell (below) Joe Gibbs Racing (Toyota Supra)





Bell triumphs as he rehearses Cup routine

NASCAR XFINITY SERIES NEW HAMPSHIRE (USA) 17 JULY ROUND 19/33



Christopher Bell earned a clean sweep of stage wins and overall victory in his first NASCAR Xfinity Series start since 2019.

The 26-year-old made his second-tier cameo due to the lack of practice and qualifying running that would precede the full-bore Cup contest the next day. He said: "You're not sitting in the car until they drop the green flag. It's a really big advantage [to drive in Xfinity]. Especially at a place like here where the Xfinity rules package is similar to the Cup rules package." The plan came together well. Ahead of finishing runner-up on Sunday, Bell won stages one and two to then beat Justin Allgaier by 6.2 seconds at the flag at the New Hampshire Motor Speedway. Driving a Joe Gibbs Racing Toyota Supra, Bell made sound early progress starting from 14th to pounce on early leader AJ Allmendinger on the final lap of stage one, just as a caution flag was displayed for a wreck, to earn the early points. He then easily held off Austin Cindric through the next phase before landing a third series triumph at the Loudon track. "What I got figured out is that I have really fast race cars to drive," said Bell. "I just love being here with Joe Gibbs Racing. The Supras I've had the last three times I've been here have been amazing." Daniel Hemric crossed the line in third aboard his similar Supra, while Cindric slipped down to an eventual fourth for Team Penske and Bell's Joe Gibbs team-mate Harrison Burton rounded out the top five. JIM UTTER

Corvette, Aston taste sweet success at Lime Rock

IMSA SPORTSCAR LIME ROCK (USA) 17 JULY ROUND 8/13

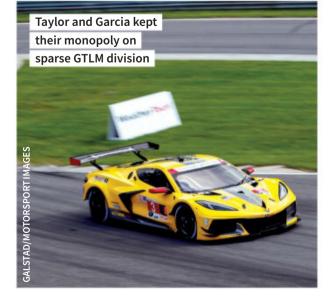
Corvette Racing continued its domination of the sadly depleted IMSA SportsCar GTLM category at Lime Rock Park on Saturday as series leaders Jordan Taylor and Antonio Garcia claimed their fourth win in just five point-scoring rounds. In the more hotly contested GTD category, Roman De Angelis and Ross Gunn combined to take an impressive second victory of the season aboard their Heart Of Racing Aston Martin Vantage GT3.

The commanding performance by Taylor, who also took pole position, was his record-extending 23rd in IMSA competition and leaves Laguna Seca as the only current track on which he has yet to win during the 'modern era' dating back to 2014 (although he did score a Grand-Am DP victory at the California venue in 2013). It was also the first triumph at Lime Rock for Garcia, who still requires a victory at Road Atlanta to complete his own 'full house'.

Tommy Milner and Nick Tandy ensured another sweep of the top two GTLM positions for the Corvette C8.R, although the story might have been rather different had a nearby lightning strike not brought about a red-flag interruption with an hour and 10 minutes remaining.

The Proton Competition Porsche 911 RSR of Cooper MacNeil and Mathieu Jaminet had been closing in when the red flag flew, but was unable to capitalise when time expired before the race could be resumed. Unfortunately, local noise ordinances do not allow race engines being run after 1800hrs, so Jaminet had to be content with a new race lap record, eclipsing the standard set in 2019 by fellow Frenchman Patrick Pilet.

The youngest driver in the field, 20-yearold Canadian De Angelis, produced an impressive lap in qualifying on Friday to secure his first-ever IMSA GTD class pole position. He proceeded to take off confidently into the lead of the Saturday





afternoon race, which was scheduled to run for two hours and 40 minutes. De Angelis managed to eke out a small lead over the Vasser Sullivan Lexus RC F GT₃ of Aaron Telitz during the opening stint before handing over to Englishman Gunn with just over 45 minutes in the books.

Gunn continued the good work, despite the best efforts of Madison Snow, who profited from a bold strategic call by the Paul Miller Racing Lamborghini Huracan crew, which catapulted him from fifth place to second after the first round of pitstops. The early conclusion to the race and a force majeure ruling ensured that Snow was able to retain second, even though co-driver Bryan Sellers never actually climbed aboard the Lamborghini on race day and therefore had not met the usual 45-minute minimum drive time. De Angelis and Gunn, who also won in Detroit in June, now hold the lead in both the 'regular season' GTD championship and the Sprint Cup, which comprises the eight shorter races of the season.

WEEKEND WINNERS

IMSA SPORTSCAR LIME ROCK (USA)

 GTLM Antonio Garcia/Jordan Taylor Corvette Racing (Chevrolet Corvette C8.R)
GTD Roman De Angelis/Ross Gunn Heart of Racing Team (Aston Martin Vantage GT3)

AUSTRALIAN SUPERCARS TOWNSVILLE (AUS)

JEREMY SHAW

Races 1 & 3

Cam Waters, Tickford Racing (Ford Mustang) **Race 2** Shane van Gisbergen Triple Eight (Holden Commodore ZB)

SUPER GT

MOTEGI (JPN) Naoki Yamamoto/Tadasuke Makino

Team Kunimitsu (Honda NSX-GT)



For full results visit motorsportstats.com

Waters fights off the Triple Eight threat

AUSTRALIAN SUPERCARS TOWNSVILLE (AUS) 17-18 JULY ROUND 7/12

Australian Supercars turned on three thrilling sprint races to round out the Townsville double-header as Cam Waters ended Triple Eight's dominance.

The Triple Eight Holden Commodore ZBs had been untouchable across the Townsville 500 weekend thanks to a Shane van Gisbergen brace, so there were fears that the three-heat SuperSprint would be a foregone conclusion. But while Triple Eight still had the edge on pace, Waters was able to close the gap enough to nab a couple of race wins aboard his Tickford Racing Ford Mustang.

The first came in Saturday evening's opener, Waters jumping early leader Anton De Pasquale at the stops with an undercut strategy. His cause was also helped by both



Triple Eight drivers picking up 15-second penalties. Van Gisbergen's was for a forceful move on Brodie Kostecki early in the race, the Kiwi still able to recover to sixth. Jamie Whincup, who finished just o.8 seconds behind Waters on the road, was dropped to fifth thanks to speeding in the pitlane.

The Triple Eight duo had race two all to themselves, van Gisbergen and Whincup staging a nailbiting battle for the win. Whincup led but lost out during the pitstops when van Gisbergen opted to take on just two new tyres. He then defended staunchly for much of the second stint against Whincup, who took on three tyres.

In the finale it was Waters's turn to defend, a bold move to pit on the second lap of a mid-race safety car period paying dividends as he jumped van Gisbergen for the lead. The pair then went at it for the rest of the race, van Gisbergen clearly quicker but Waters well on top of his defensive game to secure the win.

ANDREW VAN LEEUWEN

Yamamoto and Makino bolster title defence

SUPER GT MOTEGI (JPN) 18 JULY ROUND 3/8

Honda's reigning Super GT champions Naoki Yamamoto and Tadasuke Makino chalked their first win of the season last weekend at a scorching Motegi. The Team Kunimitsu NSX-GT drivers won a fierce race-long battle with the Racing Project Bandoh Toyota GR Supra of Yuji Kunimoto and Ritomo Miyata. Yamamoto bagged his first series pole since 2018 on the Saturday, narrowly shading Miyata, but come race day the Yokohama-shod Toyota initially looked stronger in the 33-degree Celsius heat.

On lap seven of 63, Kunimoto made a bold outside pass on Makino to move into the lead and pulled clear before the Honda came in for its pitstop on lap 24. Kunimoto hit the pits four laps later, but a slower stop meant Miyata was left trailing Yamamoto when he took over the Bandoh car.

Miyata appeared to have the pace as he



rapidly closed down Yamamoto's 3s cushion, raising hopes of a first win for the popular Bandoh squad in five years. But two full-course yellow periods blunted his charge, Yamamoto hanging on by a little over three seconds for his first win at his home track in a GT500. Completing the podium in third was the TOM'S Toyota of Sho Tsuboi and Yuhi Sekiguchi.

Nissan had another disappointing outing, with the NDDP/B-Max car of Kohei Hirate and Katsumasa Chiyo once again its best finisher in sixth, while Ronnie Quintarelli and Tsugio Matsuda were a lacklustre ninth for NISMO.

Pre-race points leaders Kenta Yamashita and Kazuya Oshima (Rookie Racing Toyota) failed to score in a lapped 13th, hampered by their 70kg success handicap, but still hang on to their advantage by three points from Yamamoto. Fuji 500Km winners Bertrand Baguette and Koudai Tsukakoshi (Real Racing Honda) also struggled with their 52kg handicap, but were on course for points until a late gear selection issue ended their run. JAMIE KLEIN

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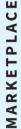


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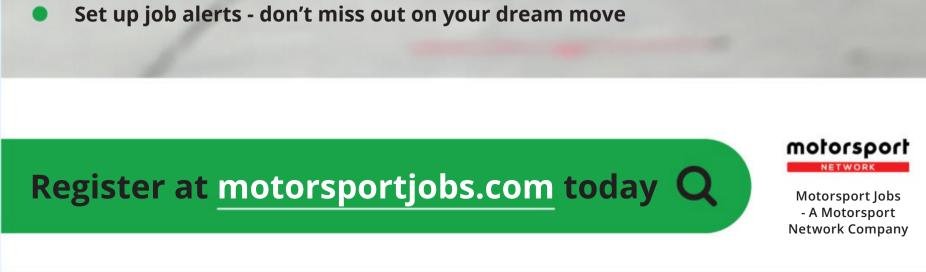
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Requirements:

- Produce 3D surface data to the GMD design process (from the initial concept sketch phase thru to the Production Release Class A Technical Surfacing) based on design direction
- All 3D data produced must be produced to an expectable standard within the scope of the project timing assumptions
- Effective construction and organisation of alias surface digital models to defined gateway tolerances
- Professional experience in an automotive design studio
- Efficient storage of and recording of model history using the agreed GMD naming protocols, locations and databases in line with relevant GMD security protocol and policies.

- management skills.
- Ability to work as a team member or confident alone.
- Must have own tools and transport.

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- Based on the design direction, you could be supplied with sketches, scan data to create the 3D surfaces
- Prepare and carry out virtual presentations of surface model data to support meetings and reviews, as required
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- Ability to execute paid social media campaigns with Facebook Ads Manager.
- Providing support to the Data & Insights Analyst to report and analyse McLaren's performance across all social media channels and implement findings from reports.
- Established social media and community management background in sport (either client or agency side).
- Experience of delivering social media campaigns and fluency with the back-end advertising tools including Facebook Ads Manager. Excellent copywriting, proofreading and editing skills, demonstrating a clear understanding of social media tone of voice. Demonstrable passion for social media community engagement. Ability to spot emerging social media trends.



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AILING VW CUP SET FOR RELAUNCH

VW RACING CUP

Volkswagen Racing Cup organisers are set to relaunch the series next year following the cancellation of its event at Oulton Park last weekend due to a lack of entries.

The championship, which has shared a grid with the Touring Car Trophy for the past two seasons, had no more than five cars racing at its first three meetings of this year. That figure was set to drop further, with points leader Jack Depper stepping up to TCT in Tim Docker's TCR-spec Volkswagen Golf and others set to follow suit.

"TCR's getting more and more successful and everybody wants to do it now," said Stewart Lines of championship promoter Maximum Motorsport. "With the VW Cup, we're going to go back to a cheaper option for drivers."

Simon Slade, competition secretary of championship organiser Club Time Attack, added: "Stewart and I have discussed ideas and we're going to come up with a refined package to relaunch it. It's been quite clear we've not had the numbers this year for whatever reason, so we need to assess it and do something about it."

A non-championship event at CTA's Snetterton meeting on 24 October is earmarked to showcase revised regulations ahead of next year's relaunch. Depper qualified 11th of 16 cars on his TCT debut before claiming a best finish of sixth. "I wanted to get my teeth stuck into something that there was more than five people racing in," he said. "Obviously TCR, being on the same package, it's the natural progression upwards."

Fellow VW Cup race winner Olly Turner could be sidelined for the rest of the year. "It's a shame for me," said Turner. "We did try and get out to Oulton Park in a TCR, but we just couldn't get anything sorted. If [the VW Cup] came back and was bigger and better I'd fully do it, because we had the pace for it and I enjoyed it." MARK PAULSON

TCR Europe winner Morgan back to TCT



TOURING CAR TROPHY

TCR Europe race winner Alex Morgan made a successful return to the Touring Car Trophy at Oulton Park last weekend after nearly two years out of the driving seat. Morgan, also a multiple winner in the Renault UK Clio Cup, rejoined the Power Maxed Racing squad with which he contested 2019's TCT season finale.

"I'm trying to get rid of the race rust," said Morgan, who qualified his Cupra TCR on pole before twice finishing second, despite carrying 30kg of ballast as a new entrant. "With all the COVID restrictions, this seemed the most sensible to get out somewhere in the UK.

"I'd like to do TCR Europe next year with PMR if possible, so this is a chance to build on the relationship we started in 2019, and get ourselves in the best position for maybe doing a full attack next year if COVID permits." Also joining the TCT grid were former British Touring Car racer Mark Smith (Cupra) and Jamie Sturges (Volkswagen Golf). MARK PAULSON

Thomas and Jordan clash in F1 support race

MASTERS HISTORIC GT

Julian Thomas came within a couple of corners of a double win in the Masters Historic GT support races at the British Grand Prix. His Shelby Daytona Cobra Coupe triumphed easily in race one, but had a much tougher time in race two.

In both, he was bettered off the line by 2013 British Touring Car champion Andrew Jordan (AC Cobra Daytona Coupe) but, while Thomas grabbed the lead on lap two in the opener, he couldn't unseat Jordan as easily on Sunday morning. Jordan was on the limit in his defence, the snaking Cobra's tail wagging as he tried his hardest to keep Thomas's car at bay.

When Jordan ran wide at Abbey, it gave Thomas a chance to challenge on lap five of 12, but Jordan hung on, as he did a lap later when Thomas moved ahead at Abbey before Jordan changed lines and retook the lead at Village. Thomas finally went ahead at Aintree, but Jordan never gave up and made a huge dive up the inside at Stowe on the last tour.



As he tried to slow the car, Thomas took the apex, and contact sent him wide and Jordan spinning. Through the drama came James Cottingham (Shelby Cobra), who had finished third on Saturday, to take the win, while the TVR Griffiths of John Davison and John Spiers, who had battled behind, were elevated to second and third.

Eddie Powell (Lotus Elan) produced a great drive to take 10th in race two from the rear of the grid after a carburettor fire, while Jeremy Welch (Austin-Healey 3000M) bagged a brace of class wins.

Other drives of note included Chris Lillingston-Price (Jaguar E-type), who recovered from a spin in race two to take 13th, and Roy Alderslade (Daytona Cobra Coupe), who yo-yoed through the order in race one, coping with a flapping driver's door and a spin at Copse to end up 10th. MIKE HOLDER

Grid capacity increase for Silverstone Classic

SILVERSTONE CLASSIC

This year's Silverstone Classic will feature the largest grids for an historic event in the UK after being granted an increase in entries.

The sport's governing body, Motorsport UK, has given the go-ahead for more entries to appear at the popular historic event, which will feature delayed celebrations of its 30th anniversary. The increase means Motorsport UK has allowed us to invite a record number of entrants — more so after the frustrations of last year [which was cancelled due to COVID-19], which have resulted in lots of pent-up demand and excitement," said Motor Racing Legends chairman Duncan Wiltshire. "We don't want to disappoint anyone wanting to join us at The Classic."

The International Trophy for Classic GT cars (pre-66) and the



already sold out for the event,

evocative saloon car racers for

grids for certain series will be increased from 58 to 61 starters. "We are very grateful that combined Royal Automobile Club Woodcote Trophy & Stirling Moss Trophy are

which takes place next weekend. Wiltshire is also expecting a full-capacity 61-car turnout of the Adrian Flux Trophy for MRL Historic Touring Car Challenge race.

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Crowds treated to Classic Nostalgia spectacle up the hill

SHELSLEY WALSH

The Classic Nostalgia weekend at Shelsley Walsh had a strong rallying focus as the cars of Richard Burns and Colin McRae featured in the demonstrations, while drivers from the Ralli22 movement delivered some of the most spectacular climbs.

While Prodrive took the Subaru Impreza used by Burns to win the 2000 Safari Rally, McRae's career was highlighted by his 2001 Rally Portugal Ford Focus WRC and the MG Metro 6R4 he owned after his WRC career and famously used in Donegal in 2006.

Demonstration runs by a range of notable race and rally cars complemented two days of competition for classic cars, including the Ralli22 movement for Group B, Group A and early WRC cars. Subaru Impreza driver Niall Moroney needed only one timed run on Sunday to set the best Ralli22 time of 31.89s.

The car most enjoyed by a bumper crowd was the Chevrolet-powered Firenza Can-Am of Mick Stafford, which was churning out a tyre-shredding 550bhp and a fabulous noise. "This is such a wonderful event and I'm only here to entertain myself and the crowd," said Stafford.

Other notable demo cars included the ex-Peter Gethin Formula 5000 McLaren M10B of Matthew Wurr and two cars from the Hepworth stable. Stephen Hepworth drove the mighty ex-Pedro Rodriguez BRM P154 Can-Am on what was thought to be its third public appearance in 47 years, while his brother Andrew was back in their late father David's Hepworth FF, 50 years after it broke the 30-second barrier at Shelsley. PAUL LAWRENCE



New motorsport Morgan +4 to race

MORGAN CHALLENGE

A motorsport version of the Morgan +4 has

Two cars will be run by a team from the university, allowing students to hone their skills and prepare them for a career in

IN THE HEADLINES

NEW ENTRIES IN BRITISH GT

British GT will welcome two extra entries to the grid at its Spa away round this weekend, with Leipert Motorsport and FF Corse joining the fray. Creventic 24H Series regular Leipert's Lamborghini Huracan GT3 will be campaigned by Toyota Racing Series stalwart Brendon Leitch and Fidel Leib, while Charlie Hollings and Ferrari Challenge Europe driver Omar Jackson will drive FF's GTC class Ferrari 488.

NO ZOLDER TRIP FOR TRUCKS

The British Truck Racing Championship has axed its away round to Belgium later this year due to uncertainty around travel caused by COVID-19. The cancelled event, scheduled for 11-12 September at Zolder, means the season will now take place across six rounds, with the next meeting at Donington Park on 21-22 August, followed by trips to Snetterton, Pembrey, and Brands Hatch in November.

DONATIONS FOR FLOODS

Organisers of the ADAC Eifel Rally Festival, which was due to take place this weekend in Germany prior to being cancelled because of the pandemic, are appealing for donations for flood victims. Heavy rain hit large parts of Europe last week, causing widespread flooding in several countries and resulting in dozens of deaths and thousands of people's homes being destroyed. For full details on how to donate, visit: eifel-rallye-festival.de

MCRAE CHALLENGE DELAYED

The popular McRae Rally Challenge, which celebrates the life and success of 1995 World Rally champion Colin McRae (below), has been postponed until next year due to COVID-19 travel uncertainties, including difficulties for Alister, Colin's brother, and his son Max to make the trip from their home in Australia. The event, which was planned for 2-3 October at the Knockhill circuit, will now take place between May and October next year.

been released by the company in partnership with the University of Wolverhampton and will compete in club events throughout the year.



motorsport or the automotive industry. Morgan Motor Company chairman and CEO Steve Morris said: "We are delighted to announce the launch of the motorsport variant of the Morgan +4, which continues our long tradition of motorsport. A century ago, Morgan's three-wheelers became famous for their exploits in trials, hillclimbing and endurance racing, and this competitive spirit is alive and well. "The programme brings tangible benefit in terms of ongoing product development, and we are delighted to continue our partnership with the University of Wolverhampton to inspire the

next generation of automotive talent."



Rookie Wallace makes history at Santa Pod

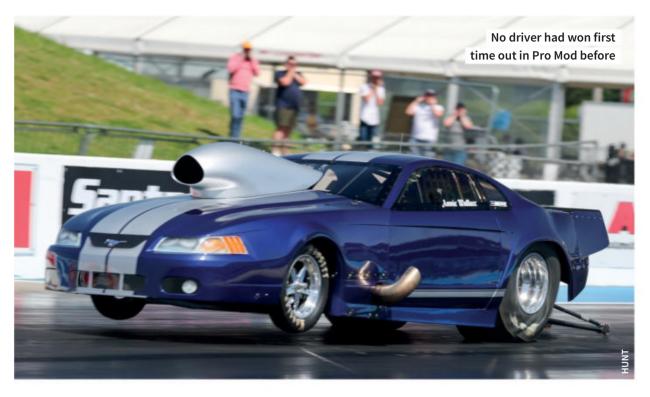
DRAG RACING

Round three of the Motorsport UK British Drag Racing Championship brought an exciting new face to Pro Modified at Santa Pod, with a remarkable story and an historic outcome.

Women have competed equally with men on all drag racing levels for decades - one in seven of this event's entry was female – yet few have ventured into Pro Mod, either here or in the US. Annie Wallace last weekend became the second British woman to try.

The 22-year-old has a racing family. Like sister Bonnie, she raced in Junior Dragster, then in her teens drove brother Bobby's unruly Sportsman Ford Pop when Bobby graduated to Pro Mod, before leaving the cockpit to crew Bobby to two second-placed championship finishes. Meanwhile, she tested in the family's second Pro Mod, a Ford Mustang.

The Mustang emits the doomy V8 rumble of a naturally aspirated, 14.4-litre giant, enlivened with drafts of nitrous



oxide. These unblown petrol engines are Pro Mod's original powerplants; supercharged and turbocharged methanol-burners arrived later. With 3000bhp on tap and three years out of the saddle, she might have chosen a prudent first approach, but Wallace launched straight into the observed runs to complete her licensing programme. Her first pass clocked 6.95 seconds at 200mph, narrowly avoiding disaster when her parachutes failed to deploy.

Wallace began her ascent by qualifying third, with only this season's dominant

pair, Kevin Slyfield and Nick Davies, ahead. She beat a faltering Slyfield in the semifinal and soloed to final-round victory when Davies's fuel pump failed. Wallace's 'money run' 6.133s/229.31mph was her sixth consecutive personal best. Slyfield's 6.017s was the meeting's low elapsed time, and Davies's 243.76mph the top speed.

No one had ever won in Pro Mod first time out. Worryingly for the opposition, Bobby Wallace has a new Camaro waiting at home. All they need is some more crew. **ROBIN JACKSON**

New closed-roads rally planned for Yorkshire



RALLYING

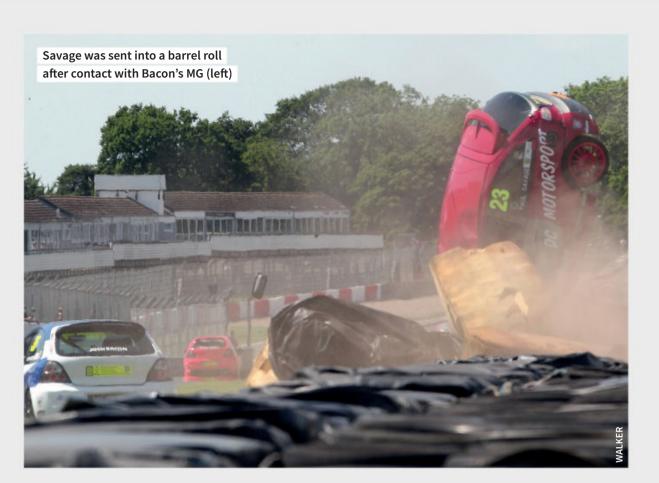
A new closed-roads rally will be held in East Yorkshire next year, amid the continued popularity of such events since a law change in 2017 paved the way for competitive motorsport to be held on public roads.

The East Riding Stages is being organised by the Beverley and District Motor Club and is due to run on 27 February 2022, featuring 50 miles of competition. It follows a closed-roads hillclimb element being included as part of last month's inaugural Yorkshire

Motorsport Festival.

"It's been over two years in planning, but over 40 years of dreaming," said event director Richard Vincent. "Running in late February, it gives crews a chance to shake down their old and new machinerv without the pressure of points at stake."





MG Trophy racer Savage escapes injury in barrel roll

MG TROPHY

MG Trophy racer Paul Savage escaped injury in a spectacular series of barrel rolls during the category's opening race at Donington Park last weekend.

Savage's ZR 190 tangled with Josh Bacon's ZR 170 exiting the chicane while battling for sixth place. The crash brought out red flags and the race's result was declared just before half of the planned distance.

"It was like being in a washing machine and you're waiting for it to stop," said Savage. "My thought was, 'How bad is this going to be?' Physically I'm OK – I'm probably going to be a bit stiff in the morning. I try to keep out of accidents – my overriding priority is to keep my car straight so I don't have to spend money on it. It's a write-off.

"I got past him [Bacon] before I got to the chicane, just. His line took him onto the grass; momentum was with me on the Tarmac. I'm not expecting somebody to be turning left in my right-rear wheel arch. Hitting there just turns you straight into the wall."

Bacon said: "I was being overtaken and then missed a bit of the last corner. We ended up on the outside and I had nowhere to go and he had nowhere to go. It's been put down as a racing incident." GRAHAM KEILLOH

Karter wins Young Driver award

ARMED FORCES SERIES RETURNS TO RACE ACTION

ARMED FORCES CHALLENGE

The Armed Forces Race Challenge had its first official event since 2019 during the 750 Motor Club meeting at Snetterton last weekend.

The series, focused on bringing military personnel to the track, was set to run its season opener at Cadwell Park in April. But numerous circumstances — including the death of the Duke of Edinburgh and issues over pandemicrelated safety concerns around sport within the Armed Forces — meant two of the forces were not authorised to compete.

The category's Royal Air Force representative Chris Slator explained: "There was a lot of instability in 2020 about whether we could compete. We had a lot of people that were committed to work, and we operate a finance model that's not for profit, so we risked making a significant loss if we ran without enough entries."

Royal Navy representative Keith Attwood added: "We built the series up really well over the couple of years prior, with great support from 750 Motor Club. In 2019 we had an average of 36 cars from our own competitors, along with guest entries. Owing to the product we could offer based on the restrictions last year, plus work commitments of our competitors, we felt we'd be better served focusing on re-establishing for 2021."

The majority of the 36 cars at Snetterton were driven by active members of the Armed Forces. The series is also open to military veterans and emergency service workers, as well as invited guest drivers. ADAM WELLER

MOTORSPORT UK

Karter Alessandro Ceronetti has won Motorsport UK's Young Driver of the Year Award after the pandemic led to the traditional assessment day on iZone's simulators being delayed. Finalists, who had starred on Motorsport UK Academy's Enhanced DiSE programme, completed a virtual element of the shootout earlier this year, where they gave a presentation and completed an interview about their goals. Ceronetti then impressed with his simulator running, fitness testing and response to feedback at iZone to scoop the award. He will now receive a bespoke training and driver development package from iZone.

"It's a real pleasure to win the Young Driver of the Year Award!" he said. "It has been a fun day at iZone, and I really enjoyed the competitive nature of the final. I've learnt a lot and I would like to thank the Academy, iZone and everyone involved in the DiSE course." The other finalists were Euroformula Open race winner Casper Stevenson, Ginetta racer Owen Hizzey, Historic Formula Ford 2000 driver Molly Dodd and Mazda competitor Sam Hicks.





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How historic racing has changed

The Brands Hatch Historic Superprix earlier this month highlighted the big challenges of today, with costs, driver demographics and the pandemic all playing a role

MARCUS PYE

ooted in the late 1970s, the Historic Superprix has drawn competitors and spectators to Brands Hatch for more than 40 years. The Grand Prix circuit, added to the hallowed Kentish speedbowl in 1960 and playground of Jim Clark, Jack Brabham and

Pedro Rodriguez, remains among the world's most satisfying racetracks to drive. Yet the sport's evolution in this stratum, dilution of interests as each passing season broadens choice in the 'old car' marketplace, rising costs and — inevitably — the COVID-19 pandemic have changed its focus.

R

These are very different times to the 1980s and 1990s when I first attended the Superprix. Back then, it had a big international presence, with racers — many owner/driver/preparers converging from the corners of Europe and beyond, and a select band contesting the FIA Historic Championships, from Lurani Trophy Formula Junior to Thoroughbred Grand Prix. For them, the opportunity to race at Brands justified the annual pilgrimage. The world governing body's presence had financial implications, but costs were sustainable. Large audiences were entertained by Can-Am, Interserie and Group 6 cars in mighty Steigenberger International Supersports Cup grids too, with a 12-race programme, the majority run on Sunday.

Nothing can be done about the content since championships have withered or died — Lurani Trophy aside, for this beacon burns

"Why would teenagers today be blown away by grand prix cars of the Hunt and Mansell eras?"

brightly still, credit to ringmaster Duncan Rabagliati and his

COVID restrictions and the United Kingdom's withdrawal from the European Union are a devastating double-whammy, its timing coincidental. There are far more important ongoing repercussions across daily life than the sporting and leisure aspirations of the privileged few. Much as we all enjoy our motor racing, from whichever angle we see it, we're far from out of the woods with the pandemic. Let's hope that this week's governmental decisions bring some succour to business sectors hardest hit over the past 18 months. But spacing people at a well-organised racetrack campus such as Silverstone, Brands Hatch or Donington Park is relatively easy. Not so at Wembley Stadium for a football match.

While 400 entries across 16 groups and 23 races was a good effort for this year's Brands Hatch Superprix, three factors reduced competitor numbers: the Friday's Indy circuit racing was a nonstarter for working people. Entry fees and event timetabling led to others staying away, according to championship coordinators. And the additional expense of transport carnets and COVID testing which has reduced the numbers of double-jabbed British-based teams venturing to the continent this year — would have been equally applicable the other way, had it not been for travel bans. As many as 10% more entries from France, Belgium, Germany, Switzerland and Italy would have likely attended — plus a grid or two from Holland — in a'normal'year.

On the plus side, onlookers were treated to some fine racing. That was particularly so at the sharp end of the Aurora/Geoff Lees Trophy single-seater races in which Matt Wrigley and Martin Stretton in F2 cars — which merit dedicated races at next month's Historic Sports Car Club Oulton Park Gold Cup surely? — plus young Sam Harrison, who at 18 is yet to gain a UK road driving licence, and Rory Smith drove hard. And James Claridge's and Mark Richardson's Chevron versus Lola battle at Thundersports' spiritual home reminded me of watching the Britannica 2000 European championship round in 1975 won by Jorg Obermoser in a Warsteiner TOJ-BMW — albeit

daughter Sarah Mitrike who keep the changing Formula Junior Historic Racing Association family motivated. There's a sea change in competitor interest, dynamic, logistics and ability to run the spectacular cars that spectators loved, inevitable corollaries of passing generations. Why would teenagers today be blown away by grand prix cars of the James Hunt or Nigel Mansell eras? Unless they saw them in action.

Historic and vintage racing now faces a common problem. Grandad or parents may own the cars, but if they perceive them as too valuable to race, or replacing a blown engine is beyond their pocket, they will stay in the garage. A dusty 'family heirloom' is no more fun than one sold into the vast car collections of a few who have no intention of airing them either. A stalemate situation. without the competitor numbers and crowd.

Standards had slipped elsewhere, though. Covering marshals attending incidents is difficult enough, especially when Brands gets treacherously slippery and cars visit gravel traps. Having observed one Formula Junior competitor improving his grid position on the final lap of qualifying, with a Day-Glo orangejacketed marshal crouched beside a spun car on the edge of the track at Clearways, I was appalled to learn that interrogation of the timing system revealed that towards half of the field had done likewise! When draconian penalties for a transponder infringement cost one competitor a well-deserved maiden win, yet others get away with downright dangerous conduct, stern warnings were insufficient. Safety and respect are paramount. *#*

Roots digs deep to share Sports 1000 victories with Yarrow

SNETTERTON 750MC 17-18 JULY

The 750 Motor Club's first Snetterton visit of 2021 provided numerous nailbiting finishes, while a heatwave amounted to incredibly tough conditions for drivers across all classes.

The Sports 1000 races were impressive, with the usual battle between Mittell and Spire chassis taking place at the sharp end. Ryan Yarrow in his Spire GT₃S and the Mittell MC-5₃s of Michael Roots and Victor Neumann were the three main protagonists fighting for victory.

Yarrow came out on top in the first encounter, after a race-long pursuit of Neumann finally paid dividends on the penultimate lap, courtesy of a poor run for the Frenchman out of Oggies. Roots finished third, over six seconds back from the top two, but come the second encounter he was firmly in the fray. He eventually claimed the win after several lead changes forced by the slipstream down the Bentley Straight.

"It reminded me of my time in go-karts," remarked Roots, praising the close racing, which did feature some slight contact between himself and Yarrow, who received a 5s penalty post-race for a track-limits infringement.

Three spectacular Locost races featured the slipstream battles typical of the category's Snetterton appearances, the order invariably changing on each run down the Bentley Straight. Race one had to be restarted owing to a red flag, after oil was laid on the track and several cars had incidents. Martin West fought with



Craig Land on the restart, with West taking victory by a mere 0.08s. Land got the upper hand in race two but, once again, it went to the wire, with West and Andrew Tait crossing the line within 0.1s of stealing victory away. The top five was completed by Simon Walker-Hansell and Paul Clark, who both took the flag within 1s of Land.

Yet, somehow, this wasn't to be the closest finish of the weekend, as race three featured a seven-car scrap for the lead. The battle was not incident-free: Tait and Walker-Hansell collided at Riches and dropped out of the leading pack, although both still took the flag within the top 10. The victory was determined by a drag race once more and, this time, Land was judged to have won by just 0.01s over West.

John Munro claimed overall victory in Saturday's Roadsports race, on his debut in Class A driving the Lotus Elise usually piloted by Alan Henderson. The Scottish racer was untroubled throughout the 45-minute contest, quickly building an advantage that he maintained and gradually extended across the early stages. His win was aided by a mid-race safety car that picked up the second-placed car rather than himself, granting him the best part of a lap as a cushion for the closing stages.

That same Elise would also perform extremely well the following day during the two-hour Club Enduro race, this time back in the hands of Henderson. After taking an

Hands (left) and Harridge battled for top spot

Munro was class of the field in Roadsports, as





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early lead, Henderson steadily pulled clear of the pack prior to a safety car just before the halfway point, which triggered the majority of the field to serve their mandatory stop. After Henderson's out-lap, the SEAT Leon Eurocup of Rob Baker was suddenly in his mirrors; a brief misfire and a battle with the master switch for Henderson had delayed the Elise driver. Henderson soon built the gap back out to over a dozen seconds, before pace seemingly started to elude him once more in the final quarter of an hour.

The gap between Henderson and Baker, who was sharing with Carl Swift, continued to shrink before the SEAT driver finally took the lead with just three laps remaining. Andy Schulz finished

Swift/Baker took the lead

third in the BMW shared with Matthew Hampson, after a storming drive necessitated by a pitstop that came just moments before the safety car intervention.

The Armed Forces Race Challenge included two impressive displays from guest driver Paul Cook. After a dominant first race, where he finished with a winning margin of 47s in his BMW E46 M3, Cook followed through on a joking remark made during his post-race interview for the PA system and started from the pits for race two. Despite this handicap, Cook stormed through the 34-car grid to win once more, this time by 18s.

Tensions arose in the Formula Vee races as James Harridge and Craig Pollard had a superb battle in the opener. Reigning champion Harridge took top spot in his Maverick, while the often impressive Daniel Hands retired after just three laps. AHS Dominator driver Hands saw the chequered flag first in race two, in which the on-track action proved to be physical. Pollard found himself out of the race after a touch with Harridge on the run to Riches. Then, as Hands and Harridge ran through Brundle and Nelson, contact put Harridge off onto the grass. Hands crossed the line to win, with Harridge recovering to second. While both were summoned to the clerk of the course, each was judged to be at fault. Therefore, the result was unchanged. Adam Shepherd took two dominant

WEEKEND WINNERS

SPORTS 1000 Race 1 Ryan Yarrow (Spire GT3S) Race 2 Michael Roots (Mittell MC-53)

LOCOST Race 1 Martin West Races 2 & 3 Craig Land

ROADSPORTS John Munro (Lotus Elise S2)

CLUB ENDURO Rob Baker/Carl Swift (SEAT Leon Eurocup)

ARMED FORCES RACE CHALLENGE Races 1 & 2 Paul Cook (BMW M3 E46)

FORMULA VEE Race 1 James Harridge (Maverick) Race 2 Daniel Hands (AHS Dominator Mk2)

TYPE R TROPHY Races 1 & 2 Adam Shepherd

CALM ALL PORSCHE TROPHY James Coleman (Cayman)

HISTORIC 750 FORMULA Race 1 Richard Prior (JGS III) Race 2 Gerry Fincham (DNC Mk5)

ALFA ROMEOS Races 1 & 2 Barry McMahon (156)

TOYOTA MR2s Race 1 Shaun Traynor (Roadster) Race 2 Aaron Cooke (Roadster)

For full results visit: 750mc.co.uk

victories in the Type R Trophy, in spite of a car that understeered too much for his liking in race one. The crew made changes for the second bout, which seemingly bolstered the ex-Ginetta racer's already impressive exploits against fellow title contender Lee Deegan and the chasing pack.

James Coleman took his first win of the year in the Campaign Against Living Miserably All Porsche Trophy, while Richard Prior was in a class of his own in his JGS in Historic 750 Formula. After a stellar run in qualifying and the scratch race, he admitted he had failed to recall that the second encounter would be a handicap affair. Gerry Fincham exceeded expectations in the handicap to win by 7s. The Alfa Romeos had a first race run almost entirely under a safety car, after Gethin Llewellyn and Andrew Bourke had a big collision at Agostini. Thankfully, both drivers walked away despite their cars looking very second hand. Barry McMahon's 156 took two easy victories in the races for the Italian machines. **ADAM WELLER**





Kirkpatrick's winning run finally comes to an end

DONINGTON PARK MGCC 17-18 JULY

The MG Trophy has followed a pattern this season: two young guns, Sam Kirkpatrick and Fred Burgess, battling over first, with Kirkpatrick prevailing. The 20-year-old had won six from six before the baking-hot Donington Park meeting last weekend and, in the opener, he made it seven.

Burgess, true to form, was attacking Kirkpatrick throughout, and he reckoned he could have made a move had the race not ended early with a red flag after a spectacular clash between Paul Savage and Josh Bacon.

Race two was a similar tale, but this time it had a last-lap twist. Burgess looked stronger throughout than Kirkpatrick out of Old Hairpin and, on the final tour, he got alongside. They touched and an unhappy Burgess spun, dropping to ninth, while Kirkpatrick was first home to seemingly claim win number eight. But he was docked five seconds for an unsafe track rejoin amid the frolics, meaning he was demoted to third, with Doug Cole declared the winner.

"The tow is pretty massive up the hill [out of Old Hairpin] and, on the last lap, he [Burgess] tried to go round the outside and I'd lost my mirror, I didn't know where he was, and we touched," said Kirkpatrick. "It's been a really close fight all year with Fred – I just managed to get out on top."

Burgess stated: "He's just run me off the road. I was quite clearly the quickest car [in the race]. I would have taken the lead with two corners to go. He knew I was there. He came and apologised to me in assembly so I think he probably feels like he's got a little bit of blame."

The MG Cup's frontrunning fight in 2021 has similarly been a tale of two drivers, with the names changed to Mike Williams in his Rover Metro and Morgan Short in his MG ZS 180.

Short was unable to take part at Donington as his rebuilt engine overheated in Friday testing, but this did not leave Williams on easy street. Champion Richard Buckley is back this year in his frontrunning Rover 220 Tomcat Turbo, and in both races he relegated Williams to second, the runner-up lamenting that he couldn't compete with the Tomcat on Donington's two straights.

Mark Eales meanwhile claimed two wins in the Metro Cup — which shared a grid with the MG Cup — to make it four victories in a row after a nightmarish Brands Hatch season opener.

Midget & Sprite Challenge frontrunner David Morrison made his first appearance of the season, while 2018 champion Steve Collier was a surprise eleventh-hour returnee as the pair checked out at the front and shared the wins. Morrison held Collier off in race one, before Collier made his move on Morrison for first at Coppice at half distance in race two and then built a three-second lead.

Ollie Neaves continued his BCV8 championship domination, bagging two more wins even though he wasn't happy with his MGB's handling. He had a close battle with Neil Fowler in race one, passing him early on, while Neaves won the second bout by over half a minute. The Cockshoot Cup also had a double winner, albeit a much less likely one in Karl Green, who took his first two wins in the category. Ray Collier, who'd won four from four heading in to the event, had to make do with a second and third.



Tom Hardman in his MG Bellevue Special won the first pre-war Triple M contest, while his closest chaser Harry Painter had a spectacular Redgate exit when his left-front stub axle broke. Hardman had to depart the

WEEKEND WINNERS

MG TROPHY Race 1 Sam Kirkpatrick (ZR 190) Race 2 Doug Cole (ZR 190)

MG CUP & METRO CUP Races 1 & 2 Richard Buckley (Rover 220 Tomcat Turbo)

MG MIDGET & SPRITE CHALLENGE Race 1 David Morrison (MG Midget) Race 2 Stephen Collier (MG Midget)

BCV8 Races 1 & 2 Ollie Neaves (MGB GTV8)

COCKSHOOT CUP Races 1 & 2 Karl Green (MG ZS 180)

TRIPLE M RACING CHALLENGERace 1 Tom Hardman (MG Bellevue Special)**Race 2** Mike Painter (MG Kayne Special)

EQUIPE THREE-HOUR RELAY Bernardo Hartogs/Richard Wilson (Lotus 15/Maserati 250S, below)

EQUIPE LIBRE Race 1 Jamie Boot (TVR Griffith) Race 2 Cliff Gray/Will Nuthall (Lotus Elan 26R)

MORGAN CHALLENGE Race 1 Bill Lancashire (+8) Race 2 Oliver Pratt (+8)



For full results visit: tsl-timing.com

meeting before race two, and Painter's father Mike took victory in his Kayne special.

Bernardo Hartogs in a Lotus 15 and Richard Wilson in a Maserati 250S won Equipe's three-hour relay, benefiting from lengthy and consistent stints. Power beat handling in the first of Equipe's 40-minute



OLD VERSUS NEW As well his MG Trophy races, Sam Kirkpatrick was also out in his classic MGB in the Equipe three-hour relay. He was one third of the runner-up Rogerscale Racing effort and reckoned he could have taken another win without car problems. "I've done it a fair few times now," he said, "I just have to remember the brakes on the MGB are not good! My dad raced historics for his whole life and it's something he always wanted me to do. We had a go in the MGB and I loved it."



BACK TO THE FRONT Steve Collier was a surprise Midget & Sprite Challenge entry, the 2018 champion having bought back his old car from Mike Chalk just last Friday. "I said to Mike if he ever wanted to sell it he could give me a ring and I'd probably buy it back," Collier said. "That happened sooner than I thought – he rang me on Thursday. He said, 'I don't want to damage it before you get it, do you want the [Donington] entry?' I wasn't happy when [the car] left; I thought there's a lot of history going away."



races, with Jamie Boot's TVR Griffith getting the better of Jon Harmer's Lotus Elan 26R. Harmer then dropped out late on with a plug lead problem. Cliff Gray and Will Nuthall later restored Elan honour by winning the second encounter, passing Boot in the closing stages.

Bill Lancashire won the opening Morgan race, then his son Howard took over for race two and, after starting from the back due to qualifying out of session, he powered through to finish second behind comfortable victor Oliver Pratt.

GRAHAM KEILLOH

BUCKLEY'S RETURN TO THE TOP Richard Buckley, as reigning MG Cup champion, chose to drop down a class last year, to race his MG ZR 170 in Class B. But at Donington he was back in the Rover Tomcat in which he took the outright title, and had the legs on everyone. "I thought I'd do one year in one, one year in the other, just mix it up," he said. They're both good fun in different ways – the ZR is a slightly different style of driving. This is my best circuit, and it does suit the car."

Cracking battle to be singleseater BOSS

MONDELLO PARK MPSC 17-18 JULY

BOSS Ireland served up two cracking races at Mondello Park last weekend, with honours shared between Paul O'Connell and Sylvie Mullins.

Poleman O'Connell led away in the opener in his Dallara Formula 3 machine, while fellow front-row starter Mullins bogged down and was subsequently collected by Gerard O'Connell at Turn 1, causing a red flag. At the restart, Paul O'Connell scampered clear and looked set for an easy win until a late charge from newbie Aaron Gaughran caused excitement, just over a second separating the pair at the flag.

O'Connell once again had the early lead in race two, but Mullins was on a charge and the Judd F1-engined Gould blasted past to take the advantage on the main straight. O'Connell fought back, but a spin damaged his suspension and he was out. A safety car period left them with just one racing lap to the flag and, as Gaughran readied his F3 Dallara to challenge the leader, he was mugged by the charging Jonathan Fildes, who started at the back of the grid. Fildes (Lola T96) had a brief stab at the leader but, when his challenge didn't come off,



Gaughran pounced to take his place back. The trio crossed the line as one with the crowd on their toes with excitement, Mullins securing the spoils.

It was a different story in some of the other categories. Rob Barrable was the man to beat in Irish Legends, the former Formula Ford 1600 ace taking all three wins despite stiff competition. Se Og Martin, meanwhile, did the double in Ginetta Junior, with class returnee Enda O'Connor doing the same in Formula Sheane.

Jordan Kelly took pole in Formula Vee and went on to dominate the first race, leaving champion Anthony Cross in his wake. In race two, Cross took the lead and, with Kelly retiring, Gavin Buckley and Tim Murray completed the podium.

On a one-off outing, Rod McGovern qualified on pole for the opening Fiesta ST race, but his lead didn't last long as he retired with an electrical problem, handing the advantage to Kevin Doran. When Graham McDonnell forged past for the lead, an opportunistic Eddie Peterson followed him by, and that's how it ended.

With the top six reversed for race two, reigning Ginetta Junior champion Jack Byrne led away from the outside of the front row and remained composed to

Colville edges clear from Gray in Fiesta fight

KNOCKHILL SMRC 18 JULY

Reigning Scottish Fiesta ST Cup champion Dave Colville claimed a pair of fiercely fought victories at Knockhill last weekend to take a clear lead in the standings.

After splitting the wins in the opening

Gray arrived in Fife tied on points, with just 0.1 seconds separating the pair in Colville's favour at the end of qualifying.

That form carried on into the first of the two races, with Gray tracking Colville for the duration, either side of an early safety car intervention caused by Duncan Langton collecting the slow-starting Peter Cruickshank off the line. Grav did make a late divebomb move under braking for the Hairpin but Colville, making the most of Gray running too deep, got better drive on the exit to reclaim the lead and take the win by 0.4s. Despite setting the fastest lap again, Gray couldn't find a way past Colville in an equally close second race, as just under half a second split the pair by the flag. John Kinmond came out on top in both of the Scottish Classics races in his Rover 3500 while Bruce Mitchell (Lotus Europa) took the points lead after a bad weekend for double champion Alastair Baptie.

A jammed gearbox sidelined Baptie's Fiat X1/9 for the first time in its five-year competitive history in the Scottish Motor Racing Club in race one, forcing the Perthshire driver out of race two.

Tommy Gilmartin was Kinmond's closest rival in the races and his Morgan looked like taking victory in the opener before its own mechanical dramas. But he recovered to 0.8s off the win in race two. Dan Martin and Ross Dunn ended the second Scottish C1 Cup round of the year level on points after the pair picked up a win each. Martin bagged pole position and duly led for the duration of the first 10-lap affair, while Dunn spent much of the race stuck behind Colin Main. Dunn momentarily snatched second but went too deep at the Hairpin and had to settle for third. Dunn then got his revenge in race two, as Martin dropped back to fifth from pole. With a clean sweep of victories, Michael Weddell extended his Mini Cooper Cup

round last month, Colville and Steven



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withstand pressure from Doran and Michael Cullen to take his first win in the series, in only his fourth race.

Michael Cullen took two more Irish Stryker wins, keeping his unbeaten record in 2021 intact. Adrian Deasy was his closest challenger in race one and Dave Reynolds in race two.

Shane Murphy took his usual SEAT Supercup double, but Brian Berry almost caused an upset by holding the reigning champion off until the final tour of race two. Alan Watkins and Paul Parr shared Irish Supercar honours, while Stephen Traub (Honda Civic) took the Irish Touring Car glory in race one, and Ulick Burke (Integra) in race two.

Mark Johnston fought his way to the front of the Fiesta Zetec train in race one, only to be usurped by poleman Michael Barrable on the last lap. Harry McGovern took the race-two win after a hectic scrap with early leader Darragh Brennan, with a last-corner effort from Barrable only just falling short.

Jackie Cochrane took the honours in the HRCA opener, while a pitstop in race two dropped his Sunbeam Tiger to the back. But he still charged up to third behind Bernard Foley's and Gareth Thompson's MGBs. **LEO NULTY**



WEEKEND WINNERS

MONDELLO PARK FORMULA BOSS IRELAND Race 1 Paul O'Connell (Dallara F3) Race 2 Sylvie Mullins (Gould GR37)

IRISH LEGENDS Races 1, 2 & 3 Robert Barrable

GINETTA JUNIOR IRELAND Races 1 & 2 Se Og Martin

FORMULA SHEANE Races 1 & 2 Enda O'Connor

FORMULA VEE IRELAND Race 1 Jordan Kelly (Sheane) Race 2 Anthony Cross (Sheane)

FIESTA STS Race 1 Graham McDonnell Race 2 Jack Byrne

IRISH STRYKERS Races 1 & 2 Michael Cullen

SEAT SUPERCUP IRELAND, IRISH SUPERCARS & IRISH TOURING CARS Races 1 & 2 Shane Murphy (SEAT Leon)

FIESTA ZETECS Race 1 Michael Barrable Race 2 Harry McGovern

HRCA

Race 1 Jackie Cochrane (Sunbeam Tiger) **Race 2** Bernard Foley (MGB GTV8)

FUTURE CLASSICS

Race 1 Paul Flanagan (Renault Clio) Race 2 Paddy Howley (MG ZR)

For full results visit: timing.ie

KNOCKHILL SCOTTISH FIESTA ST CUP Races 1 & 2 Dave Colville

SCOTTISH CLASSIC SPORTS AND SALOONS Races 1 & 2 John Kinmond (Rover 3500)

SCOTTISH C1 CUP Race 1 Dan Martin Race 2 Ross Dunn

SCOTTISH MINI COOPER CUP Races 1, 2 & 3 Michael Weddell

SCOTTISH FORMULA FORD 1600

points lead considerably. The Minimax driver dominated the opener before doubling up from pole in the second. Weddell started the reversed-grid final encounter from eighth, but charged through amid an almost comical jumped start for front-row drivers Daniel Patterson and Chris Cockburn.

Behind Weddell, the action was frantic, with Chad Little just fending off Neil Hose to claim second in race two, while Craig Blake prevailed in an epic squabble with Dylan O'Donnell. Blake and O'Donnell resumed their battle in race three, with Blake coming out on top to finish second behind team-mate Weddell. Jordan Gronkowski secured another brace of Scottish Formula Ford 1600 wins, his Van Diemen beating the Rays of Neil Broome and Graham Brunton Racing's Michael Gray in each encounter. Gray was the star of the show in race one, fighting back from an early pitstop to steal the final podium position from team-mate Lucy Grant on the final lap. **STEPHEN BRUNSDON**

Races 1 & 2 Jordan Gronkowski (Van Diemen JL012K, below)



For full results visit: speedhive.mylaps.com

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Points leader Camp heads the field en route to winning the opening Oulton race

Camp's Civic Cup double bid halted by Butler at Oulton Park

OULTON PARK CTA 17 JULY

Alistair Camp came agonisingly close to double Civic Cup success at Oulton Park, yet still extended his points advantage while series newcomer Rob Butler scored a maiden win.

In stifling heat that made life difficult for man and machine, Camp used new tyres to beat polesitter Matt Luff off the line and control the opening race. While Luff kept Camp on his toes, the pair pulled clear of third-placed Jamie Tonks, who benefited when Phil Wright missed second gear at the start.

Race two's top-10 grid reversal gave Camp more of a challenge, but he picked his way through the field in impressive style, passing Morgan Bailey for second with a cutback exiting Old Hall on the final lap and falling just half a second shy of Butler at the chequered flag.

"I could have done with a couple more laps," said Camp. "I keep getting trouble with the brakes but I think it's the temperature."

Butler had demoted long-time leader Bailey with a similar move a lap earlier. The Irishman, who last raced in the Irish SEAT Supercup in 2016, had endured a trying debut at the previous round at

WEEKEND WINNERS

CIVIC CUP

Race 1 Alistair Camp Race 2 Rob Butler

OultonPa

TCT/TCR UK

Race 1 Jac Constable (SEAT Cupra TCR) **Race 2** Lewis Kent (Hyundai i30 N TCR)

For full results visit: tsl-timing.com

Brands Hatch with a loom problem, and was hampered at Oulton by a failed shock absorber discovered too late to replace.

"We had a massive amount of understeer but I knew I had the speed, so it was just 'would the car last the distance?'" he said. "And then when you see Mr Camp coming behind it's not so much fun!" MARK PAULSON

SIGNS OF PROGRESS FOR TCR UK

TCR UK's summer 2017 launch was met with reported interest from 27 potential teams. But establishing a foothold in a country with such low-cost manufacturer-built TCR machinery and the promotional opportunities associated with larger crowds. "Time Attack has always



a strong domestic touring car championship was a tough task – a 13-car entry at its inaugural round was a high point.

Now incorporated under the Touring Car Trophy banner, joining Club Time Attack's calendar of events such as Tunerfest North at Oulton Park last weekend is helping the series to blossom.

"We want it to become a destination championship in its own right because of its accessibility," said CTA competition secretary Simon Slade, citing relatively attracted thousands of spectators." Despite clutch problems on his Hyundai, Lewis Kent took victory in Saturday's reversedgrid race to close in on a second TCR UK crown. "It's really good to see it start to grow and get the numbers it deserves," he said. Kent's main challengers, younger brother Bradley and Max Hart, edged him in race one, their ballasted Hyundai i30 Ns struggling to match Power Maxed Racing's fleet of lighter Cupras. Flamboyant Hart improved to third later, while Kent Jr's season suffered more

woe when a gearbox sensor issue twice consigned him to the pits.

Jac Constable overcame intermittent powersteering problems to claim a maiden win in the opener, getting a run out of the Island hairpin to pass polesitter Alex Morgan's similar Cupra. MARK PAULSON



USING DATA TO GO FASTER

Mercedes engineer James Wingfield is used to data in his F1 day job, but the Caterham racer shows how grassroots club drivers can also benefit from the tool

JAMES WINGFIELD

PHOTOGRAPHY MICK WALKER

he introduction of data loggers and on-board cameras has transformed modern motorsport and driver development from the top levels all the way to across the entire lap. This has brought about a new role in the paddock for driver coaches, and it has proven to be a profitable earner for many a semi-pro or even pro racing driver who wants to top up their budget with some coaching work at other race events. These days, I compete in the relatively grassroots Caterham Motorsports championships that play a big part in the UK racing scene by bringing 50-plus brand new 'novice' drivers into motorsport every year through the Caterham Academy. Even in these first few years, the drivers are already making use of data analysis, and it is unusual to see anyone racing without some level of driver coaching included in the annual budget. These coaches have a lot to offer in terms of data analysis as well as driver preparation, racecraft, wet racing lines, and they can even jump into your car to set you a target lap to copy. That said, there is a lot that can be done yourself even without a coach, provided you have a decent race logging kit such as a Racekeeper or VBOX system, and a bit of understanding. It might be that you're lucky enough to have two or three test days to hone your lap times before a race weekend, or you might be straight

grassroots racing. Much like modern car mechanics have had to move with the times and embrace the electrification of car control systems, race teams, drivers and driver coaches have done the same thing in motorsport and to great effect. No longer does the race engineer have to rely solely on the feedback from a disgruntled driver who is trying to justify why they are two seconds slower than the competition. With electronic sensors recording all of the driver inputs, and on-board (and external) cameras showing racing lines and track positioning, a major aspect of race engineering has developed in a way that is no longer constrained by the unreliable human element of a racing driver's sometimes selective recollection. Race data has developed to include brake and throttle traces, often synchronised with on-board video footage and g-sensors offering an even greater opportunity to analyse exactly what the driver is doing





DATA FOR GRASSROOTS RACERS CLUB AUTOSPORT



"RACE ENGINEERING IS NO LONGER CONSTRAINED BY A DRIVER'S SOMETIMES SELECTIVE RECOLLECTION"

styles through each corner, then you should be able to quickly home in on something that works well. The same is also true of car set-ups where you can easily compare how much faster you are and why, whenever you make a set-up change.

Every car and series is slightly different but, on the whole, the biggest lap time gains are to be had down the longest straights. This isn't the time to talk about engine tuning or car/aero development, so I'll omit that from this discussion and instead focus on the driving elements

that are more likely to offer gains through the weekend. At this point, we have to consider the specific track that you're racing at, and to be aware that the critical corners may vary from class to class. As an example, we will run though some real-life data from my own Caterham 310R race car on the prestigious Silverstone Grand Prix circuit.

The first thing to look for is the overall speed trace, usually provided by a GPS sensor mounted to the car. From this you can immediately see where those long straights are, or more specifically, the longest continuous periods of high speed/wide open throttle (WOT). By starting those full throttle zones at a higher speed, you'll carry the advantage all the way to the next braking zone, so they tend to be the best places to look first as any small gain is maintained for the longest durations.

The Caterham doesn't have added downforce through devices such as wings, but it does benefit from some pretty good low-speed handling thanks to its low weight and good chassis dynamics. The straightline speeds are typically low due to high drag

into qualifying as your first session on-track. Either way, it's important to get the maximum benefit you can from every session and, to do that, there are a few golden rules to follow. First, you need to know where to look for the biggest lap time gain. You also need to analyse the data and identify what to do to improve in those critical areas. And, finally, you need to focus on your plan and put it into action in the next session.

It helps if you have a reference lap that you're aiming for, which is one of the key benefits to a driver coach, or running as part of a larger racing team with quick team-mates who can set a target lap that you can then look to copy. Even if that's not available to you, there will always be variation in your own laps and, if you try a few different racing lines or but, even so, at this fast F1 track, most of the corners still need some level of braking.

Car speed is the key parameter we're interested in, and plotting it against distance shows how it varies around the lap. Immediately we can spot the long WOT zones and home in on the important corners. Silverstone is quite unusual in that there are several long straights, the longest of which are Wellington Straight following the Loop corner, Hangar Straight exiting Becketts, and the classic pit straight out of Luffield. In the Caterham, as with most cars, both Woodcote and Chapel are full-throttle corners so, while they are strictly the corner preceding the two straights, we can ignore them and focus instead on the corners before where the WOT times start. To get those corners right, we first focus on the driving elements to find any way to optimise the exit, even at the expense of a slower »

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apex or entry, which will usually pay off with more speed all the way along the following straight. It's often possible to take a different racing line to bias the speed towards the exit. Braking earlier and/or taking a wider entry line to get the car rotated earlier in the corner often allows a more aggressive throttle application and a faster exit.

Looking at the long Luffield corner, a faster entry carries the car wider at the middle of the corner and requires a slower and, critically, later minimum apex speed to get the car turned. When comparing with a more normal reference lap, there is initially an improvement, but all the way along the following straight you lose out, resulting in three tenths of a second overall loss.

Another example is the Maggotts-Becketts-Chapel complex, and this typifies the old adage'slow-in, fast-out'. Again, a faster entry yields time gains on the first part of Maggotts, but the wider line that results from carrying more speed into the complex puts the car in a less ideal position for the most critical corner, which is Becketts. As with Luffield, overspeeding the entry has put the car off line and results in a slower, later minimum apex speed, which penalises us all the way along the next straight. The laptime is actually about level through the corner section, but the slow

level through the corner section, but the slower exit speed costs a further three tenths along the Hangar Straight.

Both of these examples show how gains were found in the same session with no change in conditions or car set-up, and they provide an indication of what can be achieved with some consideration of different driving styles once you know where to look. The data then becomes the means to quantify the gains and allows us to understand why we're faster on some laps/corners than others. Too often drivers talk about putting in one fast lap but not knowing how to repeat it, but the key is always there to be found if you look hard enough into the data.

With the driving lines optimised, the next thing to consider is the car set-up. At this point, you'll want to work with a race engineer unless you can set the car up yourself, but knowing what to focus on is the first step to optimising your speed. The data analysis required to compare set-ups is exactly the same as we did for the driving adjustments, but you may well find net gains and losses in different corners, so comparisons are typically done over a whole lap rather than



specific corners. If you have the freedom of aerodynamic adjustments for variable downforce levels, then you should expect to offset gains in the corners with losses down the straights or vice-versa, and the key will be to find out how far along the straights you are before the breakeven point is achieved. Clearly a circuit with several long straights will bias a set-up towards lower downforce, because the time gained on the straights will overcome losses through the corners, but a track with shorter straights will not offer the same reward, so you'd benefit from higher corner speeds through increased downforce.

As mentioned earlier, the relative corner and straightline speeds will vary depending on the car being used so, to test that theory to the extreme, we can compare my Caterham 310R lap with one from the 2020 Mercedes W11 Formula 1 car in Lewis Hamilton's hands. While I work as a Mercedes F1 engineer I am not here to divulge any confidential information, but some data is already in the public domain, so I can overlay the data already available on the official F1 website with my own Caterham data.

A Caterham is slower than an F1 car... even a Mercedes on three wheels

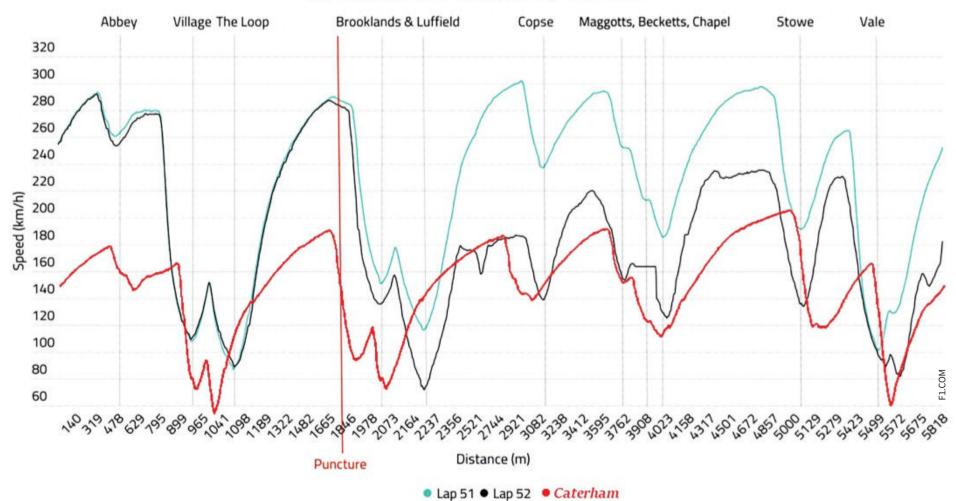


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Looking at the F1 data in isolation for lap 51 of the 2020 British GP, the first thing to note is that the characteristics of the track are clear and in fact quite similar to the Caterham. The speed traces show similar relative accelerations and decelerations so, despite the faster overall car speed, the braking zones for the F1 car appear to be similar to the Caterham. Some of the more junior single-seaters often have increased downforce but not such a large increase in power, so it's common for those to have smaller speed reductions in the high-speed corners and, in some cases, the straights can even join together to make extended WOT zones.

If we overlay both sets of data, then it puts the sheer speed of the Mercedes into perspective. While a Caterham is a fast circuit car at most trackdays, the F1 machine is almost twice as fast across the whole lap. In fact, the only time I can get close to Hamilton is on the last lap (52) of the 2020 British GP, on which – as those who watched it will remember – he suffered a puncture heading into Brooklands. Even then, with only three functioning Pirellis, the W11 is still faster than the Caterham. Maybe that could be the basis for a handicap race in the future...#



HAM Speed Trace Lap 51 & 52

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CHASING SPEED AND A DREAM

BOOK

CRUSADER: JOHN COBB'S ILL-FATED QUEST FOR SPEED ON WATER RRP £30

For man and machine, there is perhaps no truer test of finding the limits than going for an outright speed record. Whether it be on land or water, the pursuit of pushing an average speed higher and higher was arguably at its peak during the early to mid-part of the 20th century.

Malcolm Campbell and his son Donald's exploits with Bluebird both on land and in the water are the most notorious and welldocumented, but certainly not the only enterprise to strive for new records. John Cobb was another less well-known pursuer of speed who, like many before and after him, paid the ultimate price on 29 September 1952 on Loch Ness.

Steve Holter's recently published book charts Cobb's fatal endeavour with the jet-propelled Crusader, and attempts to put together piece by piece what led to the tragedy, from the flawed building of the vessel to how circumstances on the day played a part in the accident.

For motorsport fans there's something to gently ease them in and feel more at home, with the opening chapters of the book focusing on Brooklands – the world's first purpose-built circuit as it follows the exploits of Parry Thomas and Malcolm Campbell. Readers are also introduced to Reid Railton, the legendary designer whose 'mind was so far ahead of his time that the world needed years to catch up with him', and



from land to the water

who would be heavily involved with the design of Crusader.

Cobb soon appears on the scene, and his attention turns to beating the land speed record, which he did on three occasions with his Railton Mobil Special after forming a strong bond with Railton. His efforts then move to water, which as he describes is 'a sort of tradition' after Campbell Sr's earlier exploits.

A large portion of the near 350-word book focuses on the conversations between Railton, Cobb and Peter Du Cane, managing director of the engineering company Vospers that was commissioned to build the boat. Dozens of letter extracts (and sometimes the letters themselves) are put across the pages, and it certainly paints a vivid and detailed picture of the struggles Railton and Cobb had in convincing Du Cane of various aspects the design should include and his apparent lack of progress.

While there's a huge amount of detail and we get inside the minds of the protagonists, reading so many letters with many of the same details does become tiresome,



and it's perhaps apt that one of the chapters at this point is tilted Slow Going. It certainly feels as though the reader is in Cobb or Railton's shoes at times!

EEN

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WHAT MIGHT HAVE

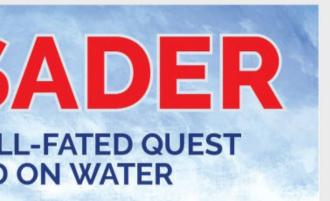
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Du Cane becomes something of a villain in the book, from ignoring Railton's work on load bearings and forward-thinking design for his own traditional methods, to changing his account of the accident in the following days. Although Holter tries to present the facts as they are and let the reader decide for themselves, it's clear that the focus for who is largely at fault gravitates towards Du Cane. The remainder of the book focuses on the crash and aftermath,





HOLTER

with frame by frame footage analysed by Holter in great detail alongside eye-witness accounts.

Even for those whose enthusiasm for the sport is based on circuit



TITLE RIVALS FINALLY COME TO BLOWS

WHAT'S ON



The crash between Formula 1 title contenders Lewis Hamilton and Max Verstappen was the only story in town following the British Grand Prix. Ariana Bravo recaps with technical editor Jake Boxall-Legge, while GP Racing editor Ben Anderson and Motorsport.com Netherlands online editor Mike Mulder give their opinions on the incident. **Go to https://www.autosport.com/podcast/**

Formula E

Rounds 12-13/15 24-25 July London, UK IV Live Channel 4, Sat 1450, Sun 1350 Available via BBC Red Button, iPlayer and BBC Sport website

DTM

Round 2/7 24-25 July Lausitzring, Germany V Live BT Sport 2, Sat 1215, BT Sport 1, Sun 1215

DTM Trophy

Round 2/6 24-25 July Lausitzring, Germany Live BT Sport 2, Sat 1400, BT Sport 1,

International GT

Open Round 4/7 24-25 July Imola, Italy

Euroformula Open

Round 5/8 24-25 July Imola, Italy

British GT

Round 4/7 25 July Spa, Belgium

British F3

Round 4/8 24-25 July Spa, Belgium

Formula Regional European by Alpine

Round 6/10 24-25 July

Divestream on Motorsport.tv, Sat 1730, Sup 1030

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FIA World Rallycross

Round 1/9 24 July Barcelona, Spain V Live BT Sport 1, Sat 1800

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Oulton Park MSVR

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Kirkistown 500MRCI 24 July

Formula Sheane, Ginetta Junior, MX-5s, Roadsports, Saloon/GTs

Snetterton BRSCC 24-25 July

AMOC GT Challenge, AMOC Intermarque, Aston Martin GT4 Challenge, BMW Compact Cup, CityCar Cup, Clubsport Trophy, Fiestas, Fiesta Juniors, Innes Ireland Cup, Jack Fairman Cup, Mazda MX-5 Trophy, ST-XR Challenge, Track Attack

Knockhill KMSC 24-25 July

Modsports, Scottish Legends, Super Lap Scotland, Westfields

Cadwell Park CMMC

racing, it's a surprisingly captivating and relatively accessible read. There's also an incredible wealth of archive images throughout, from testing models of Crusader to its build, and the fateful day at Loch Ness. There can be no doubt that the subject of Crusader has been researched in its entirety and, whether you're a die-hard enthusiast or casual reader wishing to know more about the tragic accident, there is perhaps no better resource.

STEFAN MACKLEY

Sun 1400

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British Hillclimb Championship Prescott, England 24-25 July

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FROM THE ARCHIVE

Graham Hill (#14 Ferrari 330P, shared with Jo Bonnier) leads the #21 Mike Parkes/Ludovico Scarfiotti Ferrari 275P and #58 David Piper/Jochen Rindt Ferrari 250LM at the start of the 1964 Le Mans 24 Hours. After a super-fast getaway, Pedro Rodriguez (330P, shared with Skip Hudson) has already smoked into the lead and out of shot, followed by the similar, polesitting car of John Surtees/Lorenzo Bandini. Ferrari went on to finish 1-2-3, although it was the #20 275P of Nino Vaccarella/Jean Guichet that took a comfortable victory ahead of Hill/Bonnier and Surtees/Bandini.



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WHAT COULD HAVE BEEN

When a career-changing move goes begging

BERTRAND BAGUETTE

Bertrand Baguette is now eight seasons into his Japanese Super GT career with Honda, but the Belgian could have gone in an altogether different direction had the stars aligned for him during the 2011 Indianapolis 500.

Baguette was entered in a third car for Rahal Letterman Lanigan Racing at the Brickyard, his first shot in a serious package after a rookie season spent mostly fighting towards the back for minnow squad Conquest – which came up at the last minute following dead-end Formula 1 tests for BMW and Renault.

By his own admission, Indy 2011 nearly "changed everything". Victory would have opened the door to a full-time IndyCar drive, but after pitting from the lead at the end of lap 197 of 200, he finished seventh and never drove an Indycar again.

Baguette had hit the front with 12 laps to go after passing Danica Patrick, who was on the same strategy. Once she pitted, Baguette held a three-second advantage over Dario Franchitti and had stretched his advantage to 10s with five laps to go. But the caution flag that their strategies had been pinned upon never arrived. Had JR Hildebrand's now-infamous

crash come before that point, instead of at the last turn on the last lap (handing victory to Dan Wheldon), the yellow would have saved Baguette's bacon and written his name into the history books.

"I needed one yellow flag in the last 30 laps, which almost always happens," Baguette reflects. "Half of the field was on the same strategy as me. I was P1 of the drivers who were on that strategy, so everything was looking good.

"It was tough to accept. Finishing P7 started a lot of discussions. With Bobby [Rahal], we tried to put something together, but I didn't have money. I nearly got a full-time drive with AJ Foyt, but Mike Conway got the drive in the end."

With the Indy door shut, and a test with the Peugeot LMP1 team coming just as the French margue was about to withdraw from the nascent World Endurance Championship, Baguette instead found refuge with the privateer OAK Racing LMP1 squad for 2012. He won the LMP2 class of the Le Mans 24 Hours the next year and caught the eye of Nakajima Racing – leading to him becoming a Honda fixture since 2014. **JAMIE KLEIN**



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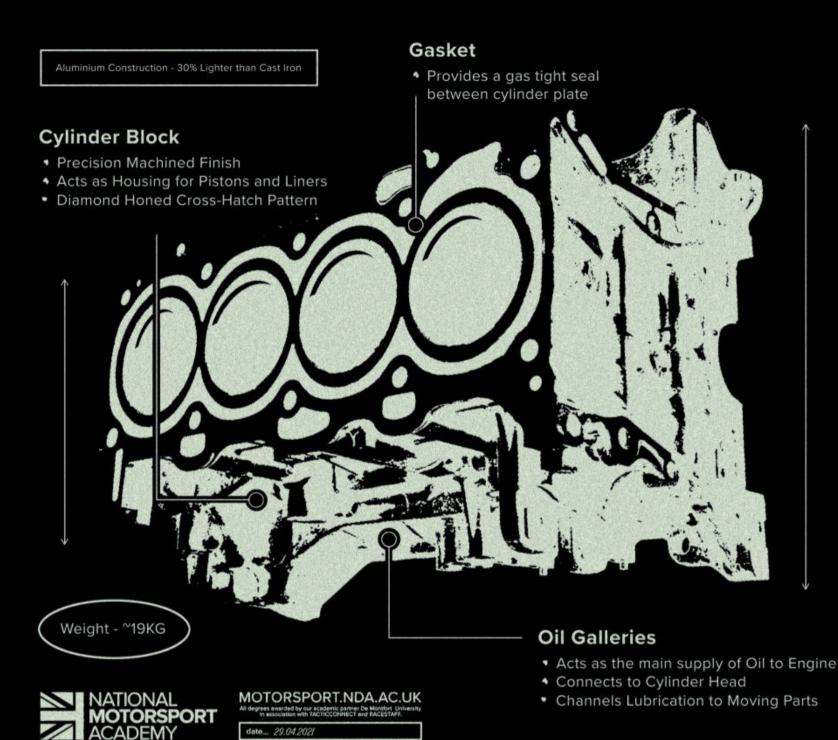
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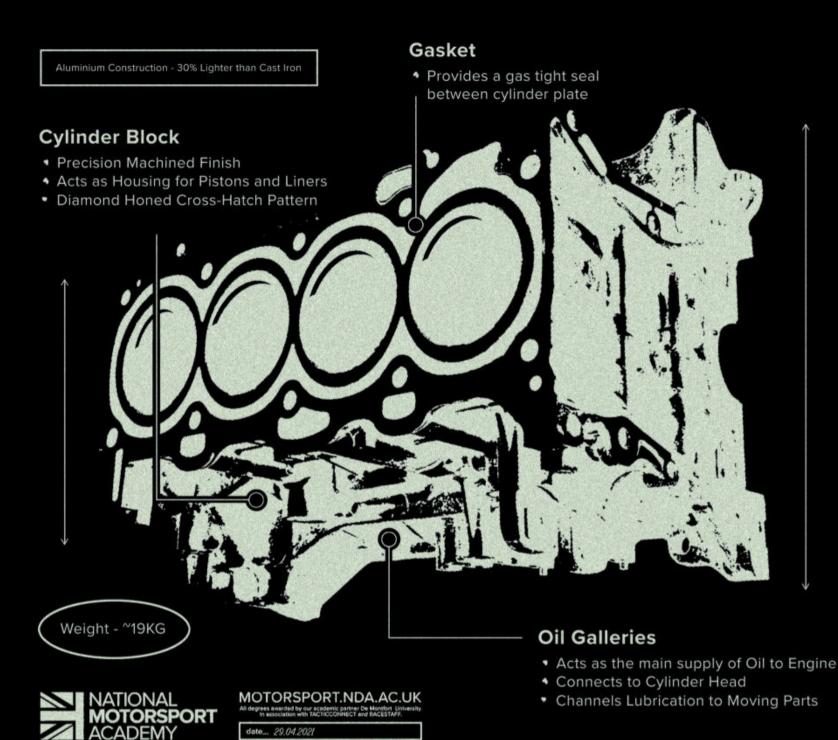
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ENGINEERING



REMEMBERING A 'THROWBACK' SERIES FROM THE LEFT FIELD



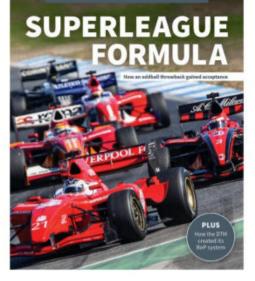
he complexity of Formula 1 cars is arguably one of its greatest appeals, but also among its biggest turn-offs.

Mercedes HPP achieved 50% thermal efficiency on its Brixworth dyno as long ago as 2017, underlining F1's credentials for producing the world's most efficient racing engines. These play a big part in the ability of F1 teams to attract the best graduates who perpetuate the cycle of innovations that drip-feed into our everyday lives.

But a common criticism of F1 is that its ultra-complex nuances distract from the gladiatorial battle between the drivers – although the superb spectacle in 2021 is doing much to counter this view. Agree or not, a driving force behind the new for 2022 regulations is a desire for simplicity that F1 seems to have lost along the way. It's precisely this quality that made Superleague Formula such a tonic. Like A1GP, another lost series that proved significant in the career of versatile engineer James Goodfield (page 26), Superleague wasn't destined to last, and it held its final race meeting 10 years ago this month at Zolder. But with its powerful, heavy single-seaters an almost provocative gesture in the face of a changing world driven by sustainability, the oddball series for cars competing in the liveries of football teams left a lasting impression on those who were part of it, team figures and drivers alike (page 10). Perhaps one day we'll be treated to a grid of the barking V12-powered Panoz cars in historic racing competition...

Historics is often derided as an old man's game, but write it off at your peril.

ENGINEERING



COVER IMAGE Superleague Formula

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N E W S Industry update The latest developments in the world of motorsport engineering

ENGINEER'S VIEW Stuart Parker The Porsche team boss on the trials of learning the new Supercup car

of learning the new Supercup car

Lucas di Grassi Our columnist argues the case for an electrified junior racing series

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As Kevin Turner explains (page 24), aside from offering entertainment, it also has a role to play in breeding future engineering talent and (whisper it) new technologies.

26 BE AN ACE ENGINEER James Goodfield

Career tips from the former A1GP Team GB engineer-turned lecturer



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HYBRID BTCC CAR SHOWS PROMISE

Speedtrap figures of 2022 mule compares well with current machines, car runs reliably

British Touring Car Championship hybrid kit supplier Cosworth Electronics declared itself "very happy" after its hybrid test car completed 118 laps of Oulton Park in the series' official two-day tyre test earlier this month.

The Speedworks-run Toyota Corolla driven by 2013 champion Andrew Jordan finished 21st of the 27 entrants on Tuesday before improving to 12th on Wednesday, lapping less than a second off pacesetter Gordon Shedden's Team Dynamics Honda in mixed weather conditions, although "no emphasis was placed on overall lap times or set-up changes" according to an official statement.

During Wednesday's wet morning session, Jordan was fastest in the speed traps in the second and third sectors, although these were slower than the highest speeds for those sectors set in other drier sessions when the car ran.

The Toyota features the next-generation TOCA engine supplied by M-Sport, which has been working closely with Cosworth Electronics in preparation for the BTCC's move to hybrid power in 2022. Jordan, who has "already done a number of other days in the car at Anglesey", stressed that reliability rather than performance was the most important objective for the test.

"It needs to be reliable for when the championship goes to hybrid power next year, so we've done a lot more laps than anyone else purely with that reliability in mind," he said. The major hybrid components (including the motor and battery, supplied by Cosworth's newly acquired Delta Motorsport arm) in the test car are unchanged since its first tests last July, and have now completed "well in excess of the normal annual mileage that a BTCC car would do", said the statement.

Cosworth Electronics head of support Neal Bateman said the Oulton Park test had been "part of the final stages of our validation process".

"We're very happy with the miles we've got from the test," he added.

M-Sport engine engineer Liam Little also professed himself "happy with where we are in terms of performance and durability".



CURRENT-SPEC LMP2 CARS GET STAY OF EXECUTION UNTIL END OF 2023

The introduction of the next generation of LMP2 prototype has been delayed by one year until the beginning of 2024. The move, rubber-stamped by the FIA's World Motor Sport Council last Thursday, means that the existing LMP2 formula introduced in 2017 will continue through a seventh year in 2023. It was initially planned that the 2017 rulebook, under which only four constructors are licensed to build LMP2 machinery, would have a four-year lifecycle through to the end of 2020. This has since been extended



in the European Le Mans Series. But the WEC's decision to revert to a conventional calendar for 2021 synchronised the end of the existing formula across

twice, by one year when the World Endurance Championship transitioned into a winter-series format with the 2018-19 'superseason', and then a further year in October 2019. That meant the current cars would have raced on in the WEC until the end of the 2021-22 season and until the close of the 2022 campaign the two ACO-governed series. It was revealed on the announcement of LMDh in January 2020 that the LMP2 licences of ORECA, Ligier, Multimatic and Dallara were being extended to cover the new ruleset. ORECA presently enjoys a near-monopoly in LMP2, with only one Ligier among the 25-car LMP2 entry at Le Mans this year. **GARY WATKINS**





NEW GEN-2 MYGALE FORMULA 4 CAR WITH HALO LAUNCHED

The second-generation FIA Formula 4 car, equipped with a halo, that is due to debut in 2022 was formally presented earlier this month.

Built by French manufacturer Mygale, the M21-F4 car on display has already begun testing and boasts what the FIA describes as "a major update to its safety profile", with an upgraded survival cell, full-length anti-intrusion panels, plus improved crash resistance and seat security. An FIA statement said that "stringent load tests will be implemented for the survival cell side strength and the side and frontal anti-intrusion panels". Further changes compared to the first iteration of the F4 car, which was introduced in 2014, include the capacity to add a hybrid component to the powertrain at series' discretion.

Despite these improvements, Mygale says the all-carbonfibre car is 15kg lighter than its predecessor, with a fixed power/weight required of all chassis/engine combinations that are created for the formula to ensure costs are controlled.

FIA president Jean Todt said that it meant "the essential base of the FIA's single-seater pyramid has been significantly strengthened for the future".

CALLS FOR CAUTION ON MASS ELECTRIFICATION

Leading voices in British motorsport have called for caution on the push to electrify, stressing a need for politicians to put "common sense" above sweeping legislation aimed at winning votes.

From 2030, the sale of new petrol and diesel cars will be banned in the UK. But in a discussion panel hosted by the FIA on the future of powertrain technologies, Motorsport Industry Association CEO Chris Aylett warned that the widespread adoption of this strategy carries significant risk as "too many nations can't afford it".

"We are going to make mistakes if we put speed before common sense," he said. "Is the future all-electric? Not a hope."

Motorsport UK chairman David Richards said that the national grid isn't yet equipped to deal with masses of cars charging overnight, and urged fellow FIA members to "educate politicians and the



FIA REVEALS "REMARKABLE" €160BN MOTORSPORT IMPACT

The FIA has revealed the findings of a study that shows the motorsport industry produces €159.2billion of business for the global economy, with an extra injection of €66.9billion overall.

Motor racing's governing body commissioned EY-Parthenon to measure the economic and social impact of the motorsport industry in a bid to find out how important it was. Its findings were published at the FIA Conference in Monaco, with its figures also including reference to the

IN BRIEF



SPEED RECORD ATTEMPT

Former Mercedes HPP engineer Rob White has created a motorcycle that will attempt to break British and world land speed records for electric semi-streamliner bikes. The White Motorcycle Concepts CEO-designed and built WMC250EV is claimed to produce 70% less drag than standard high-performance superbikes, thanks to a duct, coined 'V-Air', which forces air through the centre of the vehicle rather than around it.

STEWART AWARDS PRIZE

Formula 1 legend Sir Jackie Stewart was in attendance at Cranfield University as Helena Estorach was awarded the Sir Jackie Stewart Prize earlier this month. The Xtrac graduate analyst was recognised as the top performing student across the taught modules within its Advanced Motorsport Engineering MSc course.

ELECTRIC GT40 BUILT

An electric-powered Ford GT40 will be the first product of a tie-up between Everrati, a company that specialises in reconfiguring cars to accept electric powertrains, and 1960s component sportscar manufacturer Superformance. A prototype of the Le Mans icon has been built and is being "comprehensively adapted" with its new drivetrain at Everrati's Oxfordshire HQ.

FERRARI INSTALS NEW SIM

The installation of a new driver-in-the-loop simulator at Ferrari's Maranello HQ was completed earlier this month. The result of a two-year collaboration between Ferrari and UK-based company Dynisma, founded by ex-McLaren and Ferrari F1 engineer Ashley Warne, it will be fully operational by September in support of the all-new 2022 car. Gianmaria

public at large that there are alternatives". "Our role is to be more agnostic on these technologies," the Prodrive boss added.



1.5 million paid jobs that are "directly supported by the motorsport industry".

EY-Parthenon relied on market research from 20,000 surveys completed by participants, which included local clubs, venues, commercial rights holders, promoters, team managers, and other FIA parties. FIA president Jean Todt said the findings of the survey were "remarkable" in highlighting how big the influence of the motorsport industry is worldwide. "It demonstrates that our sport efficiently

contributes to the rebound of the economy in COVID-19 times," he said. **JONATHAN NOBLE**

Fulgenzi, head of supply chain, said the tool represented "a generational leap in this sector".



22 JULY 2021 ENGINEERING 05



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ENGINEERING



ENGINEER'S VIEW Stuart parker

GETTING TO GRIPS WITH A NEW CAR IN A PANDEMIC

Long-time Porsche squad Team Parker Racing has stepped up to the Formula 1-supporting Supercup this year and has found it to be a steep learning curve, thanks to travel restrictions



ntering the Porsche Supercup this year means we've now got every step on the Porsche pyramid covered – we've got

the Caymans in the Porsche Sprint Challenge, the GT₃ Cup cars in Carrera Cup and now the Supercup, and the GT₃-R in British GT. We've entered a partnership with Revs Motorsport for the Supercup – Patrick de Groot has many years of Supercup experience and won the championship with Richard Westbrook. He has worked all over the world with Porsche products, and we've known each other a long time so it's a good tie-up.

We've also got an all-rookie line up with Harry King and Michael Crees. Harry is brilliantly talented, and Michael has really impressed us, but they've never seen any of these European circuits before. So, we have to give a certain amount of time for them to learn the tracks, so we know it's not them making the improvement rather than the car.

A new Type 992 911 GT3 Cup car is being used in the Supercup this year and it's a completely different beast to what we were used to - it's more similar to the GT3-R than the current Type 991 Cup car. The suspension is very different with double wishbone front and a bigger front tyre. There are also different dampers compared to what we were running — they're Multimatic ones now — so there's plenty to get our head around and get used to. But it's a very confined base to work on — there's not oodles of stuff you can do to tweak it.

When Porsche do something, they do it very well and the information they give you when you first get the car is very helpful. You start with the baseline set-up and then work from there. It's a combination of feedback from drivers and what we think it should be, given the experience we have within the team. We read into the data as



life a lot more difficult. That's a big hindrance because we can't move freely. We're racing in UK championships and in Europe and we have to be mindful of how we get in and out and having the right tests at the right time. We've had to cut back some of our testing — we only had two days at Monza and Silverstone and a day at Spa, so we're behind the European-based teams.

The intention was to leave the kit out in Europe at a satellite workshop, but not being able to travel there because of the way the restrictions work means we're having to bring the equipment home. With motorsport, any time you're travelling to

"We've had to cut back some of our testing, so we're behind the European-based teams"

much as we can to see what we can apply going forward. It's a constant learning process every time we're in the car. The grand prix weekend is so time-restricted, so it's only when you're testing privately you really get a chance to experiment.

However, with the restrictions on travel because of the pandemic, that's making our

and from an event, you're not able to test as much as you would like. If we had known 12 months ago, when we were making the decision to do the Supercup, we would have these restrictions in place, we would've delayed the process by a year. It's our greatest limiting factor.

Any time in the car is invaluable - the more racing you can do, the more running in the car, the more you can learn. You look at GP Elite, who run championship leader Larry ten Voorde; they run 10 cars across two championships and the amount of data they collect is huge compared to what we do. That's why we're also racing in the Benelux championship – and Harry won two races in that at the Red Bull Ring. We know we're not going to go in and wipe the floor with people. We have to learn the car, the drivers have to learn the car – and even little things like the track limits and how that's policed in Europe compared to over here. We're all on a steep learning curve but it will only get better the more time we have.



ADVERTORIAL TOPCON

Paving the way for glory

THE 1985 BELGIAN GRAND PRIX

is remembered as infamous, with the Spa-Francorchamps track crumbling beneath the cars. Amid widescale protest from drivers, the Formula 1 race was cancelled and rescheduled for later in the year, but the undercard Formula 3000 race still went ahead. As one weary driver described it afterwards, "it was like driving on eggs..."

Thankfully such scenes are rare these days, but instances like Silverstone's cancelled MotoGP race in 2018 – due to an abundance of standing water that made riding conditions too dangerous – come as a reminder that sub-par road surfaces, whether due to excessive bumps or poor drainage, can have a significant impact.

Recognising this, Silverstone (2019) and Zolder (last year) have both undergone resurfacing in which Topcon Positioning Group's innovative SmoothRide system played a crucial part.

The company, founded in Japan in 1932, is renowned for its cutting-edge work on motorways and airport runways, and has successfully applied its learnings to racetrack reprofiling with SmoothRide too. The problems identified at Silverstone in 2018 meant the home of the British Grand Prix needed substantial reworking – for, as Topcon 3D paving specialist Sjoerd Stoové explains, by merely taking off the top layer and replacing it "you are essentially just replicating the existing



ΤΟΡΟΟΛ

situation" – which prompted the lead contractor assigned to the project to engage with Topcon.

"We needed to create an entirely new surface," Stoové says, "not only to eradicate any risk of bumps, but also so we could shape a new camber that would make sure all water runs off to avoid aquaplaning.

"Racetracks are completely different from other roads – it's very specialised work."

SmoothRide means each of the stages in the resurfacing project – from track scanning, to design, milling (the process of removing the existing road surface) and paving – are handled by one singular solution.

"Our SmoothRide solution offers an accurate, precise and efficient way to resurface a road," says Stoové, "which is vital when it comes to an application like a racetrack, where even the slightest miscalculation or bump in the road can become dangerous."

After scanning the track to identify undesirable bumps or standing water hotspots with Topcon's RD-M1 device, data is converted into a 3D digital model using Topcon's MAGNET Collage software and used to inform the design for the new surface.

Saving the time loss that would result from engaging surveyors to manually stake out the milling depths in each location, where the new design differs from the existing surface, Topcon's RD-MC Machine Control system is programmed with the desired inputs – "to millimetre accuracy," says Stoové – and utilises GNSS positioning to achieve optimal results.

The result at Silverstone was a surface finish that circuit boss Stuart Pringle called "truly world-beating".

"I don't believe there is a smoother finish on any racetrack anywhere in the world," he said. "That is thanks to the ground-breaking technology Topcon brought to the project." Topcon supports Indy Pro 2000 racer James Roe Jr as a brand ambassador, and the Irishman is in no doubt about the dual benefits that surface improvements bring to both competitors and spectators alike. "As a driver, the smoother a surface, the more consistent it is," says Roe. "This allows us to push the boundaries much more, leading to much faster lap times and better racing for the fans to watch."



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ENGINEERING



DRIVING CHANGE LUCAS DI GRASSI

THE TIME IS RIGHT FOR AN ELECTRIC JUNIOR SERIES

Formula E's ambitious plans to create a ladder of electric support series faces challenges, but these can be overcome



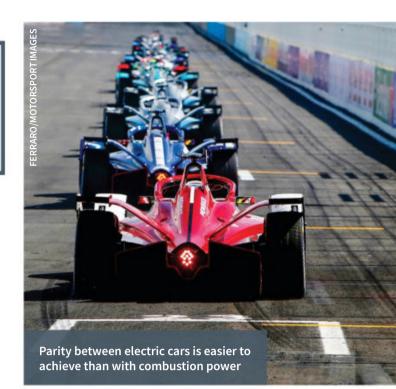
lberto Longo has outlined his plan to have a "full ladder" of electric support series to Formula E, including a junior

championship. But is this a viable idea that the market needs, and could it thrive against the well-defined Formula 1 support platforms: FIA Formula 3 and Formula 2?

The most important consideration for any junior series is cost, but electrification doesn't have to mean that it will be more expensive than combustion. Consider the cost per horsepower produced by an Audi e-Tron GT with commercial motors, and it is fairly cost-effective. It's also much easier to accurately control the power output of an electric motor using software than for a combustion engine. Large production-scale motors are even closer in performance than high-precision combustion motors, so it's more precise and cheaper to equalise the equipment for everybody. This would be a huge advantage for an electric junior series seeking to prepare drivers, as combustion engines are rarely ever the same.

This is an issue all the way up the ladder from go-karts, where you need 10 or more engines if you want to be competitive. That's where the costs lie – the equipment you must have and how much maintenance they need. From F3 to GP2, there would be a 1% margin – up or down – on engine power. If your engine was performing in the bottom 1%, then already you were starting three or four tenths down. It's also very expensive to get everything equalised, but this issue is removed with electric propulsion. It also needs less maintenance.

Formula E's traditional inner-city street circuits would be another potential obstacle for a junior series, because one of the main criteria it would need to offer drivers is mileage. The tracks can be extremely costly because the proximity of the walls means you cannot afford a mistake. If you have a young driver who is crashing all the time and doesn't get the mileage necessary, the cost per mile then becomes very expensive.



If all this is done in a smart way that makes the overall operating costs lower, then we can be close to a break-even point. I believe we could soon arrive to an equivalency of costs compared to existing F1 support series, and in the future I expect it will only get cheaper to do something close to what Formula E will be, with four-wheel drive and re-gen. If an electric junior series is cheaper as a category to arrive to Formula E than F3 or F2, then maybe a racing driver who just wants to become a professional rather than go to F1 could follow this route.

Naturally, every aspiring racing driver dreams of F1, but this is only feasible for a select few. Sometimes even being the best

"We could soon arrive to an equivalency of costs compared to existing F1 support series"

The logistics costs involved with racing in cities are also very high and you would need a different race format to allow for shorter races, because a high-capacity battery would also add extra cost. In order to be feasible therefore, any electric junior series would need to race at a combination of key Formula E venues with permanent tracks on different configurations. driver in your year isn't good enough, which is a hard lesson to learn when you've already spent €6million and then have to learn all the skills needed in Formula E anyway.

It's not about an electric junior series offering more or less development opportunities to drivers than F2 or F3 as they would involve developing very different skills. If cost is not a factor, then it becomes a question over what package drivers want to do. There will always be drivers who want to go for F1 but, if a cost-effective electric pathway can be created, it would prepare drivers with the right skills not only for Formula E, but also for Electric GT, Pure ETCR and other series that will follow. As motorsport progresses to electric more and more, a junior series looking at electrification will become more affordable for drivers and more appealing for sponsors, so naturally the market will shift towards it. I think it's a good idea for Formula E to pursue and, although there are many challenges, especially for logistics and battery costs, the timing is right to start.



ENGINEERING

Big, heavy Panoz-built cars posed a challenge to drivers

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SUPERLEMOVE FORMULA



THE END-TO-END THRILLER THAT DIED IN STOPPAGE TIME

Against all odds, the series for V12-powered Superleague Formula cars adorning the liveries of football clubs earned a place in the hearts of many, and is fondly remembered a decade after its demise

BY JAMES NEWBOLD





he Superleague Formula championship had lost its way by the summer of 2011. It had been founded amid much

optimism on the premise of connecting football with motorsport, shortly before the global financial crisis struck in 2008. And now it had begun a process of turning away from its USP, hoping to capitalise on A1GP's collapse by welcoming nations onto the grid. But only two race weekends were staged that year, at Assen and Zolder, before the championship folded.

That was a bitter shame, because the series based around the formidable 750bhp Panoz-MCT was perhaps the closest thing we've had in the 21st century to an equivalent of the enormously popular Formula 5000 category (if we're dismissing Australia's S5000 series – ed), albeit without the chassis variation. "It could be as loud as you want, it could be big and heavy, and we could get cars from America and build our own engine, it was just fantastic," says technical director Steve Farrell, who had previously been the chief engineer at the Subaru World Rally Team. "Everything about it was great fun." "I would go as far as saying in 2008-09, it was one of the most enjoyable series I've ever done, it was that good," agrees former Hitech Junior boss David Hayle, whose squad ran former GP2 racer Adrian Valles to the 2009 title with Liverpool. By the time Farrell joined in 2007, it had

already been decided that the series would use a chassis produced by Elan Motorsports Technologies in Georgia – designers Simon Marshall and Nick Alcock had also been responsible for the Panoz DPo1 used in the final season of Champ Car in 2007 – and 4.2-litre V12 engines from Menard Competition Technologies (formerly the engine division of Tom Walkinshaw Racing). "It was a huge engine, it was a beast," Hayle says. "At the start of most races, the pitwall violently shook as all the 18 cars came past. It was something else."

But despite its visceral impression, Farrell regarded the Superleague machine as "a very usable car" that was designed to "a Champ Car concept, so they were massively strong" and therefore costeffective for teams.

Its 15-inch wheels could accommodate robust brakes capable of lasting two race weekends. The engine was limited to 10,000 rpm, with an extra 1000 when the push-to-pass was engaged. "They could do that forever," Farrell says. Its sheer size meant that cooling could be problematic, but by the end Farrell's team had made great strides in this regard. "The gearboxes were good and reliable as well," he adds. "The car was very efficient to run."

"It was a big engine but it was a safe engine, reliable," agrees ADR team boss Alan Docking, who ran Craig Dolby's Tottenham car to second in 2009 and 2010, and John Martin to the title in the series' shortened final year. "It was built to last as far as a big powerful car goes. It had to be a low-maintenance, low-costing car otherwise it would have been out of business at day one."

In all, 21 cars and 30 engines were built, although one chassis was famously destroyed at Brands Hatch in 2010 by Chris van der Drift, who was fortunate to escape from a near carbon-copy of Johnny Herbert's awful Formula 3000 accident in 1988. That owed much to the incorporation of full 2008 F1-standard safety features, which combined with the bulky engine meant the Superleague car was big, heavy and unwieldy – only adding to comparisons with F5000. "It was quite an animal really in some ways," says Docking. "It wasn't so sophisticated, but you could work the car pretty hard and drivers got a response from that."

"It was built to last as far as a big powerful car goes. It had to be a low-maintenance, low-costing car"

Robert Doornbos had raced in Formula 1 for Minardi and Red Bull before moving ►



to Champ Car in 2007. He describes Superleague as "a bit of a throwback".

"It was quite aggressive, it had wider tyres and it had a turbo boost button to use a bit more power, which was similar to what we had in Champ Car," recalls the Dutchman, who was invited to join the Scuderia Playteam-run AC Milan squad which had once employed his aunt as a

physio – by his former Minardi chief engineer Gabriele Tredozi. "A Superleague car was more like a brutal Formula 3000 [Lola]. You only had one lap with the tyres, otherwise you could cook them completely, and the aerodynamics were a bit less efficient than with the [powered by Ferrari] A1GP."

Yelmer Buurman, who started more

at Donington in 2008 and became its most successful driver



Superleague races than anybody -63 in all, including super final appearances – agrees that the aerodynamics "weren't as sensitive to the aerodynamic loss when you were following another car".

"The cars were quite heavy and they had quite a long wheelbase, so they didn't feel as agile as a GP2 [Dallara]," he says. "Even though [the Panoz] had good downforce levels, they didn't have as much as GP2. That combined with the push-to-pass made it that you could have really good battles and good overtaking possibilities."

That was especially important given the unique format of fully reversing the race one finishing order for the race two grid. And that wasn't the only Superleague quirk – grids for the first race were set by a knock-out qualifying format made up of head-to-head battles, while the top-scoring cars across races one and two were entered in a five-lap super final. The driver who adapted best was Davide Rigon, now a factory Ferrari GT ace, who won the very first race at Donington in August 2008 on his way to that year's title with Beijing Guoan, and doubled up in 2010 for Anderlecht. Rigon had been set to sign for AC Milan



Doornbos relished the simplicity of the V12 machines relative to F1

when he was invited by Zakspeed boss Peter Zakowski to visit his facility. Suitably impressed, and attracted by the idea of working alongside famed Italian engineer Giorgio Breda, Rigon switched allegiances to the Chinese club and promptly won first time out. "It was a big surprise for me because there were big names like [Antonio] Pizzonia and Doornbos coming from F1," remembers Rigon. "In the test I was there together with the others, but not super-fast [enough] to expect to win. But at Donington straight away I was very fast there, my car was very well-balanced." Having been involved in the Superleague development programme on the understanding that he wouldn't be fielding a team, Hayle's Hitech squad was called up "at the eleventh hour" to run Liverpool's car for Valles, and was paid by the series to do so. The Spaniard was thwarted by "horrendous" electrical woes that forced

him to miss qualifying and start at the back from both races – "The loom was quite complex," says Hayle. "I don't think anyone really understood it enough to be able to troubleshoot in the field with it" - so third and fifth had been a decent recovery in front of watching Liverpool FC CEO Ian Ayre. Valles emerged as one of the quickest drivers of 2008, starring to win in the wet at Zolder, and passing Doornbos for victory at Estoril. But the electrical problems continued with two mechanical DNFs at the Nurburgring and would blight his title hopes, costing a likely win at Jerez as Doornbos (who hadn't started either race at Donington due to a fuel cell-induced fire) rose to third in the points, two behind Buurman's Azerti-run PSV Eindhoven car. "I would say electrical issues more than anything else plagued us for 2008 with that car," says Hayle.

"It was a case of trying to keep a core group together and get who you could round-by-round"

By contrast, Rigon had few such worries, and after dominating the Donington season opener was never headed in the points, his only non-score coming after contact with Doornbos at Zolder. He set it right by dominating race two. "The first season was quite strange," Rigon states. "A lot of cars had issues, but my car was perfect, not one issue during the races. I could say that sometimes my car was so good, that I was also lucky to win the championship."

Rigon elected to concentrate on GP2 for 2009 and appeared only three times for Olympiacos, with Zakspeed pulling out. In the Italian's absence, Valles romped to the title (while in the world of real football, Liverpool's poor run of form cost it a long-awaited first Premier League title to bitter rival Manchester United) ahead of Tottenham's all-action Dolby, while a catastrophic gearbox failure for Buurman at Donington scuppered the Anderlecht driver's title hopes.

Yet despite Valles's untroubled run to the title, Hayle says the season wasn't entirely straightforward - the loss of two key engineers before the season required the Hitech boss to engineer Valles himself. "It was very much a part-time series in 2008-09, you couldn't afford to employ people to do it full-time because it just wasn't viable," he says. "It was really a case of trying to keep a core group together and get whoever you could on a round-byround basis, so it wasn't easy!"

The teams that were being paid to run cars by Superleague weren't entered into the cash pot, but Hayle reckons it wasn't worth the gamble. "Even if you won three or four races, it was barely enough to keep you going for the season, to employ the people you needed, run a factory and pay all the overheads and the costs of maintaining the cars," he points out. "Everything had to come out of those winnings, so unless you had drivers that were paying and you could somehow share the money with them, it didn't stack up for me." The 2009 season also marked the advent of the super final. After a rolling start for the inaugural super final at Magny-Cours contributed to a procession, Farrell's team

worked on improving cooling and clutch performance to allow for standing starts. These races often produced superb storylines. Take Jarama 2009, where Buurman's car had to be hastily repaired following an altercation with Nelson **>**

ENGINEERING



Bamber (left) won hectic Ordos super final after Perera was penalised

Panciatici entering the pits - "He braked really early for a line for the pit entry, but that wasn't the speed line..." - and won with a front nose scavenged from stablemate Pedro Petiz. Or Ordos 2010, where stand-in Earl Bamber (promoted from commentary duties to replace a visa-less Alvaro Parente) scored a famous victory in one of the barmiest motor races you could ever see. Ben Hanley shunted into Max Wissel at Turn 1, Buurman took the lead only to suffer a slow puncture, and Franck Perera took the flag first before being penalised for starting in the wrong grid position. Rigon, who had spun avoiding the Turn 1 melee, incredibly finished third. "In a way it was a lot of pressure," Buurman says of super finals. "Everything was quite tight, especially after the second race if you were in the shootout. There was no time basically - you went straight onto the grid again after a very quick splashand-dash. When something went wrong like for example in Ordos, those moments hurt even more then, I would say."

"2010 was very tough, it was 12 races all around the world, like a world championship"

Having come close to working with Tredozi at Milan in 2008, Rigon finally linked up with him at the Azerti-run Anderlecht team in 2010, as the calendar expanded from six rounds to 12 across the full year. Given "a white paper to decide everything for the car", Rigon built a team he believed could win, but concedes his 2010 car set-up "was not as good as 2008". "We started the first race [at Silverstone] with a very bad result and I said, 'Oh my God, this will be a difficult season'," he recalls. But victory at Assen gave the team hope, and Rigon began a long fightback against early points leader Dolby and Buurman. now in Milan colours, who held the points lead after round seven at Brands Hatch. But it all unravelled for the Dutchman after contact with Dolby at Adria dropped both out of contention and opened the door for Rigon. Buurman describes the end of 2010 as "a Murphy's Law kind of thing": both he and Andy Soucek were handed drivethrough

first Algarve circuit race ("by penalising me, a Portuguese driver [Parente] got on the podium"); a diff failure took him out of race two; and a rare engine failure in first practice at the brand-new Ordos circuit in China compromised the following weekend too. Then came a street race in Beijing that didn't count for points, as the circuit didn't have the required International Grade 2 licence. Concerns over safety came to a head after Soucek destroyed the Flamengo car in qualifying at the tricky chicane. "It was basically a concrete wall and the end of the concrete wall was the apex," remembers Buurman. "Soucek turned in a bit too early and stripped the whole side of the car." Rigon had a below-par weekend plagued by gearbox trouble, but with no points on offer it couldn't have come at a better time. "I was very scared to damage the car because we knew that we didn't have so many spare parts for the next one that was counting for the championship," he says. "When I did the track walk on the Wednesday, we said, 'Guys, we are going to

penalties for track limits breaches in the



kill ourselves — this is a fast car, we cannot race here, it is hugely dangerous'. Honestly I never pushed 100%, I took it very easy. That was a really unsafe race."

Had Beijing counted for points, Dolby's race one win would have given him the title. But the battle instead went down to the wire at Navarra, where Rigon's participation in the now points-paying super final was put in jeopardy by race two contact with Dolby's stablemate Martin, which caused him to spin and stall the engine in fourth gear. Fortunately, Rigon managed to bump-start in reverse on the Navarra track's expansive runoff.

"I was thinking my championship was gone," he recalls. "I put the manual mode like a world championship there."

Uncertainty dominated 2011, but it still provided Buurman's favourite Superleague moment when the PSV driver passed compatriot Doornbos's Netherlands car — via a bit of contact — to win their 'local derby' at Assen. "At that time [Doornbos] was steaming!" chuckles Buurman. "That was a real good one in front of the home crowds."

But the writing was on the wall for Superleague as a spate of events in the Middle East, Australasia and China were cancelled. Just as suddenly as it appeared, it was gone, leaving many sorry to see its demise. "The cars were great, they sounded great, they looked great, it was fantastic racing," says Hayle, whose Superleague involvement diminished after forming a partnership with Reid Motorsport in 2010 to concentrate on running Atech GP in the nascent GP3 series and in Formula Renault UK. "The whole concept of the knockout qualifying, the complete reversed-grid races and then the super final, it was really well thought out. I was really pleased to be part of it, it was a fantastic series."

"I was very sad when it ended," adds Buurman. "There was quite a lot of driving time, which was really good. It was a great series, it was organised in a very spectacular way."

Certainly not everybody 'got it', but Superleague certainly made its mark during its brief existence. "I was having a dinner with the president of China," says Rigon, "and I didn't realise until that moment how big it was. To do that and win was perfect for me. I really enjoyed that period."

Perhaps Doornbos puts it best. He found that what he jokingly refers to as the "graveyard for former F1 drivers" had helped him to "get the fun back", as he enjoyed having "less meetings with the engineers because it was less technical".

"Everybody had a big smile on their face," he says. "It was more like back to the roots, how racing should be: less technology, less PR, just a lot of fun with guys racing big engines. There were some good drivers too. And the way they shook up the grid, I thought it was quite fun."



for the gearbox and I go down to neutral, and then while I was rolling back it was like 50 km/h, I didn't stop because I could see in the mirror that I had still quite a lot of space. I put it in reverse, engaged and then I lift the clutch and the engine started. OK! Now, I said, 'Davide, don't do stupid things'. I really took it easy, put the neutral back, put the first gear and slowly I started like a gentleman! I was shaking!"

A cagey run to fourth in the super final was enough for a title that he felt carried far more weight than in 2008: "It was very tough, it was 12 races all around the world,



THE NUMBER-CRUNCHING BEHIND THE NEW-LOOK DTM

In developing its own Balance of Performance system for 2021, the DTM has drawn a line in the sand against other GT3 series. Here's how it works

BY RACHIT THUKRAL



t's no secret that Gerhard Berger isn't the biggest fan of Balance of Performance, and it was under his stewardship that the

DTM axed its own system of performance weights in late 2017. But a top-to-bottom shake-up in the winter has forced Berger vehicle dynamics to create a level playing field between the five full-time manufacturers in the DTM this year, plus the part-time McLaren entry run by Polish squad JP Motorsport.

"There was a process of possible partners, some of whom we have [prior] [for a] simulation [based approach]. It was more or less a straightforward decision."

The software developed in-house by AVL Racing is light enough to run on a standard desktop or laptop. But by harnessing the power of cloud computing, AVL is able to garner resources equal to 10,000 computer cores. That is enough to simulate 50,000 laps within an hour, allowing it to get a near-perfect indication of the relative performance of different manufacturers. The first computer-generated models of each car were prepared long before the first pre-season test at Hockenheim in April, based on the information supplied by the ITR and the manufacturers themselves. Once real-world data was available from testing, AVL Racing honed its models further with more precise measurements, helping it finalise the BoP for the opening round of the season at Monza – a track

to embrace what many consider to be a necessary evil in GT3 racing, as he carves a new future for the championship following an exodus of manufacturers in recent years. Intriguingly, the DTM is not relying on SRO, the company responsible for determining the BoP for virtually every championship using the GT3 ruleset. Instead, the series has taken its own unique route, partnering with renowned Austrian engineering company AVL Racing for the 2021 season. The idea is to use AVL's decades of

experience in simulation models and

experience with," says Michael Resl, Director Competition and Technology at DTM parent body ITR. "Due to my previous record at AVL, I knew what the guys are capable of. They never did a BoP approach for a series, but they are very good at making individual cars quick or to model them. "Obviously we looked at all the other BoP methodologies but relatively quickly it turned out that we would like to do it simulation and data-based. And to be fair we didn't look around too much for other people once the decision was made to go AVL's driver models factor in how inputs impact lap time





known to be notoriously tricky to balance cars based on different platforms due to its long straights and slow chicanes.

"Here at AVL we have developed our own vehicle dynamics software which is called VSM [Vehicle Simulation Model]," says Michael Peinsitt, Skill Team Leader at AVL Racing. "All the different parameters that describe a car go into the simulation. For example, the wheelbase is a parameter that goes into the simulation, drag coefficient, downforce coefficient, torque curve, tyre properties – all those characteristics and how they combine to behave is described with parameters, and these parameters need to be fed to the simulation.

"We obtain these parameters mainly through the ITR. So, the ITR and the

"We've developed this model over many years and we are getting good feedback"

gear. There are literally thousands of channels coming from our simulation.

"Everything that is required to run a car you will see it in front of you and you can change it. So, you can modify your characteristics, the suspension, spring stiffness and damper characteristics. All that can be done and that is obviously done through numbers because we need to characterise that."

Cars aren't the only focal point for AVL Racing, however. It is also required to simulate the real-life behaviour of racing drivers, taking into account how they react to changing track conditions.

"The driver model behaves in a very similar way to a real driver on track," continues Peinsitt. "Typically, simulation driver models tend to have some characteristics that real drivers do not show.

"One typical example could be that drivers get some understeer going into a corner, but nevertheless because the driver model wants to achieve a certain speed exiting the corner, it applies the throttle, which makes the understeer even worse. This is something that the real driver will not do, because they know, 'If I have understeer and I put the throttle down, I will get more understeer so I'm not going to do it'.

"But these are things our driver models can handle very well. We've developed this model over many years and we are getting very good feedback."

It came as no surprise that some teams chose to conceal their true pace until the first qualifying at Monza, creating a slightly disjointed grid for the DTM's first race under GT3 regulations. But the series bosses and AVL Racing were quick to react, handing a performance boost to Audi, Ferrari and BMW following a top-four lockout by Mercedes' fleet of AMG GT3s.

A second round of BoP changes followed on Sunday morning, based on the long-run data gathered from the first race, with Ferrari and Mercedes handed weight penalties this time. >

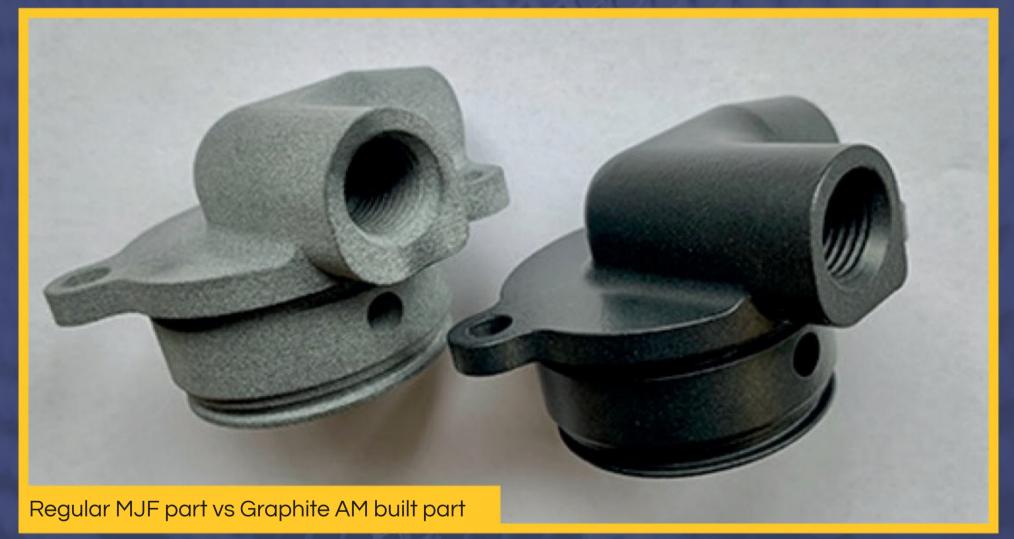


manufacturers were providing us all kinds of data like the homologation data or different specification sheets. We used all this information to create the baseline model. And of course the software requires the description of the track that the car is driving on.

"When you run the simulation, it is very similar to sitting in front of a telemetry screen. So, when you hit the start button on the simulation, you can see graphs popping up, you can see the speed as the car negotiates the drag, the throttle, the steering, the brakes and the



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The proactive approach paid dividends, with all five manufacturers represented inside the top six in second qualifying on Sunday — all separated by less than a quarter of a second. For the DTM and AVL Racing, it was a job well done.

"Before Monza it was clear everybody was doing something to not show the full potential of their cars," explains Resl. "This can be different driving lines, this can be balloon tyres, this can be fuel amounts, this can be sensors not switched on, transponders not activated, you name it.

"The first time you really see something is qualifying in Monza. As it turns out, some cars had hidden more and some cars had hidden less. So, you adjust to not have one manufacturer given a disadvantage and, in that specific case in qualifying, BMW was not 'BoPed' correctly. If we hadn't changed anything, we would have ruined their race, which is just not fair.

"Then between Saturday evening and Sunday qualifying we did what we learned from race one, we led that into BoP again." finishers carrying extra weight for the following race. At present, the winner, the second-placed driver and the thirdplace finisher are hit with an additional 25kg, 18kg and 15kg respectively. However, the DTM may decide to alter the weights for the coming rounds.

"There is a review if 25-18-15 are the right numbers with this performance level or BoP level," says Resl. "So, it will be looked at but there is no decision on if it is going to change."

Ever since the DTM floated the idea of moving away from Class 1 cars, it had made clear that it wanted to differentiate itself from other championships based on GT3 regulations. One of the most obvious ways to stand out is sheer performance, and BoP is a cost-friendly means of achieving the goal of being



"If we hadn't changed anything, we would have ruined their race, which is just not fair"

the fastest GT₃ series in the world.

Even so, the lap times at Monza were fractionally slower than the GT World Challenge Europe event at the same venue earlier this year, with a pace difference also noticeable to last year's International GT Open round.

Weather is understood to be the main culprit, with the ambient temperature at Monza over 30C when the DTM visited the circuit at the end of June. And AVL Racing is convinced that the DTM will indeed be faster than rival GT3 championships at other circuits this year.

"I think if all the different GT₃ series are running under very similar weather conditions, with the same weather, with the same humidity, with the same density, then the DTM is probably the fastest GT₃ series," says Peinsitt. ■



Under the current regulation, midweekend BoP changes are allowed in the opening three rounds of the season before being outlawed for the rest of the year. Both the DTM and AVL Racing have maintained that they'd like to keep the same BoP from Friday to Sunday at each round, as any last-minute changes increase the workload on the teams. At the same time, both have warned that they wouldn't hesitate to make tweaks should there be an imbalance in the field. There's also the new system of success ballast to be considered, with the top three

ENGINEERING

PRODRIVE GEARS UP FOR DAKAR TAKE TW ()

After tasting plenty of success in the World Rally Championship, Prodrive took its off-road excursions to a new level with its first Dakar Rally entry this year. Now well-versed in the event's unique challenges, it's putting those lessons to good use for 2022

PID BRX

BY TOM HOWARD

D

espite its recent relocations, the Dakar Rally remains one "The Dakar Rally is the hardest race in the world today, so that means when a new

Dakar to its glittering list of achievements, which began in the harsh terrain of the Middle East Rally Championship in 1984. In its desire for Dakar success, the organisation has embarked on a multiyear commitment in conjunction with the Kingdom of Bahrain, with a pair of its own designed-and-built T1 cars. Its driver line-up further emphasises the seriousness of the project, with nine-time WRC champion (and male driver for the Prodrive-run X44 Extreme E squad) Sebastien Loeb joining Roma. The quest to tackle this year's Dakar began in 2019. Prodrive took a blank piece of a paper and set about creating

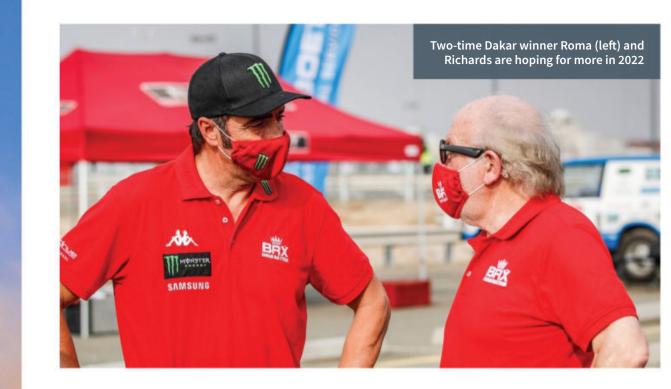
- Alloi Ahaal

of motorsport's most brutal endurance contests; an event

that requires a fair portion of luck just to reach the finish. It is one of the last great motorsport adventures, a 4751-mile marathon across the treacherous Saudi Arabian desert.

To conquer the Dakar is a monumental feat, and to achieve glory at your first attempt is extremely rare — as Prodrive discovered with its Bahrain Raid Xtreme (BRX) project in January. Such a trial has ensured that work to tame next year's event has already started in earnest. team arrives it is really hard," says BRX driver Nani Roma, a Dakar winner on both two and four wheels, whose most recent triumph came with Mini in 2014. "We're lucky that I've found a team that has a huge passion for motorsport. They are clever guys and this is important." Synonymous with success in the World Rally Championship, in which it won 47 rallies, and three drivers' and manufacturers' crowns in 19 years operating the factory Subaru team, Prodrive knows how to win in the harshest of environments. But it is desperate to add the

PRODRIVE'S DAKAR CHALLENGE



"Loeb endured his very own trial by Dakar as Saudi's harsh terrain took its toll"





major setback arriving on the fourth stage when he was hit with a five-minute penalty for speeding in a controlled zone, which triggered a tirade at officials. In the following stage, Loeb suffered several punctures and got lost in the desert, leaving him and co-driver Daniel Elena almost an hour behind the leaders.

A broken suspension arm followed on stage six, with any hopes of a quick



Loeb's trying Dakar led to split with co-driver Elena

SNMSUNG

the 3.5-litre turbocharged T1 Dakar racer from scratch. After months of development work, played out behind the scenes of the global pandemic, the BRX team's Dakar debut proved to be a challenging one that highlighted how tough the event is to conquer for a new team with a brand-new car.

DAKAR DISHES OUT A TOUGH INITIATION

Loeb, whose second-place finish in 2017 stands as his best result in four previous attempts with Peugeot, endured his very own trial by Dakar as Saudi's harsh terrain took its toll on his BRX1 machine. The Frenchman was beset by issues, his first fix ending when the truck arrived with the incorrect replacement part – two right suspension arms instead of one right and one left. It forced Loeb to wait a total of eight hours until the correct part was delivered, the actual repair only taking 20 minutes.

More mechanical pain arrived in stage seven with a damaged bearing, and he became stranded in stage eight, where he eventually retired, after suffering two punctures in the first 50 miles when his car was equipped with only one spare tyre and three working brake calipers.

ENGINEERING

"For sure we learned a lot of things," Loeb said, summing up his tribulations. "I think the team did an incredible job debriefing all of the things that went well and went wrong in this Dakar. We know we have some things to change to try to optimise the performance for next year."

Team-mate Roma encountered navigational challenges of his own during the event, but his run was far less haphazard than Loeb's. The Spaniard ended the event fifth, although three hours and 21 minutes adrift of winner Stephane Peterhansel's X-raid Mini.

"I think really nobody believed that [we could finish fifth], the first year it is amazing," says Roma. "The guys continued to believe and work. The car touched the sand for the first time on 2 November and two months later we start the Dakar. It is incredible the job the team has made.

"I think not in the history of Dakar has one team made this result in creating a new car in such a short space of time — it is really amazing. It was unlucky that Seb did not finish; we did a great job."

HARSH LESSONS BEING PUT INTO PRACTICE

The deficit to the winner, coupled with the problems with punctures and navigation, sparked a month-long internal review to





chassis (instead of the current two metres), 350mm of suspension travel (compared to 280mm) and, crucially, larger wheels (37 inches in diameter, compared to the 32in that 4x4s had this year).

"One of the fundamental problems we had this year was with punctures, and clearly that is outside of our control to a certain extent, but it was to do with the size of the wheel and the tyre," says Richards. "The FIA and ASO have now agreed a larger tyre next year, which will put us on an equal footing with the buggies that had an advantage over us this year.

"We are having to redesign a lot of the car around that now; the suspension,

ensure that no stone is left unturned for the team's second Dakar attempt next year. Six months on, and Prodrive is putting what is has learned into practice, while Loeb and Roma have also made significant changes.

"It is a very analytical process," says Prodrive chairman and Bahrain Raid Xtreme team director David Richards. "We go into every little detail and every person is scrutinised as to the area they

are responsible for in technical terms across the car from top to bottom, to individuals as well regarding how we all performed in our different roles." As a result, the BRX Hunter is undergoing a redesign of sorts that includes changes to the suspension, bodywork and wheels. A series of regulation changes by the FIA and Dakar organiser the ASO will allow the 4x4 vehicles to have a 2.30m-wide

the wheel, tyre and the bodywork. There will be transmission changes as well and all sorts of things. There will be a very intense test programme and then we will go into a few events at the end of this year to test it in real conditions."

While Prodrive has been busy improving its Dakar challenger — with its next stern test coming in the 22-24 July Baja Aragon, where a third car will be entered for 2019 winner Orlando Terranova — Loeb and Roma have both sought to solve their navigational woes by teaming up with new co-drivers.

PRODRIVE'S DAKAR CHALLENGE



With an electronic road book handed to Dakar competitors every morning before the start of each stage, demands on the navigators are very different from the WRC. After 23 years together, Loeb has split with Elena and brought experienced rally raid co-driver Fabian Lurquin into the fold for Aragon, while Roma is reunited with Alex Haro, the pair having won the Baja Aragon together in 2015. "It was not an easy thing to do and was not an easy choice," Loeb says of his split with Elena. "I was with him for 23 years and we had some incredible and great moments together. But I think the team tries to do its best to solve all the little problems we had to perform next year, and I think on my side I needed to do the same.

"With this new regulation, this change of terrain and road books with the



"One of the problems we had this year was with punctures, to do with the size of the wheel and tyre"

electronic system you get only in the morning before the start, it is very complicated for a crew like us coming from the WRC by not having this big experience of cross-country rallies."

FRESH COMPETITION ADDS TO THE CHALLENGE

Although Prodrive is better prepared for its second attempt, the challenges will continue in 2022 as the BRX will square up against a formidable force returning to the rallying scene in the form of 1980s Group B powerhouse Audi.

The marque behind the 1983 and 1984 WRC title-winning Quattro is planning a factory-supported assault on the event with an electric car using MGUs from the Formula E challenger. The as-yet-unnamed car's drivetrain will include an in-house battery design that's recharged by a combustion engine derived from Audi's defunct Class 1 DTM programme.

Audi has been developing its Dakar weapon for more than a year and has not stinted on its driver line-up, signing 14-time Dakar winner Peterhansel to partner three-time winner Carlos Sainz Sr and long-time marque favourite Mattias Ekstrom. Its involvement will only add more prestige to the 2022 event, and is a clear sign that Dakar is becoming a new battleground for manufacturers.

Richards agrees. "The fact that Audi, which has dominated Le Mans and won the WRC many times, have now decided they are coming to Dakar, I think it speaks volumes," he says.

With so many lessons learned ahead of Prodrive's second tilt, plus increased expectations and new competition coming to the fore, next year's event could turn out to be even tougher than its first foray. "The second one is harder than the first one," reckons Roma. "The first one, it is new, the team is new and maybe you can make more mistakes and have issues. In the second year we expect that we will work much harder now the team knows the race more. I am sure we have a much more competitive car and now we must continue. "I said to David [Richards] in the beginning that our goal is to win this race. I am sure we will be much more competitive, and I am sure we will fight in the podiums and try to win."

HOW HISTORICS CAN HELP THE FUTURE OF MOTORSPORT

It might not be obvious, but the historic racing world has the potential to play its part in our futures – on and off track

BY KEVIN TURNER



istoric racing is not the first branch of motorsport that comes to mind in discussions about advancing technology

and helping the green movement. After all, part of the appeal is that it includes loud, fire-breathing machines that are — in a modern context — inefficient.

But there are in fact two key areas where historic competition can help the future of the sport and society in general. And they were discussed at the inaugural Autosport Connect industry event back in March.

The historic community is well-versed in having to find alternative methods to keep cars running as certain materials become harder to find or are taken off the table thanks to modern safety concerns. So having to do the same with petrol is perhaps not as much of a leap as you might expect. Formula 1 is not the only place where synthetic fuels can be developed.

"We've heard lots of talk about moving to fully electric road vehicles," says Steve Sapsford, managing director at SCE, who formerly worked at Ricardo on internal combustion engines and then electrical/ hybrid power. "That's fine and we're heading in the right direction, but one of the things none of this deals with is the cars that are on the road already."

With around 33 million cars on UK roads alone, the push to electrification is not

going to make all the petrol and dieselengined vehicles vanish. Coming up with alternative fuels that can keep older cars on the road without burning fossil fuels could be key, and historic racing can play its part.

"There's a fantastic opportunity for renewable and sustainable fuels to be applied in all forms of racing," adds Sapsford. This can come in several forms. Biofuels (the second generation of which comes from waste, as opposed to generation one coming from crops), synthetic fuels and efuels. Each of them recycles the carbon and offers direct replacements for the fuels being used now. Clearly, getting these to work in the wide range of engines in historic racing has major potential benefits for the wider automotive world.

"There's a huge opportunity to get historic racing on the front foot, reducing carbon emissions, and to show the world that there is an alternative alongside electrification that deals with all the cars that are out there now," enthuses Sapsford.

Historic Racing Association founder Brian Sims, who previously worked at Lola, agrees. "Historic racing has become incredibly successful, but it's become very fragmented because it's grown off into so many sectors," he says. "It's so fragmented, it doesn't have a voice, so one of the aims of setting up the Historic Racing Association is to provide a forum to



debate the future of our sport."

Part of its aim is to promote historic competition to young people, who are ever-more environmentally conscious. The feeling is that new technologies need to be embraced, not resisted.

"We have got to be seen as a sport that is looking to the future and what new generations want," says Sims. "We want to use historic motorsport as a platform for the technology that can look after the old cars in developing countries where not everyone is going to have an electric car."

Engineering students hugely enthusisatic about working on old Ensign F1 cars





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HISTORIC RACING



The other area in which historic motorsport can play a role is as a general boost to the engineering industry. The need for good engineers is high and is unlikely to go away any time soon. Getting involved in racing gives practical experience and an exciting environment in which young engineers can learn.

BGC 6B

As the competition in historic racing has increased, pushed on by major events such as the Goodwood Revival and Silverstone Classic, so too has the level of professionalism. Teams involved in

"We have got to be seen as looking to the future and what new generations want"



Historic racing contributes almost £400m to the UK economy





DD 300

HAWKINS/MOTORSPORT IMAGES

India man Bob Fernley about running old Ensign racers, first 1979 and 1981 F1 cars, and later an Indycar.

"We weren't sure how much interest there would be, but the queue was out the door," says NCME director Mark Busfield. "We were swept away by the [student] enthusiasm for it." Two groups were created – one to look after the preparation and maintenance, and one to reverse engineer the car, which involves scanning it, digitising it and doing drawings. The car can then be looked at using modern approaches, such as CFD. The team ends up with lots of data, including from sensors, and can look at how to improve the car in a way not possible in the 1970s and 1980s. "We've got more engineering input now to a car designed 40 years ago than there was 40 years ago," asserts Busfield. "The students have really embraced the

contemporary motorsport have joined the party, and the established preparation firms are filled with people with experience of F1 or other high-level branches of motorsport. That helps to explain why the National Centre for Motorsport Engineering at the University of Bolton has included historic racing elements as part of its offering. That included approaching ex-Force historic racing scene."

There will always be debates about how much modern technology should be allowed into historic motorsport and how tightly cars should be kept how they were. But finding ways to help motorsport stay relevant in the modern world and encourage new generations of engineers and fans must surely be embraced. Historic racing alone is estimated to contribute nearly £400million to the UK economy – that's not only something worth protecting, but it's worth enhancing, and now is a good opportunity to do so.

ENGINEERING

HOW TO BE AN ACE Engineer

Moving abroad set James Goodfield on a path that has traversed several disciplines

BY JAMES NEWBOLD



rom winning the Safari Rally to working in a Formula 1 team's R&D department, and race engineering across the DTM

and a host of single-seater categories, James Goodfield has packed a lot into the past 25 years of his motorsport career.

A graduate of Cardiff University in 1997, Goodfield joined M-Sport by default as it was the only company that replied when he wrote to "every employer I could think of". He enjoyed four productive years with the Ford World Rally Championship squad, and played a key role in developing the Focus – a winner on its third-ever rally, the 1999 Safari – under a technical group led by Gunther Steiner. "We designed the car, developed the car, homologated the car and ran the car," he says. "That was the ultimate, it encompassed everything."

Goodfield admits he would likely have "stayed forever" had it not been his first job. Feeling he needed to "make a break", he joined the Ford-owned Jaguar F1 team in 2002, but he found the role unrewarding. "It was disappointing," he says of his F1 experience. "It wasn't for me and I've never thought about going back to F1 since."

Goodfield insists his Jaguar move was "independent and coincidental" of Steiner's own switch a few months prior, but it was "entirely down to my relationship" with Steiner that he took the leap into trackside race engineering with Opel in the DTM for 2004. His driver, Timo Scheider, was the best of Opel's six-strong stable that year and, when the marque downsized to four cars in 2005, he masterminded its only



podiums with Heinz-Harald Frentzen. Goodfield says his time in Germany, concluded by a two-year stint with Susie Stoddart (now Wolff) in two-year-old Mercedes in 2006-07, was pivotal in his career. "It wasn't easy for me, I didn't speak German and I'd never lived abroad before," he says. "But I'm here doing what I'm doing now because I took that opportunity."

It also led to a spell in A1GP, initially as data engineer working with ex-F1 man James Robinson for South Africa before switching to Great Britain for 2006-07 and serving as race engineer thereafter.

"I learned more in two seasons with James than at any other point in my career," says Goodfield, a tutor at Monza's Motorsport Technical School since 2014. "My skillset in the DTM evolved hugely just from being the data engineer under James. That's the point where you think, 'How have I managed to get away with this for the last couple of years?'"

A1GP's demise after a single season of the 'Powered by Ferrari' concept came as the new FIA Formula 2 series began in 2009, following the centrally run model of Formula Palmer Audi (also run by MSV). As chief engineer, Goodfield was tasked with ensuring parity between all cars, managing the race engineers (each running three cars), and overseeing maintenance of all cars between events. He says F2's low cost, mandated by the FIA, was a bigger factor in its poor uptake following a promising debut than its unique model.

"It didn't curry favour probably because it was just seen as too cheap," he says. "People judge a product not by what it does and how it looks, but on cost."

His relationship with the Palmer family continued after F2's 2012 last hurrah, and he classes Jolyon Palmer's GP2 victory in Hungary in 2013 with Carlin as the highlight of recent years spent mostly at F2/F3 level, although he'll be part of Risi Competizione's LMP2 set-up at Le Mans next month. It will be only his second 24-hour race, but it can be no more gruelling than rallying in Kenya... ■



TOP TIPS FOR ENGINEERS FROM JAMES GOODFIELD

Don't try and run before you can walk; keep it simple. Often you can get results just by getting the basics right and not trying to be a hero. That for me has always been a bit of an underlying rule. Don't try to overengineer things. Getting your 'big break' isn't about luck. Opportunities come along all the time to people and, when they do arise, you've got to embrace it. It may not always be easy, so be prepared to soak up some hardship and hope that the reward comes later.



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- Paintwork structure
- Polishing & Sanding techniques
- and more . . .

MODULE 3 - Special applications - Final check MODULE 2 - Paintwork preparation MODULE 3 - Basic knowledge of wax, polymer & ceramic sealants - Application of all sealants - Final check

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