Teenager becomes latest F1 Brit

BRITAIN'S BEST MOTORSPORT WEEKLY

14 MARCH 2024

SAUDI ARABIAN GP

Brilliant Bearman bursts into F1 as Max wins again

Ferrari's new rising star beats Norris and Hamilton but Red Bull dominates

111.0

'It's a matter of time before we see him permanently in F1' CHARLES LECLERC

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Another British driver makes headlines with Ferrari in F1

No offence to the talented people at Red Bull, but another Max Verstappen victory wasn't the biggest talking point from the Saudi Arabian Grand Prix weekend. Instead, it was the efforts of a driver who was 10 when Verstappen made his Formula 1 debut.

Ollie Bearman thought he was going to be kick-starting his F2 title campaign in Jeddah after qualifying on pole, but ended up being thrust into a Ferrari F1 seat thanks to Carlos Sainz falling ill (see page 4). He thus beat Lewis Hamilton (who was in F1 before Bearman was two years old!) to becoming a Ferrari GP driver.

Few debuts could have been more challenging than driving for F1's most famous team at one of the fastest and trickiest venues, with virtually no preparation time, but the 18-year-old Briton impressed hugely on his way to seventh, ahead of Lando Norris and Hamilton.

Bearman was twice a finalist in the Aston Martin Autosport BRDC Young Driver of the Year Award and showed pace on each occasion. The winners of those contests, Zak O'Sullivan and Luke Browning, are also on the F1 package on the F2 and F3 grids respectively, so there's a lot of rising British talent waiting to break into GP racing.

Away from F1, Josef Newgarden showed he will again be a force in IndyCar this season with an impressive victory in St Petersburg (p32), while Marcus Simmons talks to British Touring Car boss Alan Gow about the championship's smaller 2024 grid on p42.

There's plenty to look forward to on the UK motorsport scene this season, so take a look at p64 for our chosen highlights.



Teenager becomes latest F1 Brit



Cover images Mauger/Etherington/Motorsport Images

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FREE WITH THIS ISSUE





ENGINEERING SUPPLEMENT

How motorsport is using artificial intelligence, MotoGP's move to sustainable fuel, and an outlandish Citroen 2CV special racer are all part of our latest free supplement.

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A British Ferrari F1 star in Jeddah – and Lewis Hamilton

Teen beats Norris and Hamilton on shock

FORMULA 1

An average speed of 155mph, 27 wall-lined corners. In the words of triple world champion Max Verstappen, the Jeddah Corniche Circuit is "super-hard to jump in on", let alone with no testing in a new car, run by Formula 1's most storied squad. But that's the situation in which 18-year-old British Formula 2 star Ollie Bearman shone last weekend in Saudi Arabia.

He had been called up by Ferrari after what was originally thought to be food poisoning for regular driver Carlos Sainz turned out to be appendicitis, with the Spaniard requiring surgery. Just two hours before FP3 for the Saudi Arabian Grand Prix was due to get under way, while he was on his way into the track expecing to race in F2 after topping qualifying the previous day, Ferrari Driver Academy protege Bearman got the call to replace Sainz.

"I honestly didn't have time to get nervous or to overthink it, because it was so late that I literally had to focus straight away on trying to get up to speed and catch up the lost time," he said after qualifying 11th.

Slight errors at Turns 9, 10 and 27 had cost him a Q3 berth on a day when he barely had chance to talk to his temporary team-mate Charles Leclerc, who explained that Bearman had "so much to understand in order to be ready" with Ferrari's engineers.

The next day, Bearman became Britain's – and Ferrari's – youngest ever F1 racer. In the initial stages he held station in the pack. Then, during an early safety car period, he followed Leclerc into the pits. Afterwards, he passed Yuki Tsunoda, Zhou Guanyu and Nico Hulkenberg, and later leapfrogged compatriots Lando Norris and Lewis Hamilton – who both lost out by not pitting under the safety car – when they eventually headed for the pitlane.

Ferrari now informed Bearman of his final challenge: to stay seventh, with Norris and Hamilton well-briefed on who they were chasing. But the Ferrari debutant upped his pace, and Norris's 6.3s deficit once his McLaren was fitted with soft tyres was only eroded to 3.0s by the flag.

"The car was flying today so that is obviously a big bonus," Bearman said. "But I think we executed a clean race, no mistakes, and that is exactly what we were looking for. So, I'm happy with my performance. That was my goal, to do a great showing this weekend. I think I did a decent job, so that's all right. That's all I can do – keep pushing in F2 and cross my fingers [for an F1 promotion]." Ferrari team boss Fred Vasseur said that Bearman's overall performance had been a "mega weekend". But given Ferrari has Leclerc tied up for the foreseeable future and Hamilton arriving next year, it is at other squads where Bearman's brilliant showing might have more impact. First up there's Haas, where he will complete six FP1 outings (Imola, Barcelona, Silverstone, Hungaroring, Mexico City and





Ferrari debut

Yas Marina) in what were already expected to be auditions for a possible 2025 race drive given how Bearman impressed the team in two practice outings in 2023. New team principal Ayao Komatsu, who was effusive about Bearman's faultless FP1 appearance in Mexico last year, said it would be "very unfair" to consider him a shoo-in for the squad given the Jeddah performances of Nico Hulkenberg and Kevin Magnussen. But this was just race two of a long season.

Elsewhere, it's at Mercedes where additional interest in Bearman has cropped up. Autosport understands that the team considered Ferrari's situation as a win-win: Bearman naturally would not be able to replicate Sainz's points-scoring potential in the constructors' fight, but it would be able to weigh his performance in the context of what it might get from a rapid promotion for his Prema F2 team-mate Andrea Kimi Antonelli in replacing Hamilton for 2025. Sainz attended last Saturday's GP following his surgery. He is undergoing a week of rest before a decision is taken on his participation in next week's Australian GP. Bearman is again Ferrari's reserve for Melbourne, where he is due to pick up his F2 campaign, but Vasseur said he is "quite optimistic" that Sainz will be fit to return to the cockpit for the event.

Marko suspension threat as Red Bull saga rumbles on

FORMULA 1

The storm engulfing the Red Bull Formula 1 team hierarchy shows little sign of abating, with world champion Max Verstappen very heavily implying that he could quit the squad should advisor Helmut Marko be forced out.

Amid allegations that Marko has been involved in leaking material to the press regarding team principal Christian Horner being accused of inappropriate behaviour by a female employee, the 80-year-old implied that he could be suspended in time for next week's Australian Grand Prix. That claim was dismissed following an eight-week independent investigation, and the employee has since been suspended.

At last weekend's Saudi Arabian GP, Marko met with Red Bull CEO Oliver Mintzlaff and came away telling people that he would indeed be seeing out the remaining three years of his contract. Asked about the leaks, the Austrian said: "[It] is complete rubbish. I'm glad I can manage to use my mobile phone. I've never seen any of these chats."

The outcome of those talks will seemingly come as good news to Verstappen, who has a deal in place until the end of 2028. Ahead of cruising to victory in Jeddah, he said: "My loyalty [to Marko] is very big, and also I have always expressed this to everyone within the team, everyone high up, that he is an important part in my decision making for all the time in the future as well within the team. So, it is very important he stays within the team, including of course everyone else because it is a whole team effort."

Horner, who Verstappen's father



Jos reckons will cause Red Bull to "explode" if he remains in position, says Verstappen will not be forced to stay. "It's like anything in life: you can't force somebody to be somewhere just because of a piece of paper," said Horner. "If somebody didn't want to be at this team, then we're not going to force somebody, against their will, to be here. That applies whether it's a machine operator, or a designer, or somebody in one of the support functions that runs through the business. Being involved in a team like this involves commitment and passion. Max has that. We've seen that - he's been here since he was 18 years of age. I have no doubt of his commitment and passion going forward."

Addressing the relationship with his driver, Horner continued: "It's absolutely fine with Max. He's working well within the team. There's no tension, and you can see how relaxed he is around the garage with everybody in the team. That's translating into his performance on track as well. So, we don't see any issues with Max." MATT KEW & JONATHAN NOBLE



ALEX KALINAUCKAS



Andretti ramps up pressure with F1 base images

FORMULA 1

Andretti Global has shown off plans for its new US-based HQ, where its Formula 1 operation in partnership with General Motors marque Cadillac will be based. Such a major infrastructure project sends a strong message to FOM, which at the start of this year denied Andretti's application to create an 11th grand prix team. The new 90-acre site is due for completion in 2025 as the F1 programme continues at pace.

Significantly, one of the partners involved in its design is Ridge, a British company that has worked on several UK F1 facilities, including the new Aston Martin campus at Silverstone. The Andretti Global base in Fishers, to the north-east of Indianapolis, will house the team's IndyCar, Indy NXT and IMSA operations. But around 50% will be devoted to manufacturing and design for the F1 project, working in conjunction with a UK facility. The team has also



recently taken possession of premises at Silverstone, where the aerodynamics department, which has worked until now in a temporary office, will be housed.

The first phase of the Fishers project is the main 400,000-square-foot building, while an Andretti Experience building will later be open to the public and features a museum and restaurant. There is also room for further expansion. "Since ground breaking, we've taken time to really evaluate and dive deep into every aspect of the project," said CEO Michael Andretti. "Our goal remains to create a healthy workplace and culture for employees and a campus that can be a destination for the community, while focusing on enhanced performance and competition capabilities for our race teams." ADAM COOPER

Massa sues FIA, F1 and Ecclestone over 2008

FORMULA 1

Ex-Ferrari Formula 1 driver Felipe Massa has filed a lawsuit in London's High Court of Justice against the FIA, FOM and Bernie Ecclestone over the handling of the infamous 2008 Singapore Grand Prix crash scandal. The Brazilian's pursuit to get the race result thrown out, which would retroactively crown him champion at the expense of Lewis Hamilton, follows a 2023 interview in which Ecclestone claimed there was sufficient information available at the time for an investigation, although Ecclestone later said he did not remember giving the interview. According to a statement from Brazilian law firm Vieira Rezende Advogados, "Mr Massa is seeking declarations that the FIA



.

Mr Massa with no choice but to initiate legal proceedings."

The FIA is presently under heightened scrutiny now that a whistleblower has come forward alleging that president Mohammed Ben Sulayem attempted to prevent the Las Vegas GP street circuit from being homologated in time for last year's inaugural event. The same source is behind claims that Ben Sulayem also contacted officials at the 2023 Saudi Arabian GP in an attempt to overturn a penalty

breached its regulations by failing to promptly investigate Nelson Piquet Junior's crash at the 2008 Singapore Grand Prix and that had it acted properly, Mr Massa would have won the drivers' championship that year. Mr Massa also seeks damages for the significant financial loss he has suffered due to the FIA's failure, in which Mr Ecclestone and FOM were also complicit." Massa's legal team submitted questions to the FIA and FOM last year, but replies were delayed by the season summer break, which meant key personnel were unavailable. The statement continued: "Attempts to find an amicable resolution have been unsuccessful, leaving for Fernando Alonso.

"Recent events naturally demonstrate that issues of transparency and integrity in Formula 1 remain relevant, and it is clear that serious work is needed to restore its credibility and longterm future," the Vieira Rezende Advogados statement concluded. MATT KEW



FORMULA 1 Digital renders have shown the new Speed Park Track in Qiddiya, which is set to eventually replace the Jeddah Corniche street circuit as host of the Saudi Arabian Grand Prix. Penned by ex-Formula 1 driver Alex Wurz and famed track designer Hermann Tilke, the standout feature is the so-called 'Blade' (top right) – a 20-storey-high opening corner. In fact, the whole anti-clockwise lap is notable for its elevation – there's a 108-metre climb over the 21 corners. The venue aims to combine the best elements of permanent and street layouts, so includes multiple configurations and a blend of high-speed and slow sections.

Audi signals full steam ahead with 100% Sauber takeover plan

FORMULA 1

Audi has confirmed its plan to complete a full takeover of Sauber ahead of a 2026 Formula 1 entry under the new powertrain and chassis regulations.

Alongside its fledgling engine programme, the German manufacturer will install former chief development officer Oliver Hoffmann as the chair of all Sauber companies, while ex-McLaren team principal Andreas Seidl has been appointed as CEO of the Audi F1 entry.

After initially buying a 25% share in the Swiss team in early 2023, this total investment – which had previously only been expected to be signed off for 2026 – reaffirms Audi's commitment to the championship after a series of board-level changes, including the replacement of F1 advocate Markus Duesmann by the more sceptical CEO Gernot Dollner.

Hoffmann said: "Motorsport, particularly Formula 1, is my big passion. I am convinced that by bundling responsibilities and taking over 100% of Sauber Group, we will further accelerate our preparations for the launch in 2026. I am pleased we were able to secure the services of Andreas Seidl as Audi F1 Team CEO. He is exactly the right man for our ambitious plan. Thanks to his broad experience from leadership roles on the manufacturer and Formula 1 team side, he will make a significant contribution to Audi's Formula 1 project." MATT KEW



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WEC

A switch of the North American World Endurance Championship fixture to the Indianapolis road course from Austin for 2025 is not on the cards. A round on the circuit of which series entrant Roger Penske took control in 2019 isn't in the plan for the next two years, he has revealed.

Penske declared an interest in hosting a WEC round at the former US Grand Prix venue as long ago as 2022. But scheduling issues that prevented it joining the calendar this year will remain an obstacle in 2025.

"Right now I cannot say we are ready to do something in the next 24 months," said Penske. "We have nothing on the ground. At the moment it is a scheduling situation, when Indy is available and their schedule."

Sportscar racing returned to Indy last September for the first time under Penske's ownership of the venue with a sprint round of the IMSA SportsCar Championship (above), the so-called Battle of the Bricks fixture that will increase in duration to six hours this year. But a date in mid or late September doesn't work for WEC because of the scheduling of the long-standing Fuji fixture, which this year takes place on 15 September, one week before Indy.

Austin stepped into the breach on what is believed to be a one-year contract after the end of the WEC's five-year deal to race on the bill of the Sebring 12 Hours IMSA round. Penske has reiterated his desire to host the WEC on the 2.44-mile Indy road course. "We'd love to have them at some point," he said. "There is a lot of interest in sportscar racing right now."

The Penske Porsche Motorsport squad has, meanwhile, ruled out Indy 500 winner Josef Newgarden taking one of the vacant seats in the extra 963 LMDh it will field at the Le Mans 24 Hours alongside its two regular WEC entries. The candidates for the vacancies alongside Mathieu Jaminet, the only confirmed driver so far, are the team's IMSA regulars, Nick Tandy, Felipe Nasr and Dane Cameron. Whoever doesn't make the cut will be on hand at Le Mans as a reserve. GARY WATKINS

Canaries get WRC slot

WRC

The Canary Islands will host a round of the World Rally Championship in 2025 with to the WRC for this year. The news ensures the return of Spain to the WRC after Rally Catalunya dropped off the calendar following the 2022 edition. "We are enthusiastic about having Spain back on the WRC calendar and are encouraged to see our clearly defined strategy to have an opportunity for ERC events to have a pathway to WRC coming to fruition as Rally Islas Canarias follows on from Latvia and Poland," said WRC Promoter managing



a new two-year deal. First run in 1977, Rally Islas Canarias has been a mainstay of the European Rally Championship since 2016. The asphalt event's switch to the WRC calendar is subject to World Motor Sport Council approval, and emulates the WRC's move in elevating Rally Latvia and Rally Poland from the ERC

director Jona Siebel. The WRC has been inundated with proposals to join the calendar, which is anticipated to be expanding to 14 events next year. Saudi Arabia, Ireland, Paraguay and Argentina are understood to be in the running for a place on the 2025 schedule, with a decision expected in the coming months. TOM HOWARD



BTCC It's time to take a glance at the revised livery for the car that will have rival British Touring Car Championship squads quivering with fear. Alliance Racing has taken the wraps of its Ford Focus ST, which will feature an unchanged driver line-up of four-time champion Ash Sutton, Dan Cammish, Dan Rowbottom and Sam Osborne. An added splash of white ties in with title backer NAPA's NASCAR theme, and takes it slightly away from the look that single-seater fans found highly reminiscent of mid-1980s F2/F3000 stalwart Tomas Kaiser's Hello Sweden colours.

Gow: hybrid stays on table

BTCC

British Touring Car Championship boss Alan Gow has said that the World Rally Championship's ditching of hybrid for 2025 will have no impact on whether his series continues with its take on the theme.

The BTCC introduced a hybrid power boost system for 2022, and this has been much criticised as a major factor in rising costs. Under the existing NGTC ruleset, all control parts supplies are five-year deals, so the current hybrid contract with Cosworth runs until the end of 2026. And, in an exclusive interview with Autosport this week, Gow says that hybrid remains on the table for the next era of car rules.

"Whatever World Rally do is absolutely immaterial to us," said Gow. "Theirs was a really expensive hybrid unit, and we use low-voltage batteries, they use all the high-voltage stuff, and they have all these



other safety aspects you've got to consider that drive up all their costs and complexity to compete, which we don't have. Theirs is a totally different reason to ours, so it doesn't play any part in what we're doing. And I can't remember the last time we've taken any lessons off World Rally!

"It's all up for grabs going forward as to what we put in our cars and how we build them, what they look like and what they're designed like and what they contain." MARCUS SIMMONS

P42 BTCC'S FUTURE

NEW MIDDLE EAST Contest for Mono Supercar

MONO CUP

A new Middle East-based series for the Mono supercar is to take place over the 2024-25 winter, with organisers claiming that it will be 'the world's fastest one-make championship' for production-based machinery.

The Mono Cup will be run on an arrive-and-drive basis on behalf of the Briggs Automotive Company, constructor of the Mono. Brothers Neill and Ian Briggs, co-founders of the Liverpool-based concern, are pledging an 'extensively re-engineered' version of the car, which in road trim weighs just 580kg and produces 305bhp from a 2.5-litre engine, driven through a Hewland gearbox.

For the brothers' first foray into motorsport, they have joined forces with the Saudi Arabian Motor Federation for a series that will visit its 'home' circuit of Jeddah, as well as venues in Bahrain, Qatar and the United Arab Emirates. It will take place over a six-month span, and is open to drivers with an International C race licence.

"The Mono Cup embodies BAC's unrelenting dedication to high-performance driving; we are supremely proud that we can now take our values, passion and expertise honed within the automotive arena and apply that to motorsports," said Neill Briggs.





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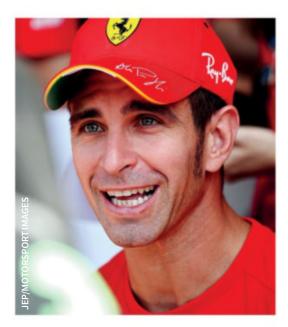
Le Mans winner Pier Guidi leads Ferrari GT attack...

GT WORLD CHALLENGE EUROPE

Le Mans 24 Hours winner Alessandro Pier Guidi will return to the GT World Challenge Europe full time this season after a two-year absence. The Italian will race a factory AF Corse Ferrari 296 GT3 in a bid to follow up on his 2020 and 2021 titles in the Endurance Cup leg of the series.

Pier Guidi (right), who contested one GTWCE enduro last year, will race in the five long-distance races alongside fellow works drivers Davide Rigon and Alessio Rovera in the Pro class. Rigon and Rovera were part of Ferrari's 2023 GTWCE campaign, like this year mounted under the AF Corse-Francorchamps Motors banner, but raced different cars.

The drive alongside his World Endurance Championship programme with the 499P Le Mans Hypercar also gives Pier Guidi the chance to add another Spa 24 Hours victory to his CV. His last-gasp win in the centrepiece round of Endurance Cup anchored his title success in 2021 together with Nicolas Nielsen and Come Ledogar at the wheel of an Iron Lynx-entered 488 GT3 Evo run by AF. A second factory car will be entered for the GTWCE enduros and shared by new-for-2024 Ferrari signing Thomas Neubauer, former Bentley works driver Vincent Abril and David Vidales. The Spaniard has moving into sportscars after racing in Super Formula Lights last year. The confirmation of the AF line-ups for the 2024 GTWCE was timed to coincide with last week's official pre-season series test at Paul Ricard. At the same time, Ferrari took



the wraps off the GT programmes for its roster of factory drivers.

Arthur Leclerc, brother of Ferrari Formula 1 star Charles, will move into sportscars after a single season of Formula 2 in 2023. The 23-year-old, who is no longer part of the Ferrari Driver Academy but retains an F1 development role, will race in the Italian GT Championship for the Scuderia Baldini squad.

Rigon and Daniel Serra have been confirmed as the core of Risi Competizione's line-up for the GT Daytona Pro class of the Endurance Cup segment of the IMSA SportsCar Championship. Rovera, Antonio Fuoco and Miguel Molina have had their IMSA programmes confirmed with the teams for which they drove at Daytona, respectively Triarsi Competizione, Cetilar Racing and AF. Lilou Wadoux, who joined Ferrari for 2023, will race in the Super GT Series in the GT300 class, sharing a 296 with Kei Cozzolino. **GARY WATKINS**

...as Aitken stays in DTM

DTM

Jack Aitken will continue in the DTM for a second consecutive season as part of an unchanged line-up at Emil Frey Racing. The 28-year-old Briton will again partner Max Verstappen protege Thierry Vermeulen in the Swiss squad's Ferrari 296 GT3 line-up.

Aitken told Autosport in January that he was still in talks about continuing in the DTM. The 2024 calendar features no clashes with his schedule in the IMSA SportsCar Championship, in which he has stepped up to a full-time seat this season with the Action Express Racing Cadillac team alongside Pipo Derani.

"A second season of DTM is exciting," said Aitken (below) at the announcement. "I loved last year's series for how competitive and aggressive the racing can be. Our expectations are to fight more consistently at the front and to take more wins and pole positions. I think we have a bit more of an understanding with the Ferrari now than we did at the start of last year."

Aitken, whose relationship with EFR harks back to 2021 when the team ran Lamborghinis, scored a maiden DTM victory at the Lausitzring last season.

Team principal Lorenz Frey-Hilti added: "We were able to gain a lot of experience with the Ferrari throughout last year and are still very convinced and impressed by what a great racing car Ferrari has developed.

"This year we are better prepared for the season, because last year the switch to Ferrari took place very late before the first race. The expectations from outside are very high, but we also have high expectations of ourselves."

EFR received plenty of interest to add a third Ferrari to its DTM team. But a driver's sponsor pulled out of its commitments, so it has stuck to two. **RACHIT THUKRAL**





Gold standard Quinn in Europe

EUROPEAN LE MANS SERIES

Briton Alex Quinn has landed a full-time European Le Mans Series LMP2 drive. The 23-year-old's deal to contest the six-round series with Algarve Pro Racing comes three months after he lost a seat in the IMSA SportsCar Championship because he had been upgraded to gold status.

The Formula Renault Eurocup race winner in 2020 had been due to continue the relationship with Ben Keating that yielded the Michelin-sponsored IMSA Endurance Cup class title in Quinn's first year of prototype racing last year. But the drive with United Autosports was scuppered when he was belatedly moved from silver to gold under the FIA's driver categorisation system. Quinn's chance as a gold comes in the ELMS P2 pro-am ranks. He will share the Algarve Pro ORECA-Gibson 07 with class stalwart Richard Bradley – LMP2 winner at the Le Mans 24 Hours with KCMG in 2015 – and Kriton Lendoudis, who is moving up from the historic ranks where he has raced, among other things, a Mercedes C11 Group C car and a Peugeot 908 HDi LMP1.

"My IMSA championship means I am carrying some momentum into my first ELMS season," said Quinn. "I feel endurance racing is my future and I'm really looking forward to another season in LMP2, this time on the opposite side of the Atlantic. I raced against Algarve Pro in IMSA, so I know how quick the team is and I count myself lucky to be joining the fold." GARY WATKINS

Girolami joins Hyundai battalions



TCR WORLD TOUR Nestor Girolami, runner-up in the swansong FIA World Touring Car Cup of 2022, has ended a five-year association with Honda to join Hyundai for this year's TCR World Tour. The 34-year-old Argentinian (left) contested the inaugural World Tour last year with a revolving cast of local Honda teams, but now links up with reigning World Tour champion Norbert Michelisz and 2022 WTCR king Mikel Azcona in an expanded all-star line-up run by BRC Squadra Corse. Hyundai circuit racing boss Julien Moncet said: "We know he will fit perfectly into the team alongside Norbi and Mikel." Meanwhile, a new Honda team run by multiple world tin-top race winner Pepe Oriola will contest the World Tour. GOAT Racing will run highly rated 18-year-old Italian Marco Butti, who contested two rounds last year with BRC Hyundai, in a Civic Type R.

BELL FROM ALPINE TO ASTON

Another senior figure from the Alpine Formula 1 team has headed for pastures new. Veteran technical man Bob Bell has joined Aston Martin as executive director-technical. The 65-year-old has worked in F1 for over four decades since he started as an aerodynamicist at McLaren, and initially landed at Enstone-based Alpine in 1997 in its Benetton days.

KOVALAINEN'S SURGERY

F1 race winner Heikki Kovalainen has put his campaign in the Japanese Rally Championship on hold until he has recovered from open heart surgery. The 42-year-old was discovered to have an ascending aortic aneurysm, although had not suffered any symptoms. The surgery will take place in his native Finland.

BARRICHELLO JR IN 'F3'

The Barrichello name is returning to the old philosophy of Formula 3 for the first time since 1991 British champion Rubens competed in the category. Fernando Barrichello, the 18-year-old younger son of the ex-Ferrari star, will compete in Euroformula Open with Motopark. The German team has also recruited ex-F2 driver Brad Benavides, and ran FIA F3 racer Martinius Stenshorne in this week's Barcelona test.

MUSEUM HELPING THE GIRLS

Silverstone Museum has celebrated International Women's Day by announcing a month of activities in October for its #GirlsWill campaign. A series of panellist events will feature female sports stars, while a range of education and career workshops will take place. The initiative is supported by More than Equal and Girls on Track.

DELEON'S LEON

Team Hard has its first driver on board for this season's British Touring Car Championship following the squad's surprise salvation for 2024. Just as Autosport went to press, Daryl DeLeon (below) was named in one of



the two Cupra Leons. The 18-year-old Anglo-Filipino contested the second half of the 2023 season with the team.





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Formula 1's 'pivotal moment'

When it's off-track issues that have been making the headlines at the start of a new season, what does this say about the situation F1 is in?

ALEX KALINAUCKAS

⁶⁶ I t's a really pivotal moment for the sport, in terms of what we project to the world. How it's handled. And it's not been handled very well to this point." Lewis Hamilton there, not for the first time on an important and sensitive subject, getting it spot on. The seven-time world champion was speaking last week ahead of the Saudi Arabian Grand Prix. Specifically, he'd been asked about the off-track controversies currently engulfing the championship. The Christian Horner/Red Bull situation has been running longest, but the question posed to Hamilton also concerned the investigations currently facing FIA president Mohammed Ben Sulayem. In the championship's hive brain, let alone the consciousness of the millions of fans watching on, neither is going to go away fast. And nor should they.

The latter situation, allegedly, is an amazing example of an organisation shooting itself in the foot. To have the FIA president under investigation concerning the ultimately trivial matter of a pitstop penalty (plus whatever went on before the Las Vegas race return) just gives oxygen to a very real fear of race fixing, *a la* what certain sections of the F1 fanbase feel about the Abu Dhabi 2021 officiating saga.

In the former, the Horner saga, the story has taken yet more twists. But the message from the man at its centre was: let's talk about something else. "As far as I'm concerned, as far as Red Bull

"Arguably, F1 is at this point because it has collectively failed to address previous issues"

is concerned, we move on and we look to the future," Horner said in the Jeddah team principals' press conference. "The intrusion on my family is now enough."

Bull squad would like to release more specifics, perhaps even the full report that was compiled by an unnamed independent KC before Horner was cleared by Red Bull GmbH, it can't do so without approval from all parties involved.

This is a very complicated situation, with an important privacy element too. But the development last Thursday, on the eve of International Women's Day, that the woman who registered the original grievance has since been suspended elevates things into a different realm. Was this a reprisal? Is this a suggestion of a different form of wrongdoing? How is everything going to impact her well-being and privacy at a time when another party is pontificating about such concerns? These questions and plenty more were skipping around the F1 paddock in Jeddah. And in phones, offices and factories of the wider championship. Because the optics are awful. And what's compounded things is the lack of any action or even proper words of support from the top levels of the F1 organisation itself and the F1A.

So, as this pervading sense of absent oversight combines with further rumours abounding, it's all feeding down through F1's many areas, to the women working within those spheres. Autosport understands that there is now a strong sense in the paddock that if something happens to another woman and they speak up, they may be treated harshly. Canvassing opinions from sources at various teams last weekend, agreement on such a situation shone through. That must be reversed. And fast.

Legal proceedings have to be respected, of course. But when it is F1TV presenter Laura Winter, who spoke eloquently on how the news of recent weeks has made it hard to be a woman working in F1, and the championship's only black driver being the strongest voices on such difficult matters, that's a problem too.

Arguably, F1 is at this point because it has collectively failed to address previous sexism issues, that is has lionised those 'Piranha Club' and 'sex, breakfast of champions' attitudes, and signed up to hold races in one autocracy after another. If the championship doesn't get things right this time around, and there really is still time, what might be yet to come could be even worse.

That was four days on from Horner walking Geri Horner down the Bahrain paddock in such a display that the *Daily Mail* was rapidly on the phone to a body language expert. The pair were back in front of the cameras after Max Verstappen had snapped up a second victory in a week in the Middle East. The overarching desire of progressing from this murky point

can, of course, happen. But it's vital that doesn't take place until the full facts of the matter have been established and addressed. Only then can progress come as the following step. That hasn't happened yet because most of the case's details remain private. And, while sources have suggested that the Red After all, in recent years F1 has committed itself to addressing its long-standing diversity issues. That is to be commended, alongside the understanding that by appealing more to minorities there is additional money to be made. But if a real test of such commitments is now horrifying its women, and by extension potentially putting off any more young women who might one day want to come and work in F1 in whatever capacity only to find the dream really isn't want it seems, the progress it vaunts is depressingly in peril.



Marquez's low-key Ducati debut

Those expecting a spectacular start to the MotoGP superstar's season shouldn't be disappointed – it's a case of all in good time as he continues to find his feet

LEWIS DUNCAN

arc Marquez's first MotoGP outing on a Ducati went as well as it could have. That might not seem like much when taken at face value. Fifth in the sprint and fourth in the grand prix last weekend at Losail are not the results many were hoping for when

the six-time MotoGP champion jumped on the all-conquering Ducati. But let's put that into context. For 11 years, Marquez rode the Honda RC213V. His riding style has developed around it. On the Ducati, he's had just nine days, so fourth is not too shabby.

"We analysed a lot of things to try to manage the start, it was better today," he said after the Qatar Grand Prix. "Then I was able to manage the tyres. The thing was yesterday I struggled and today most of the riders were managing the rear, but I was managing the front more than the rear because every year with the other bike I was struggling a bit with the front tyre in this race track.

"Anyway, I need to improve my riding style in some points because still I'm not riding well. But today the race was constant, solid. I did my attack in the last eight laps, and when I did the attack, it was when I started to push more with the front and I finished the front tyre, and the last two laps I gave up because I saw the chance to crash and the chance to take two more points, three more points... I preferred to finish fourth and wait for two weeks in Portimao."

All-out glory was something Marquez never considered for his Ducati debut. That much was clear back in October when news of his move to Gresini Racing was made official. This exercise has always been about discovering if he can still be the rider he used to be after four years in the wilderness at Honda with numerous injury woes and a tricky bike. The 'old' Marquez was more prominent last weekend. The smile was back, the swagger on the bike was back and, as a result, the speed was there, even at a track he has found to be one of his weaker ones.

If we dig into the details, the numbers offer a glimpse of where Marquez is in his Ducati development. In qualifying, he was sixth latter stages, getting to within 0.4s of Martin before the Pramac rider shot away. As Marquez noted, that was largely down to him wrecking his front tyre.

A direct comparison of the 2024 and 2023 Qatar GPs is difficult because they took place at different times of year, with 2024 immediately following a pre-season test. But when you compare his Honda successor Luca Marini's 2024 and 2023 weekends, you see just how far off from winning Marquez truly was on the

"The smile was back, the swagger on the bike was back and, as a result, the speed was there"

RC213V. Marini set 1m51.762s to qualify on pole on the VR46-run 2022-spec Ducati last year. That was 1.19s quicker than his best qualifying lap last weekend on the Honda. His best race lap from the 2023 GP, in which he finished third, was also 0.820s quicker than his fastest from last weekend, when he was 20th. There is a caveat that Marini is also still in a learning phase on the Honda, but it does illustrate how difficult the RC213V is.

Reflecting on his Ducati debut, Marquez noted: "The expectation is super-high but I keep going with my style. I want to be patient this year, I want to enjoy again, I want to fight for the top five positions and it's what I did this weekend. Still every day I improve my riding style, every day I change a few things that help a little bit. Still, I believe that I don't arrive on the limit of the bike."

At points he admitted he was still riding the bike like he would a Honda, including how he extracted one-lap pace. But slowly this is being smoothed out.

Again, Marquez aimed to keep expectations in check after Sunday's race. He was keen to point out that having the test in Qatar prior to the GP allowed him to get up to speed. In Portugal he won't have that luxury. "Portimao will be an important weekend because normally in the tests, in Malaysia and here [in Qatar], I take time to arrive in the good lap times," he said. "So, in Portimao we will start from zero. At the moment, it's Bagnaia and Martin who are faster than me and I must learn from them." While the Portuguese GP may offer us the definitive answer as to where Marquez truly is in the competitive order, Qatar gave a glimpse to the reality that he will be a genuine threat in 2024 if he can continue this upward trajectory. **#**

with 1m50.961s. With the Losail track in great condition since a resurfacing last year, lap times were at record pace. Marquez was just 0.172 seconds off the pole time set by Jorge Martin on the latest-spec factory Ducati in Pramac colours. Marquez was fastest in the third sector of the track, where front-end confidence is needed through some high-speed corners. Over the four sectors, his ideal lap time was 1m50.794s, which was third only to Martin and Francesco Bagnaia. That's a significant detail, given both are the reference riders in the Ducati stable. In the sprint, Marquez set the best lap at 1m52.040s and was just 1.143s off a podium. As for the GP, he was only 3.429s from the win. Fourth was exactly where Marquez should have been. That didn't prevent him from giving the podium a good go in the



OPINION PIT + PADDOCK



Stop/go penalties for more serious, or multiple, offences would simultaneously punish the sinner and benefit the sinned against (where they remain running) MARTIN WELLS

When is a penalty not a penalty?

Leaving aside whether you believe Kevin Magnussen's brace of penalties in Jeddah to be either unjustified or too severe, once the stewards had imposed them, they exposed the biggest flaw in F1's current system of punishment: it assumes that any misdemeanour is a victimless crime.

By only applying his 20-second punishment at the end of the race, the officials left the Haas driver free to continue influencing the remaining laps and compounded the hurt already felt by Alex Albon and Yuki Tsunoda by allowing him to employ his – perfectly legal – delaying tactics to deny them the chance of fighting for the final point.

It was a bit like a football referee saying: 'I've given you two yellow cards, but I'm not going to send you off until the final whistle, so you're free to score or prevent the opposition from doing so for the rest of the game.'

If we accept that swapping places back is often fraught with difficulty in a race situation, then surely the only fair way to address such situations in real-time is to make a drive-through penalty the minimum punishment in the stewards' arsenal. With stop/go penalties for more serious, or multiple, offences, they would simultaneously punish the sinner and benefit the sinned against (where they remain running).

Some may rail against the severity of such penalties for relatively minor offences, but they might also open up the debate over whether such mistakes or errors of judgement should be penalised in the first place.

Martin Wells Buckingham

Bearman proves he's got what it takes

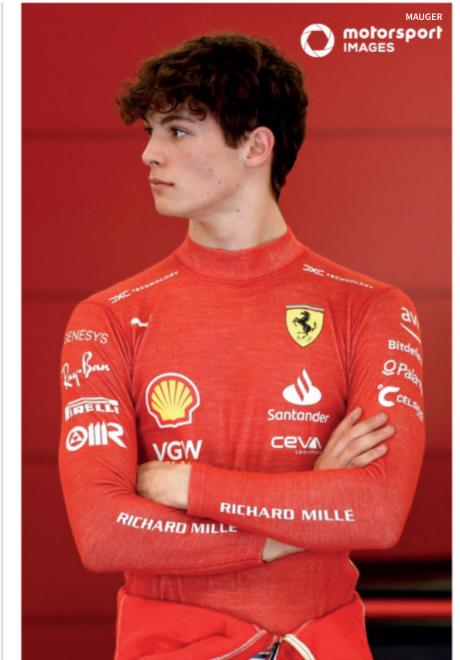
Absolute congrats to Ollie Bearman (right), superb result. And of the top 10 in Jeddah, 40% of drivers were racing under the Union Flag, with 70% of the cars having been built in the UK: we're quite good at this F1 stuff, aren't we. **Graeme Innes-Johnstone**

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RACE CENTRE

Verstappen makes it two wins in a row to start the season – a first for the Dutchman



FORMULA 1

FERRARI SHOWS PROMISE BUT RED BULL DOMINATES

It looked like business as very usual in Saudi Arabia, although Ferrari had several reasons to be cheerful as it leads the chasers

ALEX KALINAUCKAS



RACE CENTRE SAUDI ARABIAN GP

fIlook back at the last six, seven months, we are the team that have improved the most," said Charles Leclerc after driving his Ferrari to third place behind the Red Bulls of dominant winner Max Verstappen and runner-up Sergio Perez in last Saturday's Saudi Arabian Grand Prix. "We are slowly closing the gap. The gap is still quite big. But if we keep working like that, I'm sure it's a matter of time before we put Red Bull under a bit more pressure."

After a second dull race in a week to kick off the new campaign, F1 really needs Ferrari to reach that point fast. As it was, Leclerc ended up 18.6 seconds behind Verstappen, who notched up his 56th F1 win, his 100th podium appearance, and the first time he's ever started off a season with two successive victories. Not that those comparatively 'bad' starts in 2021, 2022 or 2023 did the Dutchman much harm...

But, when you take a closer look at Leclerc's Jeddah race and Ferrari's weekend overall, not to mention Ollie Bearman's excellent debut performance in place of Carlos Sainz, it reveals something intriguing.

The positives didn't arrive at the start of the contest on the eastern shore of the Red Sea. Polesitter Verstappen and Leclerc launched pretty much in underwhelming unison from the front row. It was a getaway Verstappen called "not very good, but good enough".

But from third, Perez shot forwards fast in the other Red Bull, just as Verstappen swung across Leclerc and snipped off any chance of an attack the Ferrari driver wasn't able to make anyway. When they slammed on the anchors for the Turns 1-2 left-right complex, Perez was actually up into second place. He moved over on Leclerc but "gave him the space into Turn 2", which allowed a close fight to play out as the opening stagger unwound. Leclerc kept alongside Perez through the Turn 3 kink, then down the short straight to the near-90-degree Turn 4 left. Here Leclerc was in position to get back ahead and duly did.



...but the Ferrari didn't yield and regained the position albeit temporarily

> the fearsome fast left-hander that concludes the second of the three main fast blasts on the Jeddah circuit, and which feeds immediately into the shallow Turn 23 right and its chunky kerb. Unlike the Williams driver in FP3, and himself from FP1, Stroll never made it that far - his wall-strike snapped his Aston Martin's steering and he was sent straight on into the



Verstappen crossed the line with a lead of 1.2s at the end of the first tour of 50, critically depriving Leclerc of DRS - this was enabled on the second lap, due to the updated rules for 2024. On that second tour Leclerc shaved Verstappen's advantage, but the third time around any faint hope of a contest was utterly dashed. Not only did the leader boost his gap by a statement gain of 0.5s, but Perez was now all over Leclerc's tail, having been within DRS detection range from the off. At the start of lap four, Perez used DRS to force his way to the inside at Turn 1 and, as he seized second, Red Bull's full grip on the event was established. "There wasn't much I could do," as Leclerc later put it. Once he had his team-mate following, Verstappen's lead sat at 2.3s. He increased this to 2.6s by the start of lap seven, which is when arguably the most interesting moment of this race occurred. Lance Stroll emulated Logan Sargeant in whacking the wall inside Turn 22 -

barriers deep in the Turn 23 run-off. The safety car was called into action as the Canadian climbed clear, after there had been some chippiness to direct at his engineer Ben Michell for asking, "Can you bring it back, Lance?"

When the race neutralisation happened, the leaders were at the banked Turn 13 hairpin, which meant they all piled into the pits the next time by. That meant "the last stint was a bit longer than we would have liked, but with the safety car, you had to go for it", said Verstappen. He was referring to the 11s gain to be had in stopping under caution speeds, combined with this track having very little in the way of tyre degradation for the harder tyre compounds. This was why the leaders had started on the mediums and would have gone onto the hards at a sole pitstop even without a stoppage. Even with 43 tours left to run, they knew they could make it to the end from here.



Verstappen had pulled enough of a gap to allow Red Bull to double-stack, with the world champion turned around in 2.4s. Perez led Leclerc in, with each having something of a disaster at this stage that ultimately came to naught. Leclerc's was that he ended up with the slowest stop of the trio, despite having a clear run to the Ferrari pitbox. He had to be held for 5.3s as Oscar Piastri, Perez and Fernando Alonso flashed down the pitlane towards their own services for the white-walled rubber.

Perez, meanwhile, headed out of his pitbox with its traffic light warning system still showing red and its controller rather in the way as Alonso bore down. The Spaniard duly hit the Aston's brakes and Perez would soon be slapped with a five-second time penalty. "It was actually my mistake," Perez later said, "because I was told by the team to hold it back. I looked on the right and there was nobody there. But in hindsight, I think the penalty was correct. Sometimes the team can be a little bit slower than you in the car. But this time it was the other way around." Perez still led Leclerc out of the pitlane, but they weren't behind Verstappen in the safety car snake. Unwilling to try double-stacks that would have meant sacrificing track position, and with a chance of another safety car at this brutal track, McLaren and Mercedes had left Lando Norris and Lewis Hamilton respectively out on their medium tyres. Norris therefore cycled through to head Verstappen, with Hamilton behind his bitter 2021 title rival and leading the neutralised Perez/Leclerc scrap.

"I DIDN'T WANT TO TAKE TOO Many Risks because it's easy to make a mistake around here"

lap 10, Norris leaving it until he reached the pitlane entry point on the long main straight before powering back up to speed. He was able to stay out of Verstappen's clutches, while in the pack behind Hamilton and Perez had a little dice on the approach to Turn 1.

This was the order when the race got going again at the start of

Leclerc, meanwhile, had to defend from the surging Piastri in such a way that he effectively sent a repass up the inside line of the left-hander to stay ahead of the McLaren.

Norris then led rather comfortably for the first three tours back at racing speed because, for the Red Bulls, "it took a few laps to warm up hard tyres", according to Verstappen. He added: "I also didn't want to take too many risks because when you don't have a lot of grip, it's easy to make a mistake around here. At one point, once the tyres had a bit of grip, I could catch [Norris] and pass him. Pretty straightforward." That very familiar scene of the Red Bull shooting past with a huge DRS-boosted top-speed advantage over a defenceless McLaren occurred at the start of lap 13. Verstappen was ahead at the offset startline on the approach to Turn 1, while behind, Perez had to do Hamilton on the brakes nearing the apex of the corner. »



Verstappen then shot clear of Norris, with his hard tyres finally functioning as he desired, while Perez took another five laps to catch and pass the McLaren. He got ahead at the beginning of lap 18 with an even better DRS run on Norris than his team-mate's, but by the end of that tour Verstappen's lead had reached 5.4s. From there, the contest at the front was over. Verstappen edged away by an average of 0.15s up until lap 41, at which point his lead began to rather dip and bubble as he lapped battling traffic at the rear of the pack.

This, Verstappen said, was the only element of the race that came even a little close to perilous. "With the backmarkers at the end, the tyres were getting a bit cold and it was a bit slippery getting close to them," he explained. "And then also you don't want to take too much risk. We had a good gap behind. So that was probably a little bit of a difficult moment – to pace yourself there."

Perez reckoned the race had been "looking good" before the safety car. "I was within three seconds from Max and I think the degradation on that medium stint was looking quite good," he said. "But, unfortunately, then we were compromised with such an early safety car, and that meant that basically everyone just pitted. [The penalty then] pretty much compromised our race."

But that time addition didn't deprive Perez of his second runner-up finish in two races in 2024. Leclerc ended up 10s adrift at the flag, which became 5s once the penalty was applied.



Leclerc had reached that point after spending the first five laps following the restart chasing first Perez and then Hamilton. Leclerc eventually overhauled his future Ferrari team-mate with a battling, outside-line pass into Turn 1 on lap 15, where Hamilton made him work on the inside for the closely following Turn 2. Leclerc then had to close a 3.3s gap to Norris, before passing the McLaren with another simple DRS run down the main straight at the end of lap 26. After this, Leclerc's gap to Verstappen sat at 15.6s.

By the time Verstappen's pace went out from the low 1m32s and even high 1m31 back to the 1m33s as he lapped the tail of the field, the gap had increased by 5.2s. Yet Leclerc was adamant that his pace compared to the leader's "stayed more or less stable towards the end, but then it was too late for us to put them under any pressure".

This rather stacks up given Leclerc edged the final 10 laps by an average of 0.223s – if we take Verstappen getting stuck into the traffic on lap 41 as an obvious cutting-off point. But here it's important to remember that Leclerc had to clear just two backmarkers to the six of Verstappen.

By the very end of the race, with each in clean air (bar Leclerc lapping Daniel Ricciardo's RB on the final tour), he was able to top Verstappen's personal best lap time by 0.141s. This gave the Monegasque the fastest-lap bonus point thanks to his 1m31.632s effort, which ended Verstappen's 100% points record for 2024.

Two things undid Ferrari's race, aside from the obvious element of the safety car pitstops putting other cars between Leclerc and the Red Bulls. The first came down to differing tyre performance on the two cars. "We were struggling all the time at the beginning of the stints – whether it was at the beginning of the medium or beginning of the hards, we struggled to switch the tyres on," explained Leclerc, echoing his qualifying struggles the previous day on new softs. "Then, towards the end of the stint we were pretty good. With the medium, we didn't really see that. With the hard, we saw that towards the end, but it was too late to actually recover what we had lost at the beginning with the battles we had." A rare turn-up indeed – a new ground-effect Ferrari that had trouble getting its tyres into the best working temperature range, to the extent that it suffered relatively little degradation - not that this is ever a major problem on the Jeddah circuit. The other issue was that Ferrari had "a little bit less top speed than the others", Leclerc added. He also claimed that this "was wanted" and centred on the team running a bigger rear wing and downforce/



"WE WERE STRUGGLING ALL THE TIME AT THE BEGINNING OF THE STINTS TO SWITCH THE TYRES ON"

drag package than its rivals at Red Bull, McLaren and Mercedes. "We'll review that to see if it was the right decision or not."

When it came to passing Norris, it had taken Leclerc eight more laps than Perez spent behind the McLaren, but he didn't believe that the tyre warm-up issue "was the thing that was making me struggle to pass him". "Once they went into temperature, which was the case when I was close to Lando, then it was more the top speed that was making me struggle to get past," Leclerc explained. But Ferrari, in its choice to eschew its 2023 Monza/Las Vegas skinny rear-wing special in order to minimise rear-end sliding on this tricky, corner-filled layout, wanted the added downforce. Its recent tyre degradation woes will have played a part in this decision, but actually the SF-24 treated its rubber very well overall, once it was in the right window. "Today I don't think tyre degradation was a thing," Leclerc concluded. "It was more about tyre warm-up and we struggled a bit more to bring them to the right temperature in order to push. Which made it also a bit more difficult because I had to overtake cars during my warm-up. And that was a bit trickier for us than for them. And that's where [Red Bull] pulled the gap." His team boss agreed with that assessment. "With a good start »

SAUDI ARABIAN GP RACE CENTRE



There were two main storylines to Jeddah qualifying: the fight for first; and Ollie Bearman's efforts to qualify Carlos Sainz's Ferrari, which had pole potential, as high up as possible, only hours after he'd been informed that he'd be driving it.

In the pole fight, yet again it came down to Charles Leclerc in the other Ferrari versus Red Bull's Max Verstappen. There was much intrigue and expectation at Ferrari, given GPS data indicated that the team hadn't run anywhere near its top engine modes in Friday practice, particularly FP2, the sole relevant night preparation session. But, right from the off in qualifying, Ferrari already knew it was in trouble.

"The feeling wasn't quite right from Q1," explained Leclerc, who suddenly found his car was jittering with oversteer when running new soft tyres in the opening segment.

He progressed smoothly enough, trailing Verstappen in Q2 by just 0.079 seconds. Then, in the final segment, he and Ferrari tried something else: an extra preparation lap, with the knowledge that this circuit's smoother surface means extra tyre heat from one more slower tour can sometimes provide more grip than the fresh bite of new softs.

"It didn't help at all," said Leclerc, who initially faced a 0.8s gap to Verstappen after the first Q3 runs. Here he sat fourth – behind eventual third and fourth-place finishers Sergio Perez and Fernando Alonso.

Verstappen had initially produced a 1m27.472s, which he said "felt almost a bit like the failed 2021 lap" that

was so rapid and on the edge here before the Dutchman crashed at the final corner. He couldn't replicate that form on his second Q3 effort, ending up 0.2s down after "a little moment between Turns 9 and 10" that

"Leclerc suddenly found his car was jittering with oversteer running new soft tyres"

"lost momentum", his engine audibly not singing there as it had on his first run.

Leclerc, without a second prep lap, had "put everything together" on his final Q3 run behind. But it came in 0.3s short,

albeit enough for second place. He felt "there wasn't much more", and "for sure we left a little bit of performance on the table". The main difference to Verstappen came down to the Red Bull's straightline prowess, which Leclerc's braking gains couldn't overcome, and small losses at Turns 16 and 22.

Bearman, having survived a traffic issue with the Sauber of Valtteri Bottas in Q1, missed Q3 by 0.04s behind Lewis Hamilton (who went on to qualify eighth behind George Russell). His 1m28.642s wasn't enough after trying to carry too much speed in Turn 9, then having to back off in Turn 10, with Bearman's subsequent gains through the rest of the lap to be ahead of Hamilton by the final corner undone when he made a slight error getting back up to speed on the run to home.

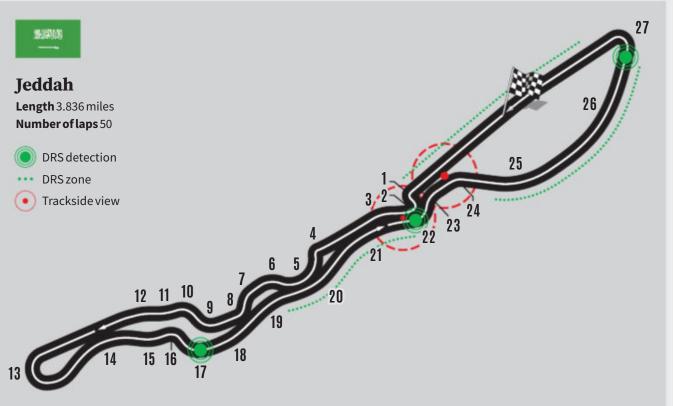
RACE CENTRE SAUDI ARABIAN GP



"Precision and the risk you are willing to take," says Ferrari's Charles Leclerc on what it takes to nail a lap around the Jeddah Corniche Circuit. But while he acknowledges "I don't think it's much different than other tracks", the proximity of the walls that line this super-fast layout means the drivers inevitably aren't quite fully on it from lap one in practice.

"You have to go through that step-by-step approach," Leclerc adds about how he and his peers should be gradually building up to gaining proximity to the walls during FP1 at the Saudi Arabian Grand Prix.

Delightfully, Leclerc doesn't appear to be following his own advice from Autosport's vantage point for the start of the one-hour session on Friday. We're perched at the pit exit, outside the Turns 1/2 opening complex - the soon-to-be setting sun beating down, the catch fencing rusting in the salty air. Leclerc, as well as Haas driver Nico Hulkenberg, are running right up to the wall that comes up fast out of the exit of what is effectively a small hairpin that follows the big stop of the first turn. That wall forms the Turn 3 kink, with both the Ferrari and the Haas being taken right to its edge here even on their first tours.



"Alonso leaves the biggest impression. It's thrilling, the speed so close to the walls spiking the energy" the exit of the fast, blind Turn 22 left that ends one of the fast sections around this course, with the rapid ridge kerbs of Turn 23 in the foreground. Say what you will about where this action is taking place, this is nevertheless a stunning spot to watch F1 cars. The drivers, now up to speed and risking more on the soft tyres, are growing in confidence. There's a variety of lines here: the two McLarens are regularly riding the full Turn 23 kerb, seemingly unruffled. Others, including Verstappen but more

vividly Williams driver Logan Sargeant, are whipping their wheels right immediately out of Turn 22 to avoid hitting as

These machines are showing little issue with putting the power down, something that continues through the first half of the session. Fernando Alonso's Aston Martin, Max Verstappen's Red Bull and Lewis Hamilton's Mercedes are, however, squirming as their drivers accelerate. But the track's still hot from the boiling afternoon sun, so grip is at a premium. Just before the halfway point, we move to a new viewing spot – much of the kerbs.

But Alonso leaves the biggest impression. With just over 10 minutes remaining, he steams out of Turn 22 at full blast, runs the full length of the Turn 23 kerb, and shoots on his way leaving a cloud of detritus behind. It's determined, his hands solid on the wheel as he flashes by. It's thrilling – the speed so close to the walls spiking the energy. And this is only practice... **ALEX KALINAUCKAS**



we could have been there, we could have fought," said Fred Vasseur. "And I think in Jeddah it's quite easy to overtake and for them they have a better top speed. It was a choice [the bigger rear wing], but on some occasion we will have other opportunities."

Overall, Vasseur was left to focus on how "in the race last year in Jeddah, we were something like 1.1s off [on average race pace] and I would say today probably, as soon as we were in free air, we were more like four or five tenths off. The fact we were able to do the fastest lap in the last lap with Hamilton and Norris pushing with softs was a good signal of the improvement we've made on tyre management and consistency.

"In quali, they have perhaps two to three tenths on us and in the race a bit more, but it's difficult to estimate because we don't know if they were pushing at max. But the feeling is more positive. That if you come back in this region [closer to Red Bull overall], you know if you do a step, you can put some pressure on them."

Again, thoughts go to some future point where another team can do battle against Red Bull. Perhaps one day even more than one.

At McLaren and Mercedes, Piastri on the safety car stop mediumhard strategy ended up fourth, 32s behind Verstappen and 13.4s adrift of Leclerc. The Australian had pursued Hamilton for 22 laps, nearly getting him on the 34th tour, only for a locked left-front to force him



"SEEING HOW HE WORKED AND HOW HE APPROACHED THIS SITUATION WITH SUCH CALM WAS VERY IMPRESSIVE"

off at the opening turns. Just as it looked as though Piastri was about to finally get past Hamilton for good two laps later, the Mercedes headed to the pits. There, Hamilton took on the soft tyres, as did Norris on the next lap from further up the road. Norris emerged with a 0.5s gap back to Hamilton at the start of lap 39, having lost his previous 4.4s advantage largely due to a slow right-rear change. This dropped the duo behind Alonso, his constant pursuer George Russell (once the Mercedes driver had jumped eventual final point-scorer Nico Hulkenberg after the restart), and the race's other Briton: Bearman.

Norris and Hamilton had a 6.3s gap to close to the debutant over the final 12 laps, but could only halve this by the flag. During this fruitless chase, Norris weaved naughtily towards the end of the main straight on lap 40 and copped a black-and-white driving standards warning flag after stymying the Mercedes' momentum. The trio therefore ended up in seventh, eighth and ninth, Bearman's result impressing his new-found peers. "Extremely impressive," Leclerc said of his temporary team-mate. "I think everybody has seen that. Obviously having him in the same garage, seeing how he worked and how he approached this whole situation with such calm, with so much excitement as well. "He has shown the whole paddock what he is capable of. And I think after a NEXT F1 REPORT performance like that, it's a matter of time before we see him permanently in the Formula 1 paddock." Ending as we started, with future **Australian Grand Prix** dreams. Both may well come true 28 March issue one day, but perhaps not until 2025 at the earliest....*

STROLL LANCES BARRIER, ALONSO BEATS RUSSELL

Lance Stroll produced the first safety car period of 2024 with his lap-six crash at Turn 22. It was a repeat of his FP1 clip with the Turn 21 inside wall, although this time he bent his Aston Martin's front suspension and careened into the barrier on the other side of the road.

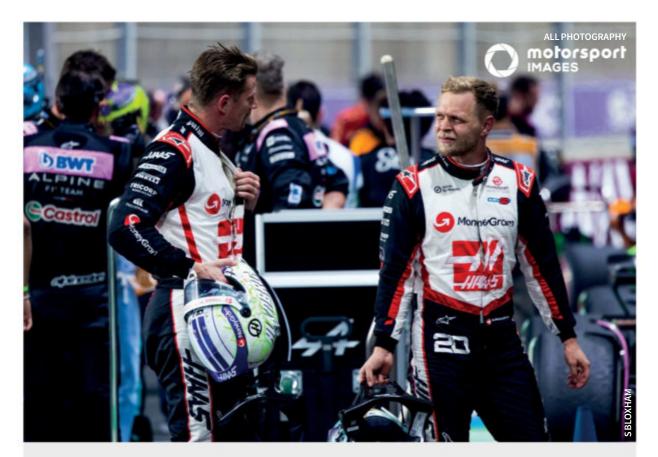
This injected much-needed strategic variance into a straightforward onestop race, although Aston Martin kept Fernando Alonso in step with the other frontrunners with a switch to the hard tyres in that period.

Prior to that disruption Alonso had been passed by Oscar Piastri and was attempting to contain Lando Norris, but the Briton staying out ensured that the Spaniard's fifth place was now going to court the attention of George Russell.

Worried that the Mercedes driver was going to make light work of him, Alonso asked about a potential Plan B over the radio, while attempting to preserve his hard tyres to ensure he could keep Russell at bay. His pace remained strong enough to ensure that Russell could not get within DRS range, and Alonso maintained a one-to-twosecond gap over the course of the race.

"It was stressful, because I was pushing and Oscar was just pulling away and George was significantly faster behind," Alonso confessed. "I was thinking, 'OK, it's 43 laps to the end after the safety car: an unknown territory in terms of tyre age.""





Hulkenberg scores a point as Magnussen is a pain in the Haas

Nico Hulkenberg ensured that Haas was the first team from the bottom half of the field to get off the points mark for 2024 with 10th place, but with more than a little help from Kevin Magnussen's hold-up play in the lower midfield.

A fuel system issue had precluded Hulkenberg from qualifying any higher than 15th, but he came into play when he stayed out during the safety car period, which lifted him to eighth place. This became 10th after George Russell and Ollie Bearman made their way past, but further threats to a potential points finish had to be dealt with by Magnussen.

The Dane had earned a grand total of 20 seconds in penalties, one 10s hit for passing Yuki Tsunoda off-track, the other 10s through avoidable contact after guiding Alex Albon towards the Turn 4 outside wall. Misdemeanours aside, Magnussen was ahead of the gaggle of cars that also included Esteban Ocon and Logan Sargeant, and he was tasked with producing a defensive drive to ensure none could get through and eat into Hulkenberg's pitstop window.

Magnussen slowed the field down in the higher-speed corners to save electrical energy, which he deployed on the straights to cover off DRS. Eventually, the gap to Hulkenberg extended to over 20s, opening up the window for the German to pit and stay ahead, cementing 10th after Zhou Guanyu had also stopped.

"We have the top five teams, so you have to do something unorthodox and push your luck a little bit," Hulkenberg said. "It was my team-mate that made that possible. Great team game by Kevin; I'll return the favour later in the season!"



Ollie Bearman's age on his F1 debut, making him the youngest British F1 driver and the youngest Ferrari driver in F1 history



SAUDI ARABIAN GP RACE CENTRE

GEORGE RUSSELL MERCEDES DRIVER

Solid race but not the result you wanted?

Yeah, that's a good assessment. We're still really trying to understand this car because we have shown true performance at points over the last two weekends. FP1 straight out of the box, we were top of the timesheets and always in the top three. FP2, P2. Then

both weekends, the pace just falling away from us. That hasn't been our competitors getting faster, that's been us getting slower. So we need to understand why that is. But it's fine margins now. So close with ourselves, McLaren, Aston, Charles [Leclerc] is just a smidge ahead. We just need to tap into a bit more.

Q&A

You couldn't pass Fernando Alonso...

It was a long evening out there. I spent nearly 40 laps within 1.5 seconds of Fernando but couldn't get past. I had a slippery car on the straights, but I couldn't get close enough in the high-speed to give him any real pressure. P6 was likely

> a fair result in the end and it's clear that we haven't found the sweet spot with this car just yet.

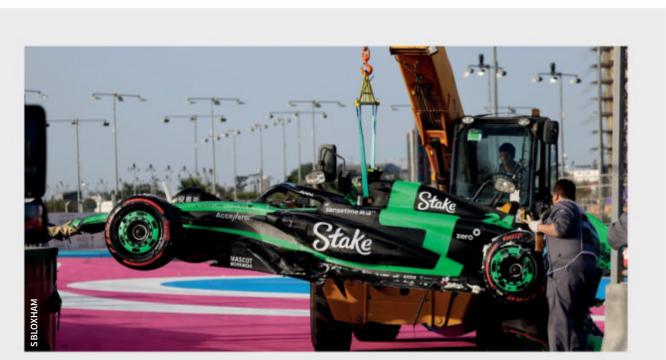
Is the problem more than just bouncing?

Potentially. I think there's more to it. It's so complex these days. These cars are so complicated. When you couple that with the tyres, the tyres are very difficult as well. Right now, I don't have the answers.

Are you disappointed with the gap to Red Bull?

I think if you take Red Bull out of the equation, it's all pretty tight with the remainder. Relatively speaking, it's all quite tight out there considering how many different teams there are, except Red Bull.

How hard is it to jump in an F1 car, like Ollie Bearman has? Extremely difficult. But if you've got the speed and the talent, at the end of the day, it's just another race car. He clearly had the confidence straight from the off, pushing the car to the limit. So, respect for him for the job he's done. I'm really excited to see him on the grid next year or the year after.



Sauber suffers second slow stop in sub-par Saudi Saturday



EARLY GASLY RETIREMENT CONTINUES ALPINE WOES

Pierre Gasly made the start of the Saudi Arabian GP, but barely got any further when a suspected gearbox issue ended his race after the first lap, continuing Alpine's miserable start to the 2024 season.

Both Gasly and Esteban Ocon were eliminated in the first part of qualifying for the second consecutive race, with Alpine's overweight and down-onpower A524 continuing to be problematic in its early stages of development, although grid position ultimately mattered little to Gasly.

Ocon enjoyed a slightly more fortuitous evening in Jeddah than his dismal Bahrain race, and was firmly ensconced within the midfield battle behind Kevin Magnussen. The Dane's clash with Alex Albon offered Ocon one position, and an opportunistic move on Yuki Tsunoda yielded another, with Ocon hoping to challenge Magnussen. When the Haas driver eventually stepped up the pace, Ocon couldn't keep up and was eventually moved aside by Albon, but the Frenchman at least managed to beat Logan Sargeant for 13th. "We managed to get in front of [the RBs] somehow, but on a normal circuit, I think, with normal situations, and no fighting, we are still behind," Ocon suggested afterwards. "We navigated our way through and there were a lot of battles. But yeah, in the end, it was just not enough."

Sauber had to contend with a second slow pitstop in as many weeks, with Zhou Guanyu stationary during his final stop for an extra 25 seconds.

The Chinese driver had been recovering from the legacy of his heavy FP3 shunt, which meant he was unable to set a lap in qualifying and started from the back. He stayed out during the safety car period and ran solidly in the midfield before his slow stop, costing him an outside shot at points. According to trackside engineering lead Xevi Pujolar, new pit equipment was suspected to be cross-threading the wheelnuts. Valtteri Bottas finished just ahead of Zhou after stopping twice and struggling to build tyre temperature on the hard compound. His qualifying had been compromised with a Q1 exit after encountering Alex Albon and Ollie Bearman on his quickest lap.





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DRAWING BOARD

GIORGIO PIOLA

MERCEDES EXPLORES DIFFERENT REAR WINGS

The characteristics of the Jeddah Corniche Circuit require some degree of trade-off in aerodynamic configuration to get the best out of the car across the varying types of corners. There are flat-out sections that require minimal drag to maximise top speed, but there are enough traction zones where good rear-end downforce to build that acceleration is necessary.

Mercedes explored two different rear wings throughout practice in the quest to find that balance, and split George Russell and Lewis Hamilton to produce back-to-back testing. Russell had

a lower-drag wing, with a shallower mainplane and V-shaped cutout in the top element, while Hamilton used the higher-downforce wing

HAMILTON FP2

AMR23

AMR24

seen in Bahrain. Both eventually used the wing Russell had tried for the rest of the weekend, hoping

snapdragon

that it could garner more top-end pace. Mercedes hurt the most on the opening sector, where it was noticeably down on performance in the higher-speed corners compared to Lando Norris's McLaren during the course

HAMILTON, RUSSELL Q/R

of the race, but much of that was due to a recurrence of bouncing. "Our high-speed performance has been weak, and the car is bouncing in those corners," said trackside engineering director Andrew Shovlin. "We were losing so much time in sector one that we spent the rest of the lap clawing it back." JAKE BOXALL-LEGGE

SAUDI ARABIAN GP TECH

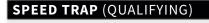
ASTON MARTIN TELLS A NEW TAIL

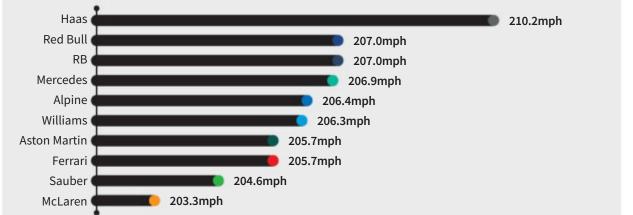
Over 2023, Aston Martin experimented with a nifty little winglet grafted onto the rear crash structure, first spotted at Zandvoort after the summer break. At the time, performance director Tom McCullough stated that "aerodynamically, it was found to be strong", but the design was fragile. It frequently cracked when the car was being lifted up, even with changes made to the rear jack to ensure there was clearance for the wing. Rather than abandon it entirely, the team has brought it back for 2024 with a few changes, with a small scoop placed just before it to evoke memories of the early swing-arm wings (or 'swinglets' – [please no! – ed]) seen in MotoGP. These winglets should help enhance the effect of the diffuser, helping to expand the airflow behind it and linking the low-pressure wake to the beam wing to increase performance. Given that this has now been raced with, it appears that Aston Martin has either been able to improve its structural integrity, or it has made further progress with the design of its rear jacks. The team also brought modified brake ducts and a lower-drag rear wing to Saudi Arabia to improve its aerodynamic efficiency on the straights. **JAKE BOXALL-LEGGE**



20 Zhou #24 no Q1 time	-	18 Gasly #10 1m29.479s	-	16 Bottas #77 1m29.179s	-0	14 Ricciardo #3 1m29.025s	-	12 Albon #23 1m28.980s	-
•		•		•		•	A	•	
WELLOW	19 Sargeant #2 1m29.526s		17 Ocon #31 1m29.475s	WELLOW	15 Hulkenberg #27 no Q2 time	-	13 Magnussen #20 1m29.020s	-	11 Bearman #38 1m28.642s

FRE	E PRACTICE :	1	FRE	E PRACTICE	2	FRE	E PRACTICE	3	SEAS	ON STATS			
POS	DRIVER	TIME	POS	DRIVER	TIME	POS	DRIVER	TIME					
1	Verstappen	1m29.659s	1	Alonso	1m28.827s	1	Verstappen	1m28.412s		/ERS' MPIONSHIP	PTS	BEST FINISH	BEST QUAL
2	Alonso	1m29.845s	2	Russell	1m29.057s	2	Leclerc	1m28.608s	1	Verstappen	51	1	1
3	Perez	1m29.868s	3	Verstappen	1m29.158s	3	Perez	1m28.906s	2	Perez	36	2	3
4	Russell	1m29.939s	4	Leclerc	1m29.180s	4	Russell	1m28.964s	3	Leclerc	28	3	2
5	Leclerc	1m30.030s	5	Perez	1m29.300s	5	Norris	1m28.971s	4	Russell	18	5	3
6	Sainz	1m30.164s	6	Stroll	1m29.336s	6	Alonso	1m29.038s	5	Piastri	16	4	5
7	Norris	1m30.231s	7	Sainz	1m29.455s	7	Stroll	1m29.127s	6	Sainz	15	3	4
8	Hamilton	1m30.236s	8	Hamilton	1m29.504s	8	Piastri	1m29.213s	7	Alonso	12	5	4
9	Stroll	1m30.580s	9	Gasly	1m29.528s	9	Hamilton	1m29.268s	8	Norris	12	6	6
10	Albon	1m30.747s	10	Piastri	1m29.594s	10	Bearman	1m29.306s	9	Hamilton	8	7	8
11	Bottas	1m30.783s	11	Tsunoda	1m29.666s	11	Magnussen	1m29.485s	10	Bearman	6	7	11
12	Ricciardo	1m30.917s	12	Norris	1m29.758s	12	Gasly	1m29.546s	11	Hulkenberg	1	10	10
13	Ocon	1m30.945s	13	Zhou	1m29.777s	13	Tsunoda	1m29.572s	12	Stroll	1	10	10
14	Sargeant	1m30.966s	14	Albon	1m29.789s	14	Ocon	1m29.575s	13	Albon	0	11	12
15	Piastri	1m30.977s	15	Ocon	1m29.901s	15	Hulkenberg	1m29.675s	14	Zhou	0	11	17
16	Tsunoda	1m31.036s	16	Sargeant	1m29.934s	16	Ricciardo	1m29.740s	15	Magnussen	0	12	13
17	Gasly	1m31.046s	17	Magnussen	1m29.985s	17	Albon	1m29.808s	16	Ricciardo	0	13	14
18	Zhou	1m31.131s	18	Hulkenberg	1m30.077s	18	Bottas	1m30.083s	17	Ocon	0	13	17
19	Hulkenberg	1m31.411s	19	Ricciardo	1m30.088s	19	Zhou	1m30.739s	18	Tsunoda	0	14	9
20	Magnussen	1m31.577s	20	Bottas	1m30.153s	20	Sargeant	notime	19	Sargeant	0	14	18
WEATHER Sunny, air 26-29C track 34-41C			41C WEATHER Night, air 25C track 27-28C			WEATH	WEATHER Sunny, air 25-28C track 34-40C			Bottas	0	17	16
	. ,,			0 .,			. ,,			_			





QUA	LIFYING 1		QUAL	IFYING 2		QUAL	IFYING 3	
POS	DRIVER	TIME	POS	DRIVER	TIME	POS	DRIVER	TIME
1	Verstappen	1m28.171s	1	Verstappen	1m28.033s	1	Verstappen	1m27.472s
2	Stroll	1m28.250s	2	Leclerc	1m28.112s	2	Leclerc	1m27.791s
3	Leclerc	1m28.318s	3	Alonso	1m28.122s	3	Perez	1m27.807s
4	Perez	1m28.638s	4	Piastri	1m28.343s	4	Alonso	1m27.846s
5	Alonso	1m28.706s	5	Russell	1m28.448s	5	Piastri	1m28.0899
6	Russell	1m28.749s	6	Perez	1m28.467s	6	Norris	1m28.132
7	Piastri	1m28.755s	7	Norris	1m28.479s	7	Russell	1m28.316
8	Norris	1m28.805s	8	Tsunoda	1m28.564s	8	Hamilton	1m28.460s
9	Bearman	1m28.984s	9	Stroll	1m28.578s	9	Tsunoda	1m28.547s
10	Tsunoda	1m28.988s	10	Hamilton	1m28.606s	10	Stroll	1m28.572
11	Hamilton	1m28.994s	11	Bearman	1m28.642s	WEATH	ER Night, air 25C t	rack 28-31C
12	Hulkenberg	1m29.055s	12	Albon	1m28.980s		0 /	
13	Ricciardo	1m29.065s	13	Magnussen	1m29.020s			
14	Magnussen	1m29.069s	14	Ricciardo	1m29.025s			
15	Albon	1m29.107s	15	Hulkenberg	notime			
16	Bottas	1m29.179s					NEXT R	ACE .
17	Ocon	1m29.475s						TUL
18	Gasly	1m29.479s					24 Mar	ch
19	Sargeant	1m29.526s					Australia	n GP
20	Zhou	notime					Melbour	ne

	TRUCTORS' IPIONSHIP	PTS
1	Red Bull	87
2	Ferrari	49
3	McLaren	28
4	Mercedes	26
5	Aston Martin	13
6	Haas	1
7	Williams	0
8	Sauber	0
9	RB	0
10	Alpine	0

0

18

18

QUALIFYING BATTLE

21 Gasly

Verstappen	2	0	Perez
Leclerc	1	0	Bearman
Leclerc	1	0	Sainz
Hamilton	0	2	Russell
Gasly	0	2	Ocon
Norris	1	1	Piastri
Alonso	2	0	Stroll
Magnussen	0	1	Hulkenberg
Ricciardo	0	2	Tsunoda
Sargeant	0	2	Albon
Zhou	0	2	Bottas

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Events removed when one driver in a team could not record a representative time for reasons outside their control

2

1

1

2

WINS

Verstappen

FASTESTLAPS Verstappen Leclerc

POLE POSITIONS Verstappen





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RES	ULTS ROUND 2/24	I (50 LAPS – 191.66 N	1ILES)		
POS	DRIVER	TEAM	FINISHTIME	LED	TYRES
1	Max Verstappen (NLD)	Red Bull-Honda RBPT	1h20m43.273s	45	Mn, Hn
2	Sergio Perez (MEX)	Red Bull-Honda RBPT	+13.643s		Mn, Hn
3	Charles Leclerc (MCO)	Ferrari	+18.639s		Mn, Hn
4	Oscar Piastri (AUS)	McLaren-Mercedes	+32.007s		Mn, Hu
5	Fernando Alonso (ESP)	Aston Martin-Mercedes	+35.759s		Mu,Hu
6	George Russell (GBR)	Mercedes	+39.936s		Mn, Hn
7	Ollie Bearman (GBR)	Ferrari	+42.679s		Sn,Hn
8	Lando Norris (GBR)	McLaren-Mercedes	+45.708s	5	Mn, Su
9	Lewis Hamilton (GBR)	Mercedes	+47.391s		Mn, Su
10	Nico Hulkenberg (DEU)	Haas-Ferrari	+1m16.996s		Mn, Hn
11	Alexander Albon (THA)	Williams-Mercedes	+1m28.354s		Mn, Hn
12	Kevin Magnussen (DNK)	Haas-Ferrari	+1m45.737s		Mn, Hn
13	Esteban Ocon (FRA)	Alpine-Renault	-1lap/+4.001s		Mn, Hn
14	Logan Sargeant (USA)	Williams-Mercedes	-1lap/+6.785s		Mn, Hn
15	Yuki Tsunoda (JPN)	RB-Honda RBPT	-1lap/+10.533s		Mn, Hn
16	Daniel Ricciardo (AUS)	RB-Honda RBPT	-1lap/+20.715s		Mn, Hn
17	Valtteri Bottas (FIN)	Sauber-Ferrari	-1lap/+23.115s		Sn, Hn, Sn
18	Zhou Guanyu (CHN)	Sauber-Ferrari	-1lap/+29.553s		Mn, Sn
R	Lance Stroll (CAN)	Aston Martin-Mercedes	5laps-accident		Mu
R	Pierre Gasly (FRA)	Alpine-Renault	1lap-gearbox		Mn

WEATHER Night, air 25C track 27-29C

WINNER'S AVERAGE SPEED 142.462mph FASTEST LAP AVERAGE SPEED 150.720mph.

LAP
IAD
LAF
50
4s 38
ls 50
2s 40
4s 50
6s 49
2s 42
ls 37
5s 50
8s 45
6s 47
4s 49
5s 43
4s 49
4s 49
ls 47
9s 48
ls 44
3s 5

RACE BRIEFING

FP3

Ollie Bearman replaced Carlos Sainz from FP3 onwards

RACE PENALTIES

MAGNUSSEN 10-second penalty and three licence points for causing a collision with Albon MAGNUSSEN 10s penalty for leaving the track and gaining an advantage PEREZ 5s penalty and one licence point for unsafe release TSUNODA 5s penalty for unsafe release



LA	LAP CHART																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Verstappen	Leclerc	Perez	Alonso	Piastri	Norris	Russell	Hamilton	Tsunoda	Stroll	Bearman	Albon	Magnussen	Ricciardo	Hulkenberg	Bottas	Ocon	Gasly	Sargeant	Zhou
G	1	16	11	14	81	4	63	44	22	18	38	23	20	3	27	77	31	10	2	24
1	1	16	11	14	81	4	63	44	18	22	38	20	23	27	3	31	77	2	24	10
2	1			81	_	4							23		3	31	77	2	24	
3	1	-	_	81		4							23		3	31		2	24	
4	1	_		81		4		-	-				23		3		77	2	24	
5 6	1			81 81		4		-	-	38			23	3	3 31	31 77	77 2	2 24	24	
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11	4	1	44	11	16	81	14	27	63	24	38	22	20	31	23	77	2	3		
12	4	1	44	11	16	81	14	27	63	24	38	22	20	31	23	77	2	3		
13	1	4	11	44	16	81	14	27	63	24	38	22	20	31	23	77	2	3		
14	1	4	11	44	16	81	14	63	27	38	24	22	20	31	23	77	2	3		
15	1	4	11	16	44	81	14	63	27	38	24	22	20	31	23	77	2	3		
16	1	4	11	16	44	81	14	63	27	38	24	22	20	31	23	2	77	3		
17	1	4	11	16	44	81	14	63	27	38	24	20	22	31	23	2	77	3		
18	1	11	4	16	44	81	14	63	38	27	24	20	22	31	23	2	77	3		
19	1	11	4						_	_			22			2	77	3		
20	1	11	4						_	_			22			2	77	3		
21	1	11	4						_	_			22			2	77	3		
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26	1												22				3	77		
27	1		_	-									22				3	77		
28	1	11	16	4	44	81	14	63	38	27	24	20	22	31	23	2	3	77		
29	1	11	16	4	44	81	14	63	38	27	24	20	31	22	23	2	3	77		
30	1	11	16	4	44	81	14	63	38	27	24	20	31	22	23	2	3	77		
31	1	11	16	4	44	81	14	63	38	27	24	20	31	22	23	2	3	77		
32	1	11	16	4	44	81	14	63	38	27	24	20	31	22	23	2	3	77		
33	1					81	14	63	38	27	24	20	31	23	22	2	3	77		
34	1	11	16	4	44	81	14	63	38	24	27	20	31	23	22	2	3	77		
35	1	11	16	4	44	81	14	63	38	24	27	20	31	23	22	2	3	77		
36	1												31				3	77		
37	1												31				3	77		
38	1												31				3	77		
39	1												31				3	77		
40	1												31				3	77		
41	1	11	16	81	14	63	38	4	44	24	27	20	31	23	22	2	3	77		

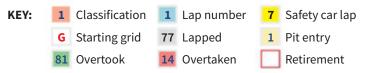
on an F1 podium 100 times, seventh on the all-time list

TYRES

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



42	1	11	16	81	14	63	38	4	44	27	20	31	23	22	2	3	77	24
43	1	11	16	81	14	63	38	4	44	27	20	23	31	22	2	3	77	24
44	1	11	16	81	14	63	38	4	44	27	20	23	31	22	2	3	77	24
45	1	11	16	81	14	63	38	4	44	27	20	23	31	22	2	3	77	24
46	1	11	16	81	14	63	38	4	44	27	20	23	31	22	2	3	77	24
47	1	11	16	81	14	63	38	4	44	27	20	23	31	22	2	3	77	24
48	1	11	16	81	14	63	38	4	44	27	20	23	31	22	2	3	77	24
49	1	11	16	81	14	63	38	4	44	27	20	23	31	22	2	3	77	24
50	1	11	16	81	14	63	38	4	44	27	20	23						



SAUDI ARABIAN GP **DRIVER RATINGS**

Full marks well deserved in Jeddah by Verstappen and last-minute Ferrari stand-in Bearman, while Stroll pips Ricciardo for the wooden spoon

JAKE BOXALL-LEGGE

RED BULL



Started 1st —— Result 1st

Sailed away after keeping Leclerc at arm's length into opening corner. Trademark consistency on hard tyres bore fruit, although overall margin over Perez not as commanding as in Bahrain. Battle with Norris after safety car was brief, and pass for the lead wasn't too challenging.

MCLAREN



Started 3rd — Result 2nd

Same result as in Bahrain, but much better run than in opening round and largely matched Verstappen's pace throughout the GP. Admitted fault for unsafe release penalty, which inflated gap to team-mate by extra five seconds. Move on Leclerc looked easy with straightline speed advantage.

MERCEDES



Started 8th — Result 9th

Looked a little out of sorts in qualifying, but moved up to third after staying out under safety car. Ceded places to Perez and Leclerc, but did well to preserve his medium tyres and keep Piastri at bay. Put Norris under scrutiny in late-race stint on softs, but frustrated by his defence.

ASTON MARTIN



Started 4th ----- Result **5th**

LANCE STROLL Started 10th -Result R

Repeated his



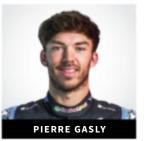


Started 2nd — Result 3rd

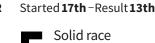
On the front row once again after strong qualifying

little about Perez in early stages, and then breezed past the later-stopping Norris on lap 27. Was short about half a second compared to the Red Bulls, although claimed the fastest lap to deny Verstappen a full suite of points.

ALPINE



-Result **R** Started 18th



Started 6th — Result 8th Might have been



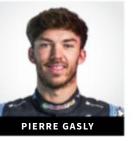
Started 5th







effort. Could do



Afflicted by



ESTEBAN OCON

OLLIE BEARMAN

Started 11th — Result 7th

Forgivable mistake in

Q2 cost a Q3 berth,

but was delightfully

Opportunistic move

on Tsunoda after

safety car ensured

Kept his cool despite

Norris and Hamilton

looming in his mirrors.

points were on.

aggressive in the race.

Heroic effort

after being dropped in at

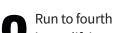
the deep end.

Hardly a vintage

LANDO NORRIS



----- Result 4th



GEORGE RUSSELL

Started 7th — Result 6th

A solid, if unspectacular, performance. Outqualified Hamilton again, but struggled to pose a consistent threat to Alonso. Managed to get within DRS range

briefly, but could not

degree of pace as the

Aston and had to be

content with sixth in a

somewhat lonely race.

maintain the same

drive, but one that paid out. Very lucky not to be penalised for either suspected jumped start or weaving in defence on Hamilton, but extended his medium stint well - all while fighting faster cars - to ensure he had enough to keep fellow Briton at bay after their late pitstops.

on for a higher score if he hadn't botched an overtaking attempt on Hamilton. Outqualified team-mate, and put a move on Alonso to take a further position. Was stuck behind Hamilton, who had stayed out under safety car; efforts to pass came to little until Hamilton pitted.

in qualifying showcased his evident one-lap pace, but was worried about race day. Lost a position to Piastri, but saw off pressure from Russell in middle act of the race with careful early management. Cemented fifth with a strong series of laps towards the end on lower fuel.

FP1 wall-bang at Turn 21, but with disastrous consequences when he landed in the subsequent barrier. Had been 0.7s off Alonso in qualifying and, despite a good start to move clear of Tsunoda, was out of the game as early as the sixth lap with his crash.

the symptoms of a suspected gearbox issue on the formation lap. Managed to take the start, but could not go any further than the first lap. Outqualified by his team-mate by just 0.004s, but Alpine's struggles again relegated him to a Q1 exit.

despite limitations of Alpine machinery. Took a position from Albon when the Williams was hit by Magnussen, and later cleared Tsunoda, but couldn't close Magnussen down when the Haas driver stepped up the pace. Lost a further position to Albon.

SAUDI ARABIAN GP RACE CENTRE



WILLIAMS



Started 19th - Result 14th

Dumped out in Q1. Moved past Bottas to join Magnussen train, but rarely showed the same endeavour to break free of it as his team-mate. Dropped Ricciardo and tried to challenge Tsunoda. He could not keep up with the faster of the RB drivers, but got the place thanks to the Japanese's penalty.



Started 12th - Result 11th

Disappointed not to break into top 10 after having his race ruined – twice – by Magnussen. Shove towards Turn 4 wall cost a wing endplate, but shook it off to look lively in Haas driver's train. Moves on Ocon and Tsunoda welljudged, but ship had sailed after Hulkenberg had pitted.

RB



Started 14th - Result 16th

B Outclassed by Tsunoda in qualifying, but glacially slow pitstop hurled him to back of the order. Made up ground to his fellow lower midfielders as Magnussen held them up, but struggled to remain in touching distance. Languid late-race spin rather epitomised his race.



Started 9th — Result 15th

Broke into Q3, but caught napping at start by Stroll. Was remarkably calm after Magnussen made illegal pass, but this stalled his progress when he was caught in the train. Failed to repass the Dane, which brought Ocon and Albon into play, and lost a place with a 5s unsafe release penalty.

Sauber



Started 20th - Result 18th

FP3 shunt meant that, although he made it out

on track at the end of Q1, he ran out of time to start a qualifying lap. One of the nonstoppers after the safety car, he was left to run a lonely race – albeit with decent pace as Magnussen backed up the midfielders.



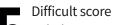
Started 16th - Result 17th

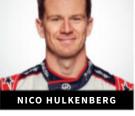
Whisker away from making Q2. Pitted twice, but with little impact on overall finishing position after propping up the order for most of the race. Hard tyre pace too poor to make inroads into scrap behind Magnussen. Far faster in late-race stint on softs, but couldn't close on Ricciardo.

HAAS



Started 13th - Result 12th





Started 15th - Result 10th



SCORING SYSTEM

from the car but still yields a reasonable result.

6 Solid performance but without getting the most out of the car or nailing it when it really mattered.

5 Patchy performance, not necessarily off the pace but failing to string together the

mediocre pace and mistakes adding up to a wasted weekend.

1 Terrible. A performance with no redeeming features.

O A rare case, but if a driver crashes on the way to the grid without car failure at play (think Verstappen at the 2020 Hungarian GP) and cannot take part in the race, they must get this score. The same for stalling at the lights and not getting going, although this in effect is a non-factor in modern F1.

to balance. Earning two 10s penalties would ordinarily yield a low score, but defensive efforts to help build a gap for Hulkenberg to conduct his pitstop were exquisite and frustrated the cars behind. Turning around that 20s hit to finish 12th worthy of some plaudits. during the safety car really paid off, albeit with a big helping hand from Magnussen. Maintained pretty consistent pace on medium tyre to extend his stint, which was transformative for his fortunes. Hard tyre pace at the end also stayed strong, locking down a crucial point. major obstacle or dominance over rivals.

Drivers are rated for their

performance through the

on qualifying and the race.

10 Exceptional performance,

maximising the result or car

performance and excelling,

either through overturning a

whole weekend, with the focus

9 Outstanding performance, but without quite reaching the heights required for a maximum score.

8 Very good performance with no major errors and a final result that, relative to circumstances, reflected the car's pace.

7 Good performance, perhaps one that's a little inconsistent in some aspects or without extracting the maximum weekend well and coming away short of a good result.

4 Disappointing performance, failing to get close to the maximum of the car and/ or making mistakes at key moments.

3 Poor performance, either through struggling to get the most out of the car or, through some massive error, falling short.

2 Very poor performance, with

N/A DNS due to car failure in the garage, on formation laps or on the grid. We reserve the right to use this in circumstances where a driver has been injured in a crash.



INDYCAR

Newgarden sails to victory in St Pete

The Team Penske driver won't admit that he found it easy to win the opening round of the 2024 IndyCar season, but he certainly made it appear that way

JOEY BARNES



osef Newgarden was nearly untouchable as the

comfortable today," said Newgarden. "I had a lot of fun. I sort of told myself early in the race, 'I'm going. I'm not here to wait around. We're going to win this race.'

J IndyCar Series kicked off its season on the sunny streets of St Petersburg last weekend. The 33-year-old double champion surged to pole on Saturday, and that proved to be the primer. Newgarden established dominance in Sunday's contest with his Team Penske Dallara-Chevrolet, leading 92 of 100 laps en route to claiming victory by 7.9s over the Arrow McLaren machine of Pato O'Ward. It was Newgarden's 30th career IndyCar victory, which broke a tie with Penske legend Rick Mears for 13th on the all-time wins list, and his third on the 1.8-mile, 14-turn temporary street circuit. Although the Tennessee native won't confess to winning in IndyCar being easy, this latest drive, which was also his first non-oval win since June 2022 at Road America, was about as close as it gets. "I don't want to say it felt easy, but it felt really, really

"I'm really thankful to the team for the effort they've put in to get to this point. It's been a big process for us to try to come back and be better in areas that we were weak last year, and Chevrolet has done a tremendous job for us. They're a huge part of the equation. On the team side, we've also lifted our game and cleaned up a lot of areas where we were maybe not at the level we needed to be. It all just came together today. Obviously, we had strength because, looking at my team-mates, we're sitting first, third and fourth. I think that's really encouraging for the rest of the season." Newgarden had opted to start on the harder primary (black sidewall) Firestone tyres versus the softer alternate (green sidewall) compound sported by the Meyer Shank Racing car of

INDYCAR ST PETERSBURG RACE CENTRE



Polesitter Newgarden also secured fastest lap - no wonder he had "a lot of fun"

Felix Rosenqvist, who was pipped to pole by just 0.0058s, making it the closest front row in an IndyCar event on a street circuit since June 2012 at Belle Isle, when Scott Dixon edged Will Power by 0.0044s. The polesitter managed to hold the lead at the start as the field scattered behind for the charge into Turn 1.

O'Ward started third on a set of primary tyres and lost his spot to Andretti Global racer Colton Herta – on alternates – after a savvy outside move into Turn 1 that provided the inside edge in Turn 2. Meanwhile, Marcus Ericsson (Andretti Global) took fifth, while Scott McLaughlin muscled his Penske entry from ninth to sixth in an opening corner that also featured contact with Rinus VeeKay (Ed Carpenter Racing), who then bumped into Romain Grosjean (Juncos Hollinger Racing). During this same run of action in the opening lap, Rahal Letterman Lanigan Racing's Christian Lundgaard sustained a right-rear puncture after a touch from behind at Turn 4 and was forced to pit moments later.

"I sort of told myself, 'I'm going. I'm not here to wait around. We're going to win this race"

Once the field began to spread out, the race found a rhythm, with Newgarden maintaining a near-1s advantage over Rosenqvist. It only took 10 laps for an unsavoury spell of fuel-saving to commence, but strategies changed when Marcus Armstrong, running 10th for Chip Ganassi Racing, brought out the first caution of the race on lap 26 after a shunt in Turn 10 that resulted in a broken right-front corner. The incident ended Armstrong's day early in what he lamented as "a costly mistake".

The entire field came to pitroad for service, with the exception »



of Lundgaard, who cycled into the race lead. At first glance, Herta appeared to beat Rosenqvist in the pitlane drag race, with Newgarden in tow, but the timing line at the exit confirmed that Rosenqvist's front wing was just a fraction ahead of Herta's.

Lundgaard led the field to the restart on lap 31, followed by Rosenqvist, Herta, Newgarden and O'Ward. Newgarden, now running on the softer alternates, made quick work of Herta, who appeared to be struggling on the primary tyres, in Turn 4. Moments later, Herta also fell into the clutches of O'Ward and McLaughlin.

Newgarden then attacked Rosenqvist – now on primaries – at Turn 4 on the next lap, but was held back until completing the pass for second spot in Turn 1 on lap 33.

Then came another caution after Sting Ray Robb (AJ Foyt Racing) went off at Turn 1 with a smoking front-right brake disc. The result also cooked Lundgaard's off-sequence strategy because he was left to pit alone after building up a 3s lead in as many laps.

Newgarden therefore retook the lead, ahead of O'Ward, Rosenqvist, McLaughlin and Herta. When the race resumed on lap 39, Newgarden held firm, while McLaughlin stalked Rosenqvist for third. The order remained the same among the frontrunners at the halfway mark, with Newgarden holding serve with a 1s advantage over O'Ward.

Just two laps later, Ericsson's debut with his new team came to an abrupt end. His Honda engine lost power, leaving him to dive to the pits and forfeit his place in the top six. "It came from nowhere, went to half power and we tried everything to fix it, but we can't find the reason," said Ericsson, who won the race with Ganassi (and Honda) last year.

The final series of pitstops was triggered when Grosjean and Arrow McLaren's Alexander Rossi stopped on lap 64. They were followed by Newgarden, O'Ward, Rosenqvist and McLaughlin, who switched onto alternates after two primary stints. Herta stayed out for an additional lap in an effort to work the overcut, which paid off when he came out ahead of Rosenqvist and McLaughlin for third.

While Newgarden maintained control of the race ahead of O'Ward and Herta, McLaughlin managed to pull off a pass on Rosenqvist for fourth at the Turn 10 left-hander. Mere seconds later, Ganassi's rookie Linus Lundqvist was punted into the

"I was pumped with my start. I think I made it four wide and got through it, so that was a blast"





Turn 10 tyre barriers by Grosjean, which brought out the third caution of the day and left the Swede with rear-wing repairs. Grosjean was given a drive-through penalty for his misdemeanour, but it made no difference in the end as a gearbox issue forced him to retire.

McLaughlin aggressively stalked Herta at the restart, ultimately finding a way into third with another move at Turn 10. It only took until the next lap for Herta to fall another position after being passed by the Penske car of Power, who was running the same tyre strategy as McLaughlin and finishing on the softer rubber. Despite closing on the rear wing of O'Ward, McLaughlin was unable to take the runner-up spot.

"I felt really strong into Turn 10 all day and I knew I had green tyres so I had to make them work," said McLaughlin of his late charge. "I wish I could have got past Herta on the first lap – I got past him on the second restart lap – and maybe then I could have attacked Pato a little bit better when the tyres were a little bit fresher. Colton made it hard, but that's part of it, and I just sort of threw the Dr Divebomb cap on and threw it in there. It worked out well.

"I was more pumped with my start. I think I made it four wide and got through it, so that was a blast. Honestly, I had so much fun today. It was just proper racing, thinking on your feet with fuel strategy and where you put the car and how aggressive you were, and that's what IndyCar is all about. There's no prediction, it's just a wild card, and I enjoy it."

When the chequered flag fell, the running order of Newgarden, O'Ward, McLaughlin and Power provided a commanding 1-2-3-4 by Chevrolet-powered teams.

"I think it's a very solid foundation to what is going to be a very tight, very competitive rest of the year," said O'Ward. "The Penskes were just too strong for us today. We were all kind of playing the fuel game a little bit, and we've got to give it to everybody at Chevrolet. We got down to work in the off-season and we've made some gains and it's really cool to see the top four was all Chevrolet." Herta was able to hold on to fifth, the best of the Honda runners. "I thought our race was run really well but we just got screwed by tyres, being on blacks when everyone else was on greens and with the yellow flags," he reckoned. Reigning and two-time IndyCar Series champion Alex Palou, who had been running outside the top 10 for the majority of the race, capitalised on an overcut on the final pitstop and finished sixth, ahead of Rosenqvist. "It was tough with that first yellow, it put everyone on the same page on strategy," the Spaniard said. "From 13th to sixth, two spots better than last year. We had a tough weekend at the beginning, but we recovered, so it's still a good start." 🕷



O'WARD MISSES OUT AGAIN BUT IS IN THE FIGHT

Arrow McLaren's Pato O'Ward walked out of the Grand Prix of St Petersburg with a third runner-up finish from his five IndyCar starts at the venue. And he's now had five second places since his last victory at Iowa Speedway in 2022.

But this edition of the 100-lap contest didn't come with the same disappointment as last year's outcome, which was impacted by a momentary mechanical gremlin that demolished his lead with four laps to go.

This year, the 24-year-old Mexican held steady near the front, with good outright pace and no mistakes. He battled closely with eventual winner Josef Newgarden at times, while also being the barricade to prevent a Penske sweep of the podium.

Although finding Victory Lane would have been ideal, especially considering O'Ward went winless last year despite collecting seven podiums, this latest result could provide a good foundation for the rest of the season.

"It really is tough," said O'Ward. "As we saw today, you're going to pay if you're making mistakes, and that's what you don't want to be doing. With the hybrid coming in halfway through the season, you've got to be on it. There's no room for error because you need to leave those 'Joker cards' for mishaps that could happen when you introduce something new.

"There's no room for error anymore because the guys that you're competing against are also winning races, and when they're not winning races they're on the podium. This is where we have to be, and this is where we have to maintain ourselves. I think we just keep approaching it like we have and be aware of who we're racing and what we can accomplish each and every weekend."



RESULTS ROUND 1/15, ST PETERSBURG (USA), 10 MARCH (100 LAPS – 180.000 MILES)

POS	DRIVER	TEAM/CAR	TIME
1	Josef Newgarden (USA)	Team Penske/Dallara-Chevrolet	1h51m29.5954s
2	Pato O'Ward (MEX)	ArrowMcLaren/Dallara-Chevrolet	+7.9121s
3	Scott McLaughlin (NZL)	Team Penske / Dallara-Chevrolet	+8.4577s
4	Will Power (AUS)	Team Penske / Dallara-Chevrolet	+9.0559s
5	Colton Herta (USA)	Andretti Global with Curb-Agajanian / Dallara-Honda	+10.2578s
6	Alex Palou (ESP)	Chip Ganassi Racing/Dallara-Honda	+11.8036s
7	Felix Rosenqvist (SWE)	Meyer Shank Racing / Dallara-Honda	+14.4044s
8	Alexander Rossi (USA)	ArrowMcLaren/Dallara-Chevrolet	+15.7853s
9	Scott Dixon (NZL)	Chip Ganassi Racing/Dallara-Honda	+16.2964s
10	Rinus VeeKay (NLD)	Ed Carpenter Racing/Dallara-Chevrolet	+18.8346s
11	Santino Ferrucci (USA)	AJ Foyt Enterprises / Dallara-Chevrolet	+23.0437s
12	Kyle Kirkwood (USA)	Andretti Global / Dallara-Honda	+24.5876s
13	Callum Ilott (GBR)	ArrowMcLaren/Dallara-Chevrolet	+28.7113s
14	Kyffin Simpson (CYM)	Chip Ganassi Racing/Dallara-Honda	+29.5662s
15	Pietro Fittipaldi (BRA)	Rahal Letterman Lanigan Racing/Dallara-Honda	+32.8175s
16	Graham Rahal (USA)	Rahal Letterman Lanigan Racing/Dallara-Honda	+34.6955s
17	Tom Blomqvist (GBR)	Meyer Shank Racing/Dallara-Honda	+40.4726s
18	Agustin Canapino (ARG)	Juncos Hollinger Racing / Dallara-Chevrolet	+42.1247s
19	Jack Harvey (GBR)	DaleCoyneRacing/Dallara-Honda	+49.3453s
20	Christian Lundgaard (DNK)	Rahal Letterman Lanigan Racing/Dallara-Honda	+58.7347s
21	Christian Rasmussen (DNK)	Ed Carpenter Racing/Dallara-Chevrolet	-1lap
22	Colin Braun (USA)	DaleCoyneRacing/Dallara-Honda	-1lap
23	Linus Lundqvist (SWE)	Chip Ganassi Racing/Dallara-Honda	-3 laps
24	Romain Grosjean (FRA)	Juncos Hollinger Racing / Dallara-Chevrolet	82 laps-gearbox
25	Marcus Ericsson (SWE)	Andretti Global / Dallara-Honda	52 laps-electrical
26	Sting Ray Robb (USA)	AJ Foyt Enterprises / Dallara-Chevrolet	33 laps-brakes
27	MarcusArmstrong(NZL)	Chip Ganassi Racing/Dallara-Honda	25 laps-accident

Winner's average speed 96.867mph. Fastest lap Newgarden 1m00.6795s, 106.791mph.

Q31 Newgarden **59.5714s**; 2 Rosenqvist 59.5772s; 3 **O'Ward** 59.6540s; 4 Herta 59.8189s; 5 Grosjean 1m00.0642s; 6 **Ericsson** 1m03.5583s.

Q2 Rosenqvist 59.2706s; Herta 59.3157s; Newgarden 59.3214s; Ericsson 59.4484s; Grosjean 59.5074s; O'Ward 59.5382s; 7 VeeKay 59.5501s; 8 Power 59.5594s; 9 McLaughlin 59.5741s; 10 Armstrong 59.6127s; 11 Dixon 59.8483s; 12 Lundgaard 1m00.0172s. Q1 – GROUP 1 Ericsson 59.3703s; Armstrong 59.5263s; O'Ward 59.5507s; Newgarden 59.5699s; VeeKay 59.5805s; McLaughlin 59.6202s; 13 Palou 59.7897s; 15 Rossi 59.8164s; 17 Blomqvist 59.9968s; 19 Lundqvist 1m00.0034s;21 **Rasmussen** 1m00.2021s;23 **Simpson** 1m00.2956s;25 **Braun** 1m01.3044s.

Q1 – GROUP 2 Herta 59.5596s; **Grosjean** 59.5709s; **Rosenqvist** 59.6220s; **Power** 59.6888s; **Dixon** 59.7200s; **Lundgaard** 59.7940s; 14 **Ferrucci** 59.8182s; 16 **llott** 59.8911s; 18 **Kirkwood** 59.9102s; 20 **Canapino** 59.9308s; 22 **Rahal** 1m00.0953s; 24 **Robb** 1m00.4125s; 26 **Fittipaldi** 1m00.5336s; 27 **Harvey** 1m00.5712s.

CHAMPIONSHIP

1 Newgarden 54; 2 O'Ward 40; 3 McLaughlin 35; 4 Power 32; 5 Herta 31; 6 Palou 28; 7 Rosenqvist 26; 8 Rossi 24; 9 Dixon 22; 10 VeeKay 20.



WORLD OF SPORT



Enzo and Ferrari are the talking points

FORMULA 2 JEDDAH (SAU) **8-9 MARCH ROUND 2/14**

The Formula 2 weekend in Jeddah was a story of a poleman who didn't start, a winner who didn't win, and climaxed with a stunning maiden feature race victory for Enzo Fittipaldi.

Victor Martins and Ollie Bearman, both among the pre-season title favourites, were looking to get their challenges back on course after poor showings in the opening round in Bahrain. But, for vastly different reasons, the duo left Jeddah still with nil scores to their names.

This was particularly harsh on Bearman. The Prema Racing starlet should have scored two points for taking pole position on Thursday before his call-up to replace Carlos Sainz at Ferrari meant he was



Aron had started the sprint race from pole, with Richard Verschoor alongside. Trident's Dutch veteran bided his time, finally making his move for the lead using DRS into Turn 1 on lap eight. This was a lead that Verschoor would not relinquish until some hours after the chequered flag fell, when he and team-mate Roman Stanek were disqualified for having an incorrect throttle pedal progressivity map.

The move that ultimately won the race came with three laps to go, when Hauger pulled off an identical move into Turn 1 on Aron, throwing his MP Motorsport entry to the inside of the Hitech car. Hauger and Aron were joined in the top three, if not the podium celebrations, by Fittipaldi, and the Van Amersfoort Racing man went two steps better on Saturday. Fittipaldi overcut Jak Crawford at the pitstops to move up from third to a net second, and then made his move on Maini six laps later.

front were Juan Manuel Correa, Amaury Cordeel and Taylor Barnard, who were all on the alternate strategy of starting on the medium tyre. At halfway through the race, it was earlier than ideal to go onto the supersoft, but this is what Cordeel and Barnard did. They emerged still second and third, but would have to make the supersoft rubber last 13 laps to the finish.

Barnard faded immediately, but Cordeel harried Correa, who was waiting for another safety car to make his pitstop. Fittipaldi closed in, slipstreamed both of them down the start-finish straight

withdrawn from any further F2 action, and his tally was transferred to Invicta Racing's second-placed qualifier Kush Maini.

Martins qualified his ART Grand Prix car fourth, but his sprint race came to an end after only two corners when contact with Dennis Hauger pinged him into the concrete wall and resigned him to consecutive retirements. After starting third in the longer feature race, Martins slipped back. He could have scored a point for 10th, but that was taken from him after the stewards issued a five-second penalty for causing a collision with Paul Aron.

But after just two more laps, Franco Colapinto caused a second safety car of the race when he tapped the wall on the exit of the final corner, causing a puncture that resulted in a spin and stall at Turn 1. Up

with DRS, and nailed a fantastic double pass on the duo into Turn 1.

Maini moved up to finish second, while Cordeel clung on in third until the final lap, when he was ambushed on the finish line by Hauger – his second podium of the weekend - and the DAMS car of Crawford. Rodin Motorsport's Bahrain double winner Zane Maloney struggled in qualifying, but charged from 15th to fourth in the sprint, and was seventh behind Andrea Kimi Antonelli (sixth in both races) in the feature to keep his points lead. SAM HALL

Officials Pulling the Pin on celebrations

F1 ACADEMY JEDDAH (SAU) 8-9 MARCH ROUND 1/7

Alpine Academy driver Abbi Pulling left the Saudi Arabian F1 Academy seasonopener as the championship leader, despite crossing the line behind Mercedes protegee Doriane Pin in both of the two races.

The pair positioned themselves as the class of the field, pulling away in both races and fending off the competition during the various safety car restarts.

While Pin was faultless from lights to flag on both outings, her downfall came in race two in a bizarre fashion. She failed to spot the chequered flag and was not informed that the race had ended by her Prema team, who were celebrating the victory on the pitwall. After she completed an additional lap at full racing speed, officials displayed red flags to get Pin's attention.

While speaking to fellow top-three finishers Pulling and Maya Weug before heading to the podium, Pin explained



that she had suffered a radio issue, something that was not evident on the broadcast when her race engineer asked: "Doriane, what are you doing? It's the chequered flag." In the moment, Pin responded: "You didn't tell me!"

In lieu of a drive-through penalty, the Frenchwoman was given a 20-second sanction, which dropped her to eighth. It puts Rodin Motorsport driver Pulling on 44 points, with Ferrari-backed Prema driver Weug second on 33 and Pin third on 32.

While the lead trio went largely untroubled, the action was frantic behind. In the closing stages of race one, Williamsbacked Lia Block caused damage to her

ART entry after striking a kerb, which sent her into the wall backwards. On the last lap, it was Lola Lovinfosse's turn to catch the ire of the stewards when she smacked into fourth-placed Nerea Marti (Campos Racing), forcing the Spaniard out of the race.

Lovinfosse (Rodin) was in trouble again in race two, and earned a fiveplace grid penalty for the Miami round. After being pushed off at Turn 1 by Chloe Chambers, she spun up the rears of her #3 car and drove straight into the path of Block. This moved Jessica Edgar (Rodin) up to fourth behind Marti. SAM HALL

Flying Siegel is able to beat Abel

INDY NXT ST PETERSBURG (USA) 10 MARCH ROUND 1/12

Nolan Siegel led pole-to-flag to take victory in the opening Indy NXT race of the season on the streets of St Petersburg.

The 19-year-old Californian, who will contest a limited IndyCar programme this season including the Indy 500, fended off an early challenge by Jacob Abel at the

a lead of nearly seven seconds prior to the first caution after 32 of 45 laps. He was untroubled on either restart, and Siegel's HMD Motorsports machine took the chequered flag by 1.396 seconds over Abel's family-owned challenger.

"It feels amazing," Siegel said. "We've worked hard for this. First pole this weekend, led every lap. Should have won here last year - I made a mistake and redeemed myself today. The car was fantastic; it made it easy to drive." Brit Louis Foster, who appeared to be the favourite for the weekend after showing stout pace in the practice sessions, passed Myles Rowe for third early on and then pressured Abel. Foster's rookie Andretti team-mate Michael d'Orlando was fourth, while Reece Gold recovered from being forced to give up three places for jumping the start to take fifth from Irish Indy NXT debutant Jonathan Browne. Jamie Chadwick started 10th but got shoved off on the opening lap by Josh Pierson, and spent half the race in the pits. **JOEY BARNES**

WEEKEND WINNERS

FORMULA 2

JEDDAH (SAU) Race 1 Dennis Hauger **MP** Motorsport Race 2 Enzo Fittipaldi (below) Van Amersfoort Racing

F1 ACADEMY

JEDDAH (SAU) Race 1 Doriane Pin Prema Racing Race 2 Abbi Pulling Rodin Motorsport

INDY NXT **ST PETERSBURG (USA)**

start, but seized control and established



Nolan Siegel **HMD Motorsports**



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Bell rings out for Toyota victory

NASCAR CUP PHOENIX (USA) 10 MARCH ROUND 4/36

Christopher Bell breathed new life into Toyota's chances of a NASCAR Cup title with his victory at Phoenix Raceway.

The one-mile oval, where the crown is determined in November, has been a difficult one for the manufacturer – Toyota drivers had led a total of 15 laps in the track's previous four races. Bell only led twice on Sunday, but they were timely occasions. He passed Tyler Reddick in the final laps to win stage two, then inherited the lead with 40 of 312 laps to go when Martin Truex Jr was forced to pit for fuel.

Bell was among a group who had elected to pit on lap 218 during what turned out to be the final caution of the race. The Joe Gibbs Racing star drove from 20th to first and cruised home more than five seconds clear of the RFK Racing Ford of Chris Buescher.

The victory was a dramatic turnaround from the 2023 championship finale at Phoenix, when Bell blew a brake rotor

WEEKEND WINNERS

NASCAR CUP PHOENIX (USA) Christopher Bell Joe Gibbs Racing (Toyota Camry)

SUPER FORMULA

SUZUKA (JPN) Tomoki Nojiri Team Mugen (Dallara-Honda)



and was knocked out of contention early.

"Man, this one feels really good – you don't get cars like that very often," said Bell, whose seventh career win snapped Chevrolet's three-race winning streak at the start of the season. "I feel like we have the capability of running races like this a lot."

Bell's team-mate Ty Gibbs took third, Buescher's stablemate Brad Keselowski was fourth, reigning champion Ryan Blaney ended up fifth in his Penske Ford and took over the series points lead, and Ross Chastain, winner last November, was sixth. JIM UTTER

Classy Nojiri on top as ex-F2 aces struggle

SUPER FORMULA SUZUKA (JPN) 10 MARCH ROUND 1/7

Tomoki Nojiri eased his way to a straightforward win at Suzuka to open his bid for a third Super Formula title in imperious style.

With 2023 title rivals Ritomo Miyata and Liam Lawson both moving on, Team Mugen Honda driver Nojiri lived up to his billing as the pre-season favourite. He jumped from third on the grid at the start



that threatened to end his career last year, Naoki Yamamoto (Nakajima Racing) took advantage of a similar early-stopping strategy to Yamashita's to score a heartwarming third place, his first podium in dry conditions since 2020. Sena Sakaguchi (Inging) sprung a surprise when he beat Kakunoshin Ohta and Nojiri to pole on Saturday. But after slipping to third with a poor getaway, Sakaguchi struggled for race pace and ended up seventh after leaving his stop until later in the race. Dandelion driver Ohta was left to rue an even worse start - he dropped from second to seventh on the opening lap before clawing his way to fourth ahead of Ren Sato in the second Nakajima

car and Nirei Fukuzumi (KCMG).

Both of the drivers hoping to emulate Lawson and get themselves on the radar for F1 drives in 2025 suffered weekends to forget, with Formula 2 converts Ayumu Iwasa and Theo Pourchaire ending up ninth and 18th respectively. Iwasa (Mugen) made the most of a late-stopping strategy after starting 11th, but Pourchaire endured a dreadful first weekend for Team Impul, qualifying 15th and ending up last of the finishers after damaging his nose in an off at Turn 7. JAMIE KLEIN

to take command and never looked back.

There was a moment after Nojiri's pitstop on lap 13 of 31 when he came under pressure from an early-stopping Kenta Yamashita, with the chilly conditions making tyre warm-up a challenge. But Nojiri hung onto the lead during this critical phase and from there was never seriously challenged, earning his 12th career victory just under two seconds clear of the Toyota-powered car of Kondo Racing man Yamashita. On his return from the neck injuries

O motorsport.tv Relive this race at Motorsport.tv

Marquez? Acosta? Don't forget Bagnaia



MOTOGP LOSAIL (QAT) 10 MARCH ROUND 1/21

On a weekend that started with the spotlight firmly on Marc Marquez and rookie sensation Pedro Acosta, reigning champion Francesco Bagnaia showed why he is still the king of MotoGP with a dominant performance in Qatar.

Ducati supremo Bagnaia faced several new challenges heading into the 2024 campaign: Jorge Martin remains keen to seek revenge for his narrow title defeat in 2023; Enea Bastianini had been showing flashes of his '2022 best' in pre-season testing; and Marquez, perhaps the greatest rider of the generation, is now also on a Ducati, albeit a year-old bike. By winning the first grand prix of the year at the Losail International Circuit, Bagnaia issued a clear statement to his rivals both within and outside Ducati that dethroning him is going to be a lot harder than they had anticipated.

The Italian didn't start the business part of the Qatar weekend on the right foot, with chattering issues on his GP24 leaving him a distant fourth in the sprint, while Martin led from start to finish to take a convincing win on his Pramac Ducati. But much like his second title-winning campaign in 2023, Bagnaia was able to turn his fortunes around overnight to take the top spot when it mattered the most.

From the middle of the second row, Bagnaia made a brilliant launch in the GP to immediately put himself behind polesitter



Martin. Going into Turn 4, he launched an attack on the inside of the Spaniard, picking him off with ease to snatch the lead.

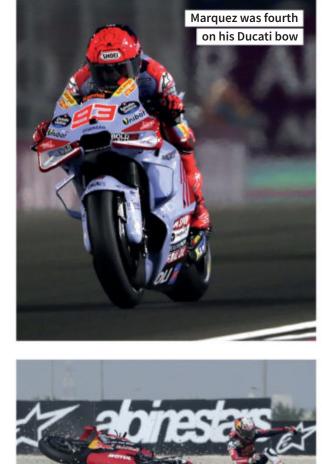
Martin and KTM rider Brad Binder didn't let Bagnaia escape during the opening salvo, but their intense duel eventually gave the factory Ducati rider the breathing space he needed to manage his tyres. Within 10 laps he was already a second clear of the chasing pack, and he eventually took the chequered flag with an even bigger margin to start his title defence in the best way possible.

A mistake from Martin at Turn 1 on lap 11 allowed Binder through into second, the South African keeping KTM in the mix with the Ducatis after a pre-season in which the Italian manufacturer was head and shoulders clear of the field.

Given how much attention Tech3 KTM rider Acosta and Gresini Ducati new 'boy' Marquez attracted in Qatar, it was only fitting that they were involved in a scrap for supremacy for much of the race. Acosta started eighth on his KTM, and steadily made his way through the field to put himself right on the rear of fourth-placed Marquez, who was still getting accustomed to the Ducati after 11 years with Honda. On the 12th lap, Acosta made a bold pass on Marquez into Turn 1 to move himself onto the cusp of a podium finish. The reigning Moto2 champion eventually dropped to ninth, reporting a significant drop-off on his tyres in the latter stages, but it was still a promising debut for the 19-year-old as he justified the hype around his step up to the premier class.

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Acosta recovered from this Saturday spill

With Acosta running wide at Turn 4 before plummeting further down the order, Marquez consolidated fourth position to lay a solid foundation to his post-Honda career. His younger brother Alex finished two positions behind in sixth on the sister Gresini bike following a battle with the factory Ducati of Bastianini. Seventh place went to VR46 Ducati rider Fabio di Giannantonio, while eighth was the best Aleix Espargaro could achieve on the Aprilia after a podium in the sprint had given him confidence of challenging for victory in the full-distance contest. Maverick Vinales completed the top 10 on the other heavily upgraded Aprilia, behind Acosta.

Despite all the progress Honda and Yamaha made over the winter, they were left to squabble in what has been described by some as a second-tier 'Japanese Cup'. Fabio Quartararo dragged his Yamaha to 11th, just ahead of the Hondas of Johann Zarco (LCR) and Joan Mir. Alex Rins and Luca Marini, making their respective debuts with Yamaha and Honda, couldn't even break inside the points, with Rins finishing 16th and Marini 20th. The GP was shortened to 21 laps after Raul Fernandez developed a technical issue on his 2023-spec Trackhouse Aprilia and had to push the bike to the pitlane after a long debate with the track officials. It wasn't an ideal start for the American team, but stablemate Miguel Oliveira was able to bag a point for 15th after overcoming a penalty that he carried from last season. **RACHIT THUKRAL**

RESULTS ROUND 1/21, LOSAIL (QAT), 10 MARCH (21 LAPS – 70.203 MILES)

POS	RIDER	TEAM	TIME
1	Francesco Bagnaia (ITA)	Ducati	39m34.869s
2	Brad Binder (ZAF)	KTM	+1.329s
3	Jorge Martin (ESP)	Pramac Ducati	+1.933s
4	Marc Marquez (ESP)	GresiniDucati	+3.429s
5	Enea Bastianini (ITA)	Ducati	+5.153s
6	Alex Marquez (ESP)	GresiniDucati	+6.791s
7	Fabio Di Giannantonio (ITA)	VR46 Ducati	+9.161s
8	Aleix Espargaro (ESP)	Aprilia	+11.242s
9	Pedro Acosta (ESP)	Tech3 KTM	+11.595s
10	Maverick Vinales (ESP)	Aprilia	+13.197s
11	Fabio Quartararo (FRA)	Yamaha	+17.701s
12	Johann Zarco (FRA)	LCRHonda	+18.075s
13	Joan Mir (ESP)	Honda	+18.437s
14	Marco Bezzecchi (ITA)	VR46 Ducati	+19.194s
15	Miguel Oliveira (PRT)	Trackhouse Aprilia	+20.717s
16	Alex Rins (ESP)	Yamaha	+24.093s
17	Augusto Fernandez (ESP)	Tech3KTM	+24.106s
18	Franco Morbidelli (ITA)	Pramac Ducati	+24.641s
19	Takaaki Nakagami (JPN)	LCRHonda	+25.556s
20	Luca Marini (ITA)	Honda	+42.422s
21	Jack Miller (AUS)	KTM	+42.761s
R	Raul Fernandez (ESP)	Trackhouse Aprilia	17 laps-tyres

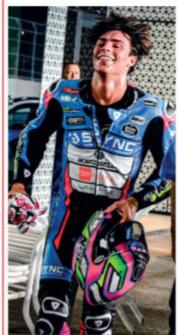
WEEKEND WINNERS

MOTO2 Alonso Lopez (below) SpeedUp

(Boscoscuro)

MOTO3

David Alonso Aspar Team (CFMoto)



Winner's average speed 106.418mph. Fastest lap Acosta 1m52.657s, 106.826mph.

QUALIFYING 21 Martin **1m50.789s**; 2 **Espargaro** 1m50.872s; 3 **Bastianini** 1m50.875s; 4 **Binder** 1m50.913s; 5 **Bagnaia** 1m50.928s; 6 **M Marquez** 1m50.961s; 7 **Di Giannantonio** 1m51.019s; 8 **Acosta** 1m51.130s; 9 **A Marquez** 1m51.266s; 10 **Vinales** 1m51.306s; 11 **Miller** 1m51.340s; 12 **R Fernandez** 1m51.521s.

QUALIFYING 1 R Fernandez 1m51.436s; **Miller** 1m51.526s; 13 **Zarco** 1m51.537s; 14 **Oliveira** 1m51.565s; 15 **Bezzecchi** 1m51.864s; 16 **Quartararo** 1m51.918s; 17 **Mir** 1m52.026s; 18 **A Fernandez** 1m52.204s; 19 **Nakagami** 1m52.228s; 20 **Rins** 1m52.327s; 21 **Marini** 1m52.952s; 22 **Morbidelli** 1m52.980s.

SPRINT RACE (11 LAPS - 36.773 MILES)

1 Martin 20m41.287s; 2 Binder +0.548s; 3 Espargaro +0.729s; 4 Bagnaia +1.625s; 5 M Marquez +1.872s; 6 Bastianini +2.322s; 7 A Marquez +3.154s; 8 Acosta +4.431s; 9 Vinales +6.738s; 10 Miller +12.670s; 11 Bezzecchi +12.835s; 12 Quartararo +12.863s; 13 Oliveira +13.095s; 14 R Fernandez +13.795s; 15 Mir +14.096s; 16 Zarco +14.840s; 17 Rins +15.629s; 18 A Fernandez +17.711s; 19 Nakagami +22.733s; 20 Morbidelli +23.267s; 21 Marini +25.553s; R Di Giannantonio 2 laps-accident.

Winner's average speed 106.648 mph. Fastest lap M Marquez 1m52.040s, 107.414 mph.

RIDERS' CHAMPIONSHIP 1 Bagnaia 31;2 Binder 29;3 Martin 28;4 M Marquez 18;5 Bastianini 15;6 Espargaro 15; 7 A Marquez 13;8 Di Giannantonio 9;9 Acosta 9;10 Vinales 7.

CONSTRUCTORS' CHAMPIONSHIP 1 Ducati 37;2 KTM 29;3 Aprilia 15;4 Yamaha 5;5 Honda 4.



Gow had 32-car fields a few years ago in the BTCC, but that was too much. He said so at the time



BTCC

WHEN FEWER CAN MEAN MORE

BTCC boss Alan Gow has got his long-time wish for a more compact BTCC field, even if he'd have preferred it not to drop off over one winter. And that's not necessarily a bad thing, he argues. Time to look ahead to 2024 - and the future

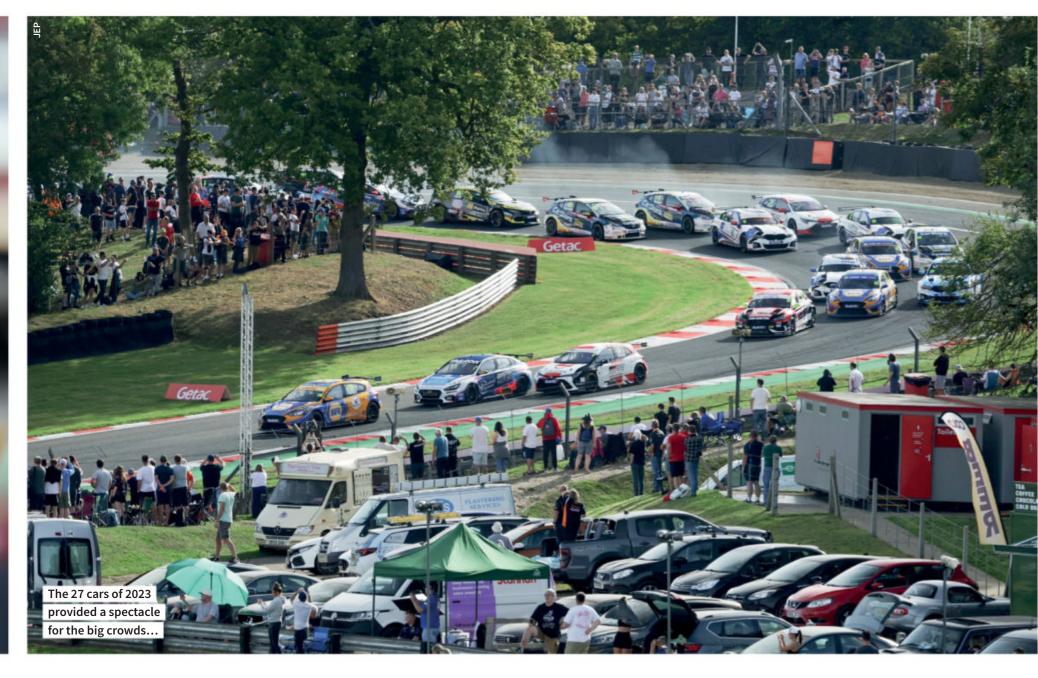
MARCUS SIMMONS

f course the British Touring Car Championship has weathered storms over its existence. That's inevitable, given it's been going for 66 years. Think about some of the dire fields of the mid-1980s in Group A days; or the early 2000s when Octagon Motorsport took over the running of the series after buying out organising body TOCA, and the new BTC Touring era kicked off with eight cars on the grid at the 2001 opener. By comparison with that, what's happened during the 2023-24 off-season has been more a passing shower than full-on thunder and lightning. From the 27 cars that fought out the BTCC in 2023, nine were lost for 2024 in the forms of Team Hard (six) and One Motorsport (three). But, thanks to the emergence of new team Restart Racing, an extra entry at Speedworks Motorsport, plus the phoenix-like rising from the ashes of Hard after all with a recently announced duo, the field stands at 23 – with the possibility of one more. Whichever way you look at it, that's hardly a crisis. "For the last six years or so, I've said plenty of times on the record to people that ideally we should reduce it to around 24 cars for a number of very good reasons, although obviously I would have preferred it to be more gradual rather than to happen over one off-season," reflects TOCA chief Alan Gow, who returned to the BTCC helm in 2003 after the ill-fated Octagon era. "But be that as it may, we're going to be around about that number, and that's the right number as far as I'm concerned. That goes for a lot of things - practicality reasons, all fitting in garages when you go to somewhere like Oulton Park and all that, but also it's quality over quantity. That's why Formula 1 don't increase their grid to 30 cars. Even V8 Supercars – what do they have, 24 cars [he's bang on]?" Bumper grids are a double-edged sword. It may not have been touring cars, but the old Formula 3 European Championship is a good illustration. Back in 2015, the Max Verstappen effect exploded entries to around 35 cars, before it shrunk to 20-odd in 2016 and got killed off by the FIA at the end of 2018, by which time the regular grid was 23 or 24. But the 2015 season was the worst in the series' history, because driving standards were so poor on the crowded tracks, and safety cars and red flags abounded. The 2017-18 seasons, with fields in the low-twenties, were superb.

BICC

Alon Gou







"WHEN YOU GO TO KNOCKHILL OR BRANDS INDY, CAN YOU IMAGINE 32 CARS IN QUALIFYING AROUND THERE?"

been back-pedalling, hoping for natural 'wastage' (such as we've seen this winter) to cull a few from the grid for the reasons he's outlined. With that in mind, will he have a maximum TBL figure for the future? "I will," he agrees, "and all the team owners always wanted the number to be lower, but it's the old story: 'please lower the grid numbers but don't lower mine'. It's a decision we can take for next year onwards as to what we'll set the maximum grid number at, and I think it'll be 24-ish.

"Even commercially, it's better for all the teams. It just works for everyone. The big loser out of it, when you consider how much we're missing as far as revenue goes on registration fees, is for me to want to reduce it to 24 sounds like I'm self-harming, because I'm purposely bringing down our revenue, but you do it for the best interests of the championship, not for my revenue, otherwise I'd keep it at 32." How much is the registration fee then? "About £30,000 per car. Cheaper than British GT! The registration fee has never been an issue, because it's actually really good value for money when you consider."

The big beast when you talk to many in the BTCC paddock is the cost of the hybrid system, introduced for 2022. It's been partially responsible for budgets being raised, making it harder for some deserving drivers to secure a seat. The NGTC ruleset under which the BTCC runs stipulates five-year contracts for all control-parts supplies so, like it or not, the Cosworth-supplied hybrid is with us until the end of 2026. For 2027, there'll be a new ruleset. Bearing in mind the World Rally Championship recently ditched hybrid from its premier Rally1 class for 2025, what's the thinking in BTCC-land? "That's a decision we'll make," says Gow. "We're in discussions now with the teams on the new regulations, planning on what it looks like. I'm not wedded to anything for 2027, whether we decide hybrid is a good thing to have and it might come down in price or whatever. Certainly the only thing I can tell you is we won't be going EV. Whether we have hybrid or non-hybrid, or greater hybrid or lesser hybrid, that's all to play for. A lot of it will also depend on what else we do with synthetic fuels and everything else." Regardless of the cost of hybrid, one of its biggest effects has »

Gow isn't really a single-seater man, but can relate it to tin-tops. "When you go to Knockhill or Brands Indy, can you imagine 32 cars in qualifying around there?" he asks. "It's a nightmare and there are more things to go wrong, ie cars in gravel traps and everything else. Now if we end up with a greater ratio of quality over quantity, then that's absolutely achieved our aims. Job done. "Also, if we're at 23 – I don't know what the number will be [for 2024] – there's latitude for another team to come in next year, because when all the TBLs were full up no one could come in unless they bought a team and bought cars." The TBLs, effectively a licence issued by TOCA to run a car in the BTCC, were introduced in 2014, initially with 30 of them. Later that decade, Gow allowed a swelling to 32, but has since



been to reintroduce a purity to competition that the BTCC had been lacking during the era when ballast was used to penalise successful drivers. The 2018 season featured a record 17 different winners, from which you could only deduce that there was little kudos from taking a BTCC race victory. Up to and including 2021, if you turned up at your local track and were a fan of a particular title contender, and he was driving a lazy, heavy old tank around in 19th place because he had 75kg of ballast, then that wasn't really a good look. Over 2022-23, however, there have been complaints that the restrictions on hybrid use that replaced success ballast have not gone far enough, leading to processional racing at the front. That's why new sporting regulations for 2024 effectively double the power boost from hybrid and turbo when deployed.

"What I would say to you is wait until you see what happens this year," enthuses Gow. "You're now looking at the thick end of 80 horsepower at the push of a button. Things are going to be very different. If you speak to those drivers that tested it in September at Snetterton – we took three top drivers and teams [Ash Sutton/ Motorbase Ford, Tom Ingram/Excelr8 Hyundai and Colin Turkington/WSR BMW) out there and they tested it and came back saying, 'Woah, this is going to make a difference'. I think you need to look at how it works out this year, and then come back to me and say you don't like it.

"Ballast was just a blunt instrument – it really was. Our problem with the hybrid is that the first year we obviously had some reliability issues, and it was a year of learning, and we didn't get everything right. The second year, last year, we hardly had any reliability issues. So now we could understand what we'd increase and how we'd do it. This is the year when it will actually show its true worth."

Hybrid, then, is on the table for 2027 onwards. But what will the next generation of BTCC car look like? Probably not *much* different to the existing NGTC machinery. And there could even be a carryover of pre-2027 cars into the new era. "That's certainly the aim, to make as many of the current cars as possible viable for an update," asserts Gow.

"I don't even know why we still call it NGTC – that was only a working title for a new set of regulations," he mutters. "We have







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"IF YOU WANT TO RUN A RANGE ROVER EVOQUE, YOU CAN. OUR REGULATIONS DON'T SAY IT HAS TO BE A SALOON CAR"

a working group with all the teams, and it's called a New Regulation Working Group – very snappy bloody title! – and that's what we're going through now, working out what the new regulations look like and what'll they consist of. Everything's up in the air.

"There's nothing wrong with the current regulations. You'd look at what you can do to make them better, more cost-effective, all this sort of stuff. Every team owner is involved in the NRWG, and it's exactly the same process that we went through when we came up with NGTC. We'd get to a stage where we work out the framework of what the technical regulations will look like, and then you have some more focused technical groups [that'll be the, erm, Technical Working Group then] to get down to the nitty gritty on those sort of details. But at the moment we're just doing the framework of what the cars will consist of."

Gow gets animated when asked whether the net might be broadened from what currently pass as touring cars – ie your states. "And why would we change it, because it allows you to do so many things? That's why we've had such a big variety of cars racing under it. Besides, they've all invested their money into that. And then you would start to look at how you can make it a little bit more cost-effective, a little bit easier to work on in some areas, just all the lessons you've had from the last 10 years [of NGTC] to make them better."

Both front and rear-wheel-drive machinery will remain eligible, adds Gow. "That's still in the workings," he says. "It's quite funny. Remember how the teams used to moan a couple of years ago saying the rear-wheel drive's so much better? It was just people sounding off when Dick [Bennetts, WSR BMW chief] was having his purple patch, and now people don't say anything about the rear-wheel-drive advantage [after the Motorbase/ Alliance Ford Focus steamroller of 2023]. Funny, that."

So, TOCA is working with the teams on the new regulations, but the crucial thing here is TOCA itself remaining in situ to run the BTCC from 2027, and that's in the power of governing body Motorsport UK. "All of our contracts come up at the same time – ITV as well," points out Gow. "And that's three years away, the end of 2026. We're still a long way away from those contracts ending, so I think it's a bit early to be talking about those."

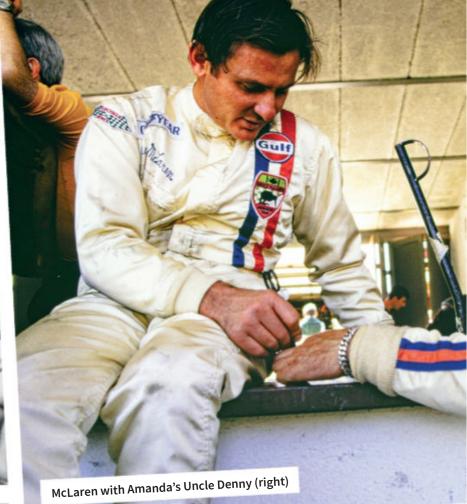
saloon and hatchback staple diet. After all, aesthetically unpleasing as they tend to be, SUVs scoff up a large percentage of the new-car market. "You can do that now – this is the part I don't bloody get," he says. "If you want to go and run a Range Rover Evoque, you can. We don't say in our regulations it has to be a saloon car. We have the minimum dimensions of the car, and we have the subframes you can bolt on – you can make a BTCC car out of SUVs and crossovers. If a team or a manufacturer wants to introduce that, bring it on. That's exactly why these regulations were designed the way they were."

The teams, asserts Gow, are "all 100% behind" continuing with the current philosophy of spec front and rear subframes, currently supplied by RML, onto which the race car can be bolted. "The basic architecture they're very happy to continue on with," he Yes, but the announcement of TOCA staying on for 2022-26 came in July 2019. Keeping to the same lead time as then gives you... four months. "Then I'd better get a wiggle on! Honestly it's not something I'm concentrating on now."

There'll be plenty of people saying there's no reason to change... "That would be my attitude as well. I can't imagine why anyone would not want to continue to have us run the BTCC. We've got the runs on the board."

Ah, the cricketing analogy betrays the Australian. But we're Brits, we like talking about the climate. Not everyone agrees with Gow – "Do you think I should retire?" the 68-year-old asks, tongue in cheek – but, with him at the helm, those BTCC storms have tended to be averted before they've struck land. The series has stayed strong, but it does need weatherproofing for the future. **#**





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FAMILY LEGACY



GROWING UP FAST AMANDA MCLAREN

Last year McLaren celebrated its 60th birthday and Autosport enjoyed a special track test. But there's also a more personal, family story to be told...

STEVE HINDLE

PICTURES AMANDA MCLAREN AND

uesday, 2 June 1970 should have been like any other day; it was warm and sunny outside, a little girl played happily while her mother made plans for the evening. Her father had left home for work early but would be returning early too, allowing time to change before all three travelled to a friends' house

for dinner: the phone call that followed changed everything. Amanda McLaren was just four years old when her father Bruce died in a testing accident at Goodwood. She remembers very little of that day, other than leaving the family's Burwood

Park home to still visit friends (as had been planned), and being given a new doll set, which surprised her, since it was neither her birthday, nor Christmas.

Now, more than 50 years on, she's happily settled in New Zealand with husband Stephen, and busy representing the brand (as an ambassador) that her father started, together with keeping his legacy alive with work through the Bruce McLaren Trust, of which both she and Stephen are trustees.

"I was shielded from the events of that day... but it was so different then," she says. "Children were only told what they needed to know, and my mother decided that my life should continue just as it was for as long as possible.

"I didn't go to dad's funeral [in New Zealand], nor to the memorial service at St Paul's. I don't even think I knew he was dead. I knew that something was wrong, but I was so used to him being away that it simply didn't click. On the other hand, it affected mum profoundly. She not only lost dad but also the unborn child she was carrying. She was traumatised, and effectively lost a year of her own life in the process."

Being so far from her family while attempting to provide stability

after they'd gone, there were no plans to make for the next trip to Kyalami or Monaco, and for mum, no dinner dances or photo shoots. Neither was there any income coming into the house. McLaren then was neither a Ferrari nor a Lotus; it was just a few hard-working men, dedicated to my father."

It's a testament to Patty McLaren that she toiled to not only secure a future for what would become one of the greatest of all motor racing teams, but also devoted herself to raising Amanda while continuing her work with the Women's Motor Racing Associates Club (otherwise known as 'the Doghouse Club'), a charitable cause, founded by drivers' wives, to support those within racing who had succumbed to misfortune.

"Mum always put her best foot forward," continues Amanda. "She and Bette Hill thrived on helping others and I'm immensely proud that all these years later, I'm now a patron of the organisation that not only helped us immediately after dad's accident, but also gave mum a mission once I started to do my own things."

Having lost her father at such an early age, Amanda's defining influence was Patty. And it's equally clear that Amanda's earliest memories of the race team do not rest entirely easily with her:

"I knew that something was wrong, but I was so used to him being away that it simply didn't click"

"Just because mum wasn't an engineer, it doesn't mean that she didn't understand the elements and challenges of running a successful motor racing business. She'd been by dad's side for the entirety of the company's existence and was completely tuned in to the requirements of both the Can-Am and Formula 1 sides of the team; and of course, she was equally aware of what he was trying to achieve in taking our race car successes to develop a production car offshoot as well." Years later though, Patty was convinced to sell her shares. It didn't sit well with her, but she was told that it was the only option if McLaren was to continue. She'd lost her husband, and she now believed she was being asked to lose the family name too. The gradual distancing between family and team, despite Patty's tenure, meant that motorsport didn't figure much for Amanda McLaren, at least not until 1976 when, aged 10, she found herself at Brands Hatch as witness to one of the most »

for Amanda, and with the added demands of being a director of Bruce McLaren Motor Racing Limited (which included trying to provide much needed emotional support for 'her boys' in the race team), it's little wonder that Patty McLaren struggled to find a way through her grief. Our conversation doesn't dwell on the darkness of these times, yet it's clear they had a profound effect on Amanda too. She would soon be diagnosed with type 1 diabetes, a condition that we now know can manifest in children suffering distress.

"I think people just assumed that being the family of a worldfamous racing driver, mum and I led a privileged life," she adds. "It's fair to say that while dad was alive, we did, but as soon as he passed, everything changed. We had a lot of support from family friends. The Hulmes, Hills and Stewarts were frequent visitors, and while the adults talked, we children would play noisily. But







extraordinary British Grands Prix ever.

"I'd been to Brands before but I'd never taken much interest in the racing, preferring instead to jump an imaginary horse around the spectator areas of the Grand Prix loop, but all that changed in 1976 when mum took me to work," she recalls. "Suddenly, there I was, face to face with James Hunt. I had a poster of him on my bedroom wall, as did many of my friends; not because he was a racing driver, but because he was bloody gorgeous!

"It was memorable too for the chaos that followed the firstcorner crash that initially saw James excluded from the restart. The atmosphere was electric, and when I told my friends at school the next day, they all wanted to know how it had come about. I explained that he drove for the team that my father had started. It was then that I realised that I knew little else. From that moment, I had to learn more, so at home I looked through mum's collection of magazines and the books on the shelf, and that's when it clicked... Uncles Denny, Jackie and Graham [Hill, who had died the previous year], weren't just good friends, they were among the greatest of world champions.

"And of course, there were books and magazine articles about dad too. I'd known he'd been a racing driver, but the depth of

"So many people think that McLaren is still a family business, and that I'm the beneficiary of vast profits"

his achievements – overcoming his illness, travelling across the world to become the youngest winner of a grand prix, to building his own cars, winning Le Mans, and achieving so much against the most formidable competition - was overwhelming, especially when I was then able to talk to my 'uncles' about him." Despite her heritage, there was nothing unusual about the girl who became a teenager. She loved music, fashion, boys and horses; disliked sport, and wasn't all that keen (then) on science. "By the time of my exams, Ron Dennis was in charge of the business," she continues. "Being at an all-girls' school, back in those days, there was never any talk of engineering as a career, so the thought of me joining McLaren didn't enter anyone's head. "Instead, school gave us five basic options. You could become a doctor, or a vet; train as a nurse, join the police, or become a teacher. It was nursing for me. I'd spent a lot of time in hospital with my diabetes and I saw what a difference nurses can make.

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I was also quite fortunate that advances in medical technologies were gathering pace and, as my career progressed, I was able to not only specialise in anaesthetics and resuscitation but go on to train others in the use of defibrillators and ventilators."

It's a story that defines generations. When Patty McLaren accompanied Bruce to race weekends, the only women in or around the pitlane were the wives and girlfriends, tasked with timing, and supporting each other when things went wrong. Subsequently, we slowly witnessed the introduction of women into minor professional roles, but little else. Thankfully, the 21st century is making amends, but it's telling that had Amanda McLaren been male, this story might well have been very different. Yet to her credit, and to Mike Flewitt's (then CEO of McLaren Automotive), in 2014 Amanda and her husband Stephen were appointed as brand ambassadors to the now supercar manufacturer. It's a role that both embraced, while for McLaren it provided that most valuable of missing links – heritage.

Working with McLaren meant that just as her father had before her, Amanda (with Stephen) moved back to the UK from New Zealand. For nearly eight years, they greeted and hosted at Woking, and travelled the world to tell the story of a remarkable young man and the cars he inspires today. But now, they're finally back home, thinking about retirement, yet knowing that their days and nights are going to be as busy as ever.

Founded in 1997, the Bruce McLaren Trust was established to not only recognise Bruce's achievements and those of his cohorts, but also to assist emerging young drivers and engineers to achieve their potential. As Trustees, Amanda's and Stephen's focus is now on delivering its scholarships (with placements at McLaren), as well as preparing a new home for the Trust's collection.

"You'd be amazed at just how many people think that McLaren

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is still a family business, and that I'm the beneficiary of vast profits," she says. "I was a nurse, and I drove an old VW Beetle. Why is this important? Because all of McLaren's current and historic intellectual property belongs to McLaren Group, and so we're incredibly honoured that Zak Brown has joined the Trust as a patron, and that together with support from Michael Leiters [CEO of Automotive], we've been granted use of the original Kiwi logo, as well as being endorsed and recognised for our work by the Group. "Although I enjoy driving fast cars, I never wanted to race; and while I found a love of science and engineering through nursing, I was able to use this in the most rewarding ways. And now I'm finally able to represent both my parents, and all they achieved. I know that I can trust McLaren to deliver dad's vision, and it's a great privilege that McLaren trusts us to care for some of its past." *#*



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- Gearbox rebuilds

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- Create and release accurate models and drawings to Radical standards and processes
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New Retro GT4 series planned for older sportscars

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We pick out the UK meetings and contests we're most looking forward to in 2024







Latest Clio Cup car hits the track The highlights of the Phillip Island Classic Gamble, Burns in Century's Porsche line-up

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Gamble and Burns join Century for Porsche bid

PORSCHE CARRERA CUP GB

George Gamble has become the latest British Touring Car race winner to announce a return to the Porsche Carrera Cup GB for this year, where he will join 2021 British GT4 champion Will Burns in Century Motorsport's line-up.

Fellow BTCC victors Dan Lloyd and Stephen Jelley have already revealed plans to make Carrera Cup comebacks this season and they will now be joined by Gamble, who endured a frustrating tin-top campaign in a Speedworks Motorsport Toyota last year. Gamble only managed a best result of eighth, having starred in his rookie BTCC season in a Ciceley Motorsport BMW the previous year, when he scored a podium at his debut weekend.

Gamble is now returning to more familiar rear-wheel-drive machinery, having finished third in the Carrera Cup points back in 2019, and described his

"Last year, I didn't have the best year - I had a lot of breakdowns and was trying to get to grips with front-wheel drive," he said. "It was hard to get any momentum going.

"I really wanted to get back into rear-wheel drive and this fitted well. I'm looking forward to the challenge. The Porsches are so close and the calendar is great-it's a fantastic championship and I had two really good years in it."

However, Gamble has not ruled out competing in the BTCC again in the future. "It didn't really work for me this year and I've had a good couple of years in the championship, so who knows," he added. "[Dan] Cammish came back to the Carrera Cup and had a good year [he won a third Porsche title in 2021 before then sealing a competitive BTCC return the next season] so we'll see what the future holds."

Burns, meanwhile, spent last season on the sidelines - the 2020 Ginetta GT4

BREAKELL'S CAYMAN CREW

Breakell Racing has revealed a two-car entry in this year's Porsche Sprint Challenge GB. The squad will continue to run Reece Somerfield as he swaps to the new RS version of the Cayman for this season and he will be joined by fellow former Ginetta racer Karim Sekkat, who switches to Porsche competition from the GT5 Challenge.

ARMED FORCES COVENANT

Motorsport UK has signed the Armed Forces Covenant, an agreement that means it will ensure that veterans and their families will be treated with respect and fairness. The governing body has supported numerous military organisations in motorsport in recent years, including the Armed Forces Rally Team, Royal Air Force Motor Sports Association and Mission Motorsport, which runs the annual Race of Remembrance event.

KNOCKHILL'S OFFSETTING

Knockhill is continuing its partnership with Carbon Positive Motorsport as it aims to 200% offset all of the emissions produced from the Knockhill Motor Sports Club's championships by 2026. To begin with, all of the mileage from the Scottish Legends series will be offset this year. Knockhill director of events Stuart Gray said this initiative is "just one part of a major sustainability programme for the circuit as a whole".

FEMALE PIONEERS TRIBUTE

This year's London to Brighton Veteran Car Run will celebrate the 120th anniversary of The Ladies' Automobile Club's first event. The organisation was initially formed in 1903 as women were excluded from existing motoring clubs and held its first event the following year (below) when 56 vehicles - including a mix of electric, steam and petrol-powered machinery - assembled at Pall Mall. Now this year's London to Brighton fixture on 3 November will

Porsche switch as a "reset".



Supercup conqueror having competed in both the UK and Europe in 2022 after his British GT success. He will now reunite with the Century squad that guided him to British GT4 honours as he makes his Carrera Cup debut. "I'm thrilled to be joining Rosland Gold by Century Motorsport this year," Burns said. "After a year out from racing it is great to be back with the team after our stint together in British GT." **STEPHEN LICKORISH**

commemorate those early pioneers as it follows part of that 1904 route.





RETRO GT4 CHALLENGE

A new four-round series for older GT4 machinery is being launched for this season.

The Retro GT4 Challenge is the idea of Vector Motorsport GT4 racer John Jackson and is being run in partnership with long-term GT4 team Stratton Motorsport.

The series of four 45-minute one or two-driver races will cater for GT4s built between 2008 and 2018 after Jackson found that these cars are no longer competitive against newer models.

"I own an Aston Martin GT4

(pictured), and myself and my son were racing in other series and we found we were either too fast or too slow," said Jackson about the current marketplace. He estimates that the older cars are around 1-1.5 seconds per lap slower than newer models.

"What we tried to find is a GT field that's even so anyone can turn up and have a shot at pole and [outright] wins. That's what it stems from. I know there's a lot of other guys with GT4s and spoke to quite a few people last year and Roger Bennington of Stratton Motorsport. What we decided to do is put on a test series this year of four rounds."

The Retro GT4 season is due to begin at Donington Park on 11 May, with further races taking place at Snetterton, Oulton Park and Brands Hatch. Each of these will feature all of the action on just the Saturday. "If we can get qualifying and the race done on Saturday, you can be back home with the family on Sunday and it keeps the costs sensible," added Jackson. "We're trying to form a community – we want hard, fair racing and will be very strict on driving standards."

Jackson said he has so far received over 30 expressions

of interest from potential drivers and is now working to ensure that as many as possible are on the inaugural Donington grid. Based on numbers achieved this year, plans for 2025 will then be developed.

He also said that a separate series for second-generation GT4s is being considered for the future as the class continues to evolve. "There's now a new generation coming out, so there's a lot of Gen2 cars going to be falling out of top-flight racing and being replaced by the new ones," Jackson added. **STEPHEN LICKORISH**

Prize fund of €30,000 up for grabs to leading female driver

GB4

The GB4 Championship is set to introduce a prize fund for the leading female driver this season in an effort to help them onto the F1 Academy grid in 2025. The €30,000 prize has been introduced by championship organiser MotorSport Vision in a bid to help young drivers make the jump into the all-female F1 support series. Megan Gilkes, Chloe Grant and Jessica Edgar, who each raced in GB4 in 2022, all moved into F1 Academy for 2023, with Edgar the only one of the trio

to remain in the series this term. MSV chief executive Jonathan Palmer said: "It is really exciting to have so many more females taking part in motor racing and particularly in single-seaters. There is real momentum gathering now, as witnessed by the commitment F1 has made with F1 Academy and the support Motorsport UK is giving to generate female participation." Currently, two female drivers have been confirmed as racing in GB4 this season, with Elite Motorsport set to run Alisha Palmowski, the Ginetta Junior Scholarship winner remaining with the



team after finishing fifth overall in the Junior series last year. Megan Bruce, meanwhile, has already been announced as racing with Fox Motorsport in 2024.



REYNARD DRIVES F3000 REYNARD Designer Adrian Reynard drove one of his own Formula 3000 machines at Donington Park last week – the Camel-liveried, ex-Eddie Jordan Racing 89D that took Jean Alesi to the 1989 title. "It was my first time ever driving an F3000 car, the opportunity just never arose before," Reynard said after stepping out of the Colin Sowter-owned car. Alesi was Reynard's second F3000 title winner, following Roberto Moreno, and from 1991-95 his machines proved unbeatable, with Christian Fittipaldi, Luca Badoer, Olivier Panis, Jean-Christophe Boullion and Vincenzo Sospiri taking titles. **Photographs by Peter Scherer**

Ugochukwu to contest partial GB3 campaign with Rodin in 2024

GB3

McLaren Formula 1 young driver Ugo Ugochukwu will race in a partial GB3 Championship campaign with Rodin Motorsport this season.

The 16-year-old American finished third overall in his rookie season of British F4 in 2022 with the team, then known as Carlin, before winning the Euro 4 title and finishing runner-up in Italian F4 last term.

It is expected that Ugochukwu will contest four GB3 events in 2024, including the Oulton Park season opener at the end of this month, the Silverstone visits in April and July, and the trip to Spa in June. His priority is the Formula Regional European Championship by Alpine with Prema Racing.

"I'm very pleased to be racing in the GB3 Championship with a team as prestigious as Rodin Motorsport," said Ugochukwu.

"I am honoured that with the continued support of the McLaren Driver Development Programme I have been given the opportunity to race in such a great championship in the UK."



RACING RETURN FOR SHANLY

Double National Supersports champion Stephen Shanly is planning a comeback to UK circuits after a 19-year absence with outings in the Radical Cup. Shanly, a former Atlantic rower, won Supersports titles in 2003 and 2004, before taking sixth place the following year in the Porsche Carrera Cup GB. "I hadn't raced for years but did a trackday with a friend, did a round of last year's Radical Gulf Cup and bought a classic Lotus Elan, and realised how much I was missing it," he said.

AIRIKKALA EYES UP GB4

Flame Airikkala, grand-daughter of rally legend Pentti, has tested a Tatuus F4-T014 used in the GB4 Championship at Silverstone and Donington Park recently as she considers her options for 2024. "This has been a great experience and so different to anything I had ever driven before," said Airikkala, who raced in Fiesta Junior last season.

FIESTA JUNIOR DRIVERS

The Wera Alliance Racing Academy will return to the British Racing & Sports Car Club's Fiesta Junior Championship, running two cars in 2024. Jenson Mason remains in the series but moves into a Mk7 Fiesta, and he will be joined by two-time karting champion Alfie Garford. "I loved every second of last year!" said Mason, who finished 2023 in ninth overall and fifth in the Mk6 class. "I learned so much and made good progress. I can't wait to get back out on track this year."

RIDGWAY TRIES GT3 AUDI

Formula Ford 2000 stalwart Graham Ridgway had the chance to try something different when he got behind the wheel of an Audi R8 LMS GT3 Evo II during a test day at Silverstone last week. The Audi (below), run by the Steller Motorsport squad that will return to British GT this season, was the fastest race car that Ridgway has sampled

and he was 'enamoured' with the idea of taking up endurance racing.



JACKSON TO RACE Rebuilt FF1600 Car In Super Classic

SUPER CLASSIC FF1600

Cam Jackson is set to race his rebuilt Winkelmann WDF2 Formula Ford in the opening round of the Super Classic FF1600 championship at Silverstone this weekend.

The car, which took Jackson to the third of his Historic Formula Ford championships in 2021, was badly damaged at the 2022 Silverstone International Trophy when Jackson collided with a backmarker. It has now been thoroughly overhauled and even has a new red paint job.

The British Racing & Sports Car Club Super Classic series is a new venture for Jackson, who has also won Classic Formula Ford championships. He made some guest appearances in the 2023 Classic championship at the wheel of the Lola usually raced by Simon Toyne, and Simon Hadfield's Titan.

Jackson, who topped Autosport's National Driver Rankings in 2021, was one of 16 Super Classic FF1600 entries submitted for Silverstone as Autosport closed for press. The largest grids are set to be the Clubsport Trophy and Modified Ford fields, which both stand at over 40 cars. **RACHEL HARRIS-GARDINER** & STEPHEN LICKORISH



Fifth-generation Clio Cup car has first UK test with Griffiths

CLIO CUP GB

The latest, fifth-generation Renault Clio Cup car ran on track in the UK for the first time earlier this month, although the opening round of the new Clio Cup GB category has been pushed back.

Former Mini Challenge Trophy driver Ben Jenkins shook down LDR Performance Tuning's new Clio at MotorSport Vision Racing's launch day at Brands Hatch recently, after delays in the manufacture of the facelifted cars. LDR team boss Lawrence Davey said that first impressions of the car, which features a five-speed sequential stick-shift gearbox, were good. "The cars are really well built, they seem quite reliable and very easy to work with and set up," he said. "It was just bringing everything in and running the engine in and making sure there weren't any leaks. Ben really liked it – the steady laps he was doing, he said the car felt really good."

Davey added that he is in talks with a second driver and could soon be placing an order for another Clio. He is optimistic that, now the car has been seen, interest in the new MotorSport Vision Trackdaysrun series will grow.

Its first races had been set for Silverstone next month, but it will now begin at Brands in June to give teams and drivers more time to receive cars amid the delays. **STEPHEN LICKORISH**

Walker seals British GT move in Paddock McLaren Artura GT4



BRITISH GT

Former GB4 and National Formula Ford frontrunner Alex Walker is due to make his British GT debut this year in a Paddock Motorsport McLaren Artura GT4 as the series has revealed its 36-car entry list. Walker first made the switch from single-seaters last year, initially contesting the DTM-supporting BMW M2 Cup before a few GT Cup outings with Paddock later in the season. He will now pair up with former Ginetta racer Blake Angliss.

"It's been a step we've been trying to make

for a few years," said Walker, who will be reunited with his old FF1600 engineer this season. "I think it's come at a good time – I did a little bit of GT Cup last year so I have a bit of experience of this style of racing." He is relishing the opportunity to be part of a competitive field that includes four past GT4 title winners. "That's what I wanted – I like it when you know, if you're at the front, you deserve to be there," added Walker.

Another Artura on the GT4 grid will be the Race Lab machine piloted by Ginetta GT runner-up Callum Davies and former MRF 2000 champion Sai Sanjay. Race Lab will also again run a GT3 McLaren for Euan Hankey and Lucky Khera, who finished 15th in last year's standings, while Greystone GT will continue to field a Mercedes-AMG GT3 for Callum Macleod and Mike Price.

STEPHEN LICKORISH

Hales injured in Silverstone E-type testing crash

HISTORICS

Vastly experienced racer, journalist and driver coach Mark Hales is recovering in Oxford's John Radcliffe Hospital following a serious accident while testing Guy Grant's Jaguar E-type at Silverstone last Wednesday.

Hales sustained nine broken ribs and a cracked vertebra when the car left the circuit on the Wellington Straight approaching Brooklands. "The brake pedal [a forging] snapped and I had nothing to pump," said the 74-year-old.

"Somehow, I managed to spin it before hitting the barrier. It was a mighty whack, but fortunately the impact was on the passenger side. Had it been my side or head-on, we might not have been having this conversation."

Hales, who has coached Grant in his TVR



Grantura and the E-type over the past two years, said the big disappointment was that the test had been positive prior to that point. "The preparer had made some changes to the Jaguar and I felt we were making progress," he said.

Despite the incident, Hales – who started club racing in 1974 – remains undaunted. He praised the Radcliffe Hospital staff for their "fantastic care", and is determined to complete 50 years of competition this season. "I still love racing and don't want to stop yet," he added. MARCUS PYE

More cars set to join the HSCC's Modsports and Special Saloons

MODSPORTS/SPECIAL SALOONS

Registrations are building for the Historic Sports Car Club's Historic Modsports and Special Saloons category ahead of next month's Snetterton season-opener.

Joining the period cars of Joe Ward (Baby Bertha), Andy Wilson (DAF V8) and Tony Davies (Vauxhall Firenza), Andy Willis's Ford V8-powered Austin A302 and Craig Percy's Morris Minor-Chevrolet are expected to be in the thick of the slugfest.

Series chairman Steve Watton will race his Turner Evo until his five-litre Rover P6 is ready, facing Myles Castaldini (Davrian-Ford) among the Modsports set. Matt Digby aims to join them and quick MG Midgets in father John's long-dormant Ginetta G4 twin-cam.

Meanwhile, Steve Barnard is confident of making Snetterton in his lock-up find Ford Escort Mk1-BDA. Ray Rowan's Delta-based Stiletto and Paul Knapton's Maguire version should ruffle feathers anew, as will John Pugsley, who breaks a long sabbatical in his Davrian. Pete Thurston's Citroen 2CV8 is also nearing completion (see Engineering supplement).

"Although the late cancellation of Race Retro reduced numbers, we had a very amicable social at which there was a lot of enthusiasm," said Watton. "It's growing organically, and a number of cars currently under preparation should swell grids as the season progresses." MARCUS PYE

MG GETS CENTRAL FEATURE

MG will celebrate its centenary year by taking over the central feature at this July's Goodwood Festival of Speed. This will be the first time the marque has headlined the event, with the Cyberster EV – which was debuted at the 2023 Festival – the highlight of Gerry Judah's sculpture. This year's theme is 'Horseless to Hybrid', recognising the technological leaps that have shaped motorsport over the past 130 years, and the Duke of Richmond believes MG "aligns perfectly" with this focus.

NOVA TO SUPPLY PETER AUTO

The new Nova Motorsport organisation, which will construct various tyres previously manufactured by Avon, will supply rubber to several of the historic categories run by Peter Auto. Nova will provide footwear for the Group C Racing series, alongside Peter Auto's two Classic Endurance Racing divisions for prototypes spanning the 1960s and 1970s, as well as its one-make 2.0L Cup contest for pre-1966 Porsche 911s.

SUPERKARTS PREPARE

The Superkarts had their first outing of the year at a soggy Silverstone test day last Sunday. The season starts on Good Friday at Donington Park with the opening rounds of the British Superkart Racing Club's Super Series. Further rounds are planned at Cadwell Park, Donington, Knockhill, Snetterton and Oulton Park. It is hoped that one of the events may feature the British Superkart Grand Prix. Terry Bateman of Superkarting-UK will also run his annual King of Cadwell event in May and regular club meetings at Darley Moor.

MAURER STARS IN OZ

Simon Gardiner's restored Formula 2 Maurer-BMW MM83 starred at Phillip Island last weekend (below). Gardiner, who has previously raced an ex-Eje Elgh/Keke Rosberg Chevron B42, bagged an impressive third



place in a field containing 18 F5000s. Despite Andrew McCarthy's best efforts, his ex-Beppe Gabbiani MM82 arrived unfinished. Teething problems meant minimal track time.









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Banks heads the way at Phillip Island Classic

PHILLIP ISLAND CLASSIC

New Zealander Codie Banks proved unbeatable in the big single-seater races – topped by the Formula 5000 Historic GP feature – at the Phillip Island Classic Festival of Motorsport last weekend.

One of 10 visiting Kiwis, Banks (Lola T332) beat father David (Talon MR1) in qualifying. Vince Holland (ex-Roberto Moreno F3000 Ralt RT21) upheld Aussie honour with second place in the first two races, finishing ahead of Todd Willing (ex-Francois Cevert March 722) and Tony Galbraith (T332) in the second encounter. Versatile local Bryan Sala (Matich A50/51) improved to sixth, between overseeing the Formula Vee exploits of sons Brenden and William.

Galbraith and Simon Gardiner (Maurer MM83) joined Banks Jr on race three's podium, with David Hardman a strong fourth in father Jim's AF2 car. After a three-car collision



stopped Sunday's first stanza, Banks Jr and Darcy Russell (Lola T330) topped the F5000 contest, chased by Aussies Frank Harris (VDS Chevron B24) and Peter Brennan (ex-Lella Lombardi T330). The smaller-capacity finale was won by West Australian Daniel Gate (Ralt RT4) from Malcolm Oastler (Ralt RT1).

In Group C&A Touring Cars, Jonathon Webb (Ford Sierra Cosworth) qualified top and claimed the first pair from Steven Richards in father Jim's Nissan Skyline GT3RS. Richards pipped invitee George Miedecke (Sierra) in race three, with Webb third. Miedecke then nabbed the final honours in another thriller with Webb.

Nicholas McBride (Swift) was untouchable in Historic Formula Ford despite the efforts of Andrew Reed, Richard Davison, Jonathan Miles and Andrew McInnes in Van Diemen RF89s. In the earlier period – where singleseaters and sportscars ran together – Nick Bennett stepped up to father Laurie's Elfintwin cam 600B and was unbeaten.

Holden Commodore drivers ruled the fivelitre Touring Car sprints, Bradley Neill (VE) setting best time in the opener, before Martin Wagg wound up his Eggleston Motorsport VF. **PETER ELLENBOGEN & MARCUS PYE**

Rolling starts boost for Equipe 50s and Pre '63



EQUIPE CLASSIC

Equipe Classic Racing organisers believe a switch from standing to rolling starts for the Equipe 50s and Pre '63 categories will boost entries this season.

The regulation change followed suggestions from drivers to avoid standing starts amid concerns that some of the machinery struggles to cope with the stress of these launches.

"A lot of those cars are difficult to get off the line and a lot of the 50s drivers don't like standing starts because the cars tend to break – they weren't designed for it," said ECR partner Rob Cull. "It may seem like a small change, but it's a big change in attitude from the drivers.

"We've got three new Lotus 11s that have come straight in. We should have three Lola Mk1s, and we've got three new [Jaguar] XK120s that have joined." **STEPHEN LICKORISH**



CLUB AUTOSPORT NATIONAL FOCUS



STEFAN MACKLEY

STEPHEN LICKORISH

MARCUS PYE

KEVIN TURNER

What we're looking forward to

The new club racing season begins this weekend, so here's a selection of events and contests that Autosport is eagerly awaiting in 2024

BEGINS 1 APRIL

🔻 An epic line-up in British GT

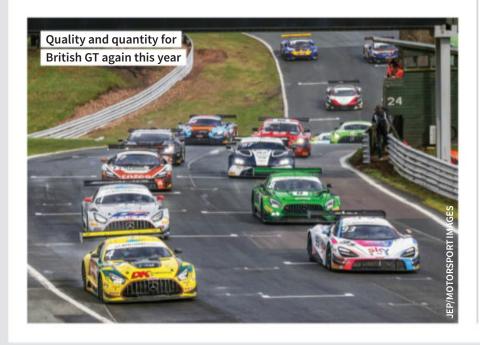
Returning champions, a plethora of factory drivers, and new machines to tame throughout a sell-out grid – the British GT Championship has all the ingredients to provide another thrilling year of action.

A total of 36 full-time entries – with further one-off additions likely – are due to take part in the nine-race, seven-round calendar, which gets under way at Oulton Park on 1 April before taking in the usual venues of Silverstone, Donington Park (x2), a return to Spa after a one-year absence, Snetterton, and the season finale at Brands Hatch.

Four-time champion Jonny Adam returns with fledgling team Blackthorn, father-and-son duo Rob and Ricky Collard team up at Barwell Motorsport, while Aston Martin Formula 1 ambassador Jessica Hawkins will make her debut at Beechdean.

BMW factory driver Raffaele Marciello remains with John Ferguson at RAM Racing for another year, and nearly-man Phil Keen returns at 2 Seas alongside 2022 GT3 champion Ian Loggie.

On the car front, the new Aston Martin Vantage GT3 is set to race in the championship as well as updated GT4 versions of the Ginetta G56, Ford Mustang and Vantage. With further live television exposure planned on Sky Sports F1 once again, possibly at as many as five events, the UK's top endurance category is going from strength to strength. **STEFAN MACKLEY**





13-14 APRIL/6-8 SEPTEMBER

🔺 Goodwood Members' Meeting & Revival

Goodwood Road Racing Club's events at the hallowed circuit need no introduction, but the three-day Revival in September – beloved of spectators since 1998 – and more relaxed Members' Meeting in April bring golden eras of the sport back to life with peerless panache.

This year's 81st MM is the 10th since the sequence of second-tier British Automobile Racing Club 'clubbies' run from 1949-66 resumed with the 72nd in 2014, COVID-19 having deferred 2020's by a year. The Sunday's double-driver Ken Miles Cup Ford Mustang race commemorates the 60th anniversary of the pony car's introduction and reminds us of Roy Pierpoint's and Jack Brabham's exploits in the rumbling 289ci V8s. The Derek Bell Cup Formula 3 race will be another anniversary highlight, 60 years after future triple F1 world champion Jackie Stewart tested Ken Tyrrell's Cooper-BMC impressively at Goodwood, then dominated the 1000cc category's inaugural season in 1964. Supplementing the racing action will be an awesome Can-Am cavalcade and a Sidecar Shootout. Alongside epic racing at the Revival, two of Ferrari's greatest heroes will be honoured in landmark years: John Surtees, who made history by adding the F1 crown to his seven world motorcycle championships in 1964; and Niki Lauda, who bagged two of his three F1 titles on Prancing Horses. The Austrian would have turned 75 last month.

MARCUS PYE

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NATIONAL FOCUS CLUB AUTOSPORT



8-9 **JUNE**

Ford vs Chevy race at American SpeedFest

Brands Hatch's American SpeedFest fixture is always a popular one. The combination of exciting EuroNASCAR, Legends and Pickups action on track and a wealth of American-themed displays off it ensures a bumper crowd. And there is a special race due to be on the timetable for this year's 11th edition.

The organisers of the eclectic Bernie's V8s series ran a special Corvette race last year to celebrate the American car's 70th birthday. This time around, they are celebrating the glory of American muscle cars more broadly with a Ford vs Chevy battle that encompasses the racing and a host of fan-voted categories as the two US car giants are pitted against each other.

Ford Mustangs and Chevrolet Camaros are likely to be the focus of the on-track battle, but organisers are targeting a range of other historic machinery to be part of the grid, including the likes of Ford Falcons and Corvettes. Let battle commence! **STEPHEN LICKORISH**

"Even we were taken aback by the enormous support that Super Touring Power garnered"

29-30 JUNE

🔻 Super Touring Power at Brands Hatch

The Super Touring era of the 1990s has always been a favourite at Autosport, but even we were taken aback by the enormous support that Brands Hatch's inaugural Super Touring Power event garnered last year. Not only were there scores of fans, lots of whom queued to get autographs from period heroes such as Alain Menu and Paul Radisich, but many of the era's stars and cars were there, both on and off-track.

Being a MotorSport Vision event, there were some great detail touches too, such as being able to play the original PlayStation *TOCA* games, and period music.

Expect the same again. Already confirmed are the Nissan Primeras that dominated last year, with current British Touring Car star Jake Hill and twice championship runner-up Anthony Reid again leading the charge. Jason Hughes will provide opposition with his ex-Jason Plato Vauxhall Vectra, as will Peugeot 406 and Honda Accord machinery, and there are bound to be plenty more tantalising announcements between now and June.

The tin-top extravaganza will provide plenty of racing, which this year will include two contests on the Sunday exclusively for the Group A cars that preceded Super Touring. So, fans of firebreathing Ford Sierra RS500s should also add this event to their 2024 diary. We already have. KEVIN TURNER



CLUB AUTOSPORT NATIONAL FOCUS

5-7 JULY

🕨 Santa Pod Dragstalgia

Born in the USA, the ground-shaking discipline of drag racing has been a highly specialised part of British motorsport since the fabled dragfests of the early 1960s. State-of-the-art nitroburning cars have become so fast that their courses have been trimmed from a standing start quarter-mile to 1000 feet – attend Santa Pod Raceway's FIA European Championship opener on 24-27 May or finale on 5-8 September for a chance to see 3.7-second 320mph action – but the appetite for older machinery is huge.

Dragstalgia, at the home of British drag racing in July, is an encyclopaedia of straight-lining history, showcasing extraordinary cars and motorcycles spanning the 1960s, 1970s and 1980s. The quickest quarter-milers are still capable of 200mph terminal velocities, with Bob Hawkins (yes, the veteran Formula Fordster) first to enter the Cannonball feature in his 427cu in slingshot rail Time Traveller II.

Wild Bunch dragsters, caricature Gassers and Outlaw Anglias are huge spectator draws at this vintage lifestyle event. This year's 13th edition already boasts an entry of almost 40 Nostalgia Superstock cars, American monsters from Ford, General Motors and Mopar marques battling for supremacy, cheered by partisan supporters. Even if you are only curious, prepare to be blown away. MARCUS PYE

27-28 JULY

V Pre-'66 Touring Cars at Croft

The inclusion of a diverse mix of guest categories at British Touring Car Championship events was undoubtedly a highlight of last year. The Legends, classic Minis of the Mini 7 Racing Club, Radicals and Caterhams added a new dimension to the race meetings, and it was great for a range of different club series to get their turn in the spotlight.

And, while all of them are back for more guest appearances this season, there is a fifth division joining the package. The Classic Touring Car Racing Club's Pre-'66 tin-tops are on the bill at Croft, and this will be the first time in over a decade that some truly historic machinery has raced alongside the BTCC.

Given the CTCRC is also celebrating its 50th anniversary this year, the trio of Croft contests should be extra-special. Expect the likes of Ford Mustangs, Cortinas and Anglias, Hillman Imps and Austin A40s to entertain the crowds with even more variety on the BTCC undercard. STEPHEN LICKORISH





23-25 AUGUST

V Silverstone Festival

Along with the Goodwood events, the Silverstone Festival – or Classic as it was previously known – has been one of the biggest historic meetings in the world for three decades. The sheer breadth of machinery, from pre-war sportscars to almost-current Le Mans racers via Cosworth DFV-engined Formula 1 cars, is one of its key appeals. F2, F3 and touring car contests always add to the variety.

Other attractions of the Historic Sports Car Club event include quality drivers and packed grids, plus the historic Silverstone Grand Prix layout often makes for some fine wheel-to-wheel action.

The event is so big that it's impossible to take it all in across just one day. And for those with kids, there are displays, activities and off-track performances to keep those less taken with the racing entertained for hours.

As usual, an effort has been made to commemorate particular anniversaries and figures. The big one this time is Ayrton Senna, 30 years after the three-time F1 champion was killed at Imola. The hope is for a record-breaking gathering of cars raced by the Brazilian, and the special tribute has the blessing of the Senna family.

KEVIN TURNER

Thundering F5000s head F2 and F3 jewels at Silverstone's historic racing extravaganza



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21-22 SEPTEMBER

🔺 Castle Combe Autumn Classic

The runaway success of last season's Castle Combe Autumn Classic – named Event of the Year in the 2023 Royal Automobile Club Historic Awards – has brought unprecedented demand for grid slots at the 2024 edition, expanded to two days.

This year's 16-race showcase features 12 varied groups. Joining perennial favourites the GT and Sports Car Cup and Fifties Sports Car Racing, the Historic Racing Drivers' Club returns to the party on the Sunday. Packed Jack Sears Trophy, Allstars and Gerry Marshall Trophy fields are central to Julius Thurgood's charismatic circus, as close to the spirit of 1950s, 1960s and 1970s club racing as you will find.

The Historic Sports Car Club's content grows with spectacular 1000cc Formula 3 screamers, in the category's 60th anniversary year, and Historic Road Sports joining the Griffiths Haig Trophy sportscar races. Last season's popular debutant the Ferrari Club Classic brings another triple-header, and an exciting local angle will be a race named for Bath garage owner Ron Fry, a legendary Ferrari competitor at Combe in the 1960s.

An Ecurie Classic Racing/Jaguar contest and Mini Se7en and Miglia bouts guarantee frenetic tin-top action, while a relaxed paddock replete with nostalgic elements also makes it special. MARCUS PYE



19-20 OCTOBER/2-3 NOVEMBER

🔺 Formula Ford Festival/Walter Hayes Trophy

We've said it many times before and we'll say it again: Formula Ford provides some of the best racing action in motorsport. And that's never been more true than at the end-of-season blue riband events: the Formula Ford Festival at Brands Hatch and Silverstone's Walter Hayes Trophy.

The single-seater category may not be as popular as it once was, when it offered the first step on a pathway for young talent to reach the pinnacle of the sport, but nevertheless it has continued to provide entertainment for more than half a century.

Not only that but, with the Festival celebrating its 50th running in 2021, names from the past have made popular appearances back behind the wheel at recent events, including ex-Formula 1 driver and 1992 Festival winner Jan Magnussen and 1991 victor Marc Goossens. All of this has helped ensure that the events remain must-visit destinations for fans of motorsport.

The Festival will take place, as ever, on Brands Hatch's Indy layout on 19-20 October, and is followed two weeks later by the WHT on the Silverstone National circuit where, if it stays dry, you can stand by for epic slipstreaming. **STEFAN MACKLEY**



FINISHING STRAIGHT

The spinetingling magic of driving into the night at Le Mans is captured

Immerse yourself in Le Mans



VIDEO GAME REVIEW LE MANS ULTIMATE PC (Steam Early Access) RRP £24.99

Le Mans Ultimate is Motorsport Games and Studio 397's official game of the FIA World Endurance Championship, *LMU* was released as an Early Access PC title initially, allowing Studio 397 the flexibility to gradually add more content and features over the coming months.

With that caveat in mind, *LMU* lacks vital endurance racing systems such as full course yellows and safety cars, but this should be rectified over time, with WEC's 2024 line-up of cars and tracks also slated for future updates. For now, though, 'Race Weekend' and 'Online' are the only driving options available on *LMU*'s main menu.

The game's online matchmaking system, dubbed 'RaceControl', is very impressive, however, lining you up against similarly skilled players from across the globe. Already tested in rFactor 2, RaceControl has proven to be a hit with *LMU*'s early adopters (although online multi-class racing has yet to be implemented). In its current Early Access phase, players are limited to single-player practice, qualifying and race sessions via 'Race Weekend' and there are no offline championships to participate in. You can race against AI opponents, however, although they are less predictable than a Le Mans Balance of Performance calculation. *LMU*'s much-vaunted asynchronous multiplayer mode, allowing you and your friends to share the burden of endurance races as a cohesive driver-swapping team,

is sadly absent, with virtual reality headset compatibility also missing. These are set for inclusion at a later date, though.

The 2023 WEC field is present and correct, so expect to see Hypercars from the likes of Toyota, Ferrari and Porsche alongside packed LMP2 and GTE classes. Car models are faithfully replicated as you'd expect, with the series' seven circuits painstakingly laser-scanned for accuracy – including the headlining Le Mans.

Hypercars' various hybrid deployment and recovery systems are in-game and adjustable, which will delight hardcore WEC enthusiasts as much as it will baffle the more casual fan.

Thankfully, driving in LMU is engaging and fun for the most part, with convincing vehicle physics complemented by authentic sound design. The whir of the Ferrari 499P's regenerative hybrid system is captured beautifully, for example, aided by the sim's immersive graphics. Driving into the night at Le Mans is suitably spine-tingling, especially when rain clouds sweep menacingly over Mulsanne. It's impressive, but the game lacks the overall visual polish of a big-budget title like Gran Turismo 7. Naturally, the best way to play *LMU* is with a steering wheel and pedals set-up, but the developer has worked on making

showcasing the 2023 season and its eclectic line-up of cars and circuits.

Studio 397, which took its name from Audi's record 397-lap run to victory in the 2010 24 Hours of Le Mans, has form in terms of creating realistic motorsport experiences, having produced 2013's critically acclaimed *rFactor 2* – replete with an impressive line-up of British Touring Car, IndyCar and sportscar content. Plans for publisher Motorsport Games to spearhead standalone BTCC and IndyCar games fell through dramatically, however, leaving *LMU* as its main focus.

FINISHING STRAIGHT



the game more accessible than the notoriously clunky *rFactor 2*. As a result, *LMU* feels more user-friendly when using a gamepad. It's challenging to tame the twitchy Hypercars without a more intuitive wheel peripheral, however. What isn't userfriendly is *LMU*'s maze of menus: there are too many complicated options and settings



Driven to Succeed – Luke Browning, Formula 3's latest winner Autosport Chief Editor Kevin Turner is joined at Silverstone by 2023 Macau Grand Prix winner and 2022 Aston Martin Autosport BRDC Young Driver of the Year Luke Browning for the first of a new podcast series focusing on rising young stars of motorsport.



INTERNATIONAL MOTORSPORT

Sao Paulo E-Prix

Formula E Round 3/10 Sao Paulo, Brazil 16 March IV Live TNT Sports 1, Sat 1600

Sebring 12 Hours

IMSA SportsCar Championship Round 2/11 Sebring, USA 16 March Livestream IMSA.com/tvlive

WHAT'S ON

NASCAR Cup

Round 5/36 Bristol, USA 17 March IV Live Viaplay Sports 2, Sun 1900

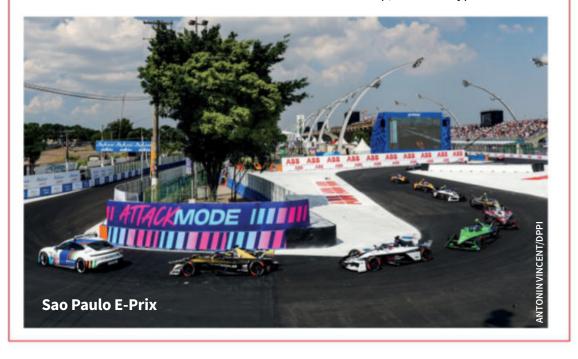
NASCAR Trucks

Round 4/23 Bristol, USA 16 March

UK MOTORSPORT Silverstone BRSCC

16-17 March

Clubsport Trophy, Fiesta Junior, Mazda MX-5 (Championship, Clubman, Supercup), Modified Ford, Super Classic Pre-'99 FF1600, Supersport Endurance Cup, Zeo Prototype



to map, which has to be addressed if the game transitions to consoles in future.

Despite some performance problems and scant content, *LMU* is a beautifully realised WEC simulator with attractive visuals, superb audio and engaging car physics. If you overlook the inevitable Early Access teething issues and own a capable enough PC, *Le Mans Ultimate* is perhaps the ultimate way to enjoy Le Mans. **ROSS MCGREGOR**

For daily racing game news, visit **traxion.gg**

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FINISHING STRAIGHT

WHAT COULD HAVE BEEN

TOMAS ENGE IN THE WRC

He missed out two decades ago, but still harbours plans...

JAMES NEWBOLD

39 551

orodriue

F3000 comeback scotched plans for 2004 campaign – and two WRC rounds – in a Subaru

ad things played out differently in early 2004, Tomas Enge could have joined the exclusive club of drivers to have competed in both Formula 1 and the World Rally Championship. The Czech, who made three grand prix starts for the moribund Prost team in 2001, believes it's entirely realistic that he could have switched codes permanently to rallying, such was his passion for the discipline.

"The only thing I was playing on PlayStation was *Colin McRae Rally*," he says. "I didn't play *Formula 1* or anything else. It was only offline so you would play against yourself. I beat my records constantly. I knew the roads without pacenotes, that's how crazy I was."

But when his manager Antonin Charouz reached a deal with the start-up Ma-Con team to bring the 27-year-old back for a fifth full season in International Formula 3000, Enge was reluctantly obliged to pass up a programme of selected asphalt events in a full WRC-spec Subaru Impreza for the Prodrive-run works team. "I was massively disappointed," he recalls. "I really looked forward to it and I really wanted to continue in rallying on a more professional way."

NOTU

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He'd made his rallying dreams a reality in January 2003, entering the Mountain Rally Norway (on snow) in a Mitsubishi Lancer Evo VI. The decision had been triggered by uncertainty over his future prompted by the failed drugs test that cost him the F3000 title in 2002. The same year, he'd forged links with Prodrive racing its Ferrari 550 Maranello, and taking a GTS class pole at Le Mans.

Enge's experience in rallying built up over a 2003 season in which he combined regular appearances in domestic rallies aboard a Skoda Octavia and Ford Focus with outings for Prodrive in the American Le Mans Series, and he even tested a WRC-spec Impreza at MIRA, where Prodrive completed its shakedowns. But the run was "only a few kilometres" on Tarmac with gravel tyres and suspension set-up, so it didn't give Enge much of an impression about how he would have clicked with it. "I can't say whether the Subaru would fit my driving style, it's a massive question mark," he says. Still, he was hopeful of a deal being put together for 2004 to run a current-spec Subaru in national rallies before entering Corsica and Sanremo later in the season. But plans were scotched by his F3000 comeback. "I could have been the first Czech in Formula 1 and then a World Championship rally," rues Enge. "I was still



ALL PICS: SUTTON

"I COULD HAVE BEEN THE FIRST CZECH IN F1 AND THEN A WORLD



CHAMPIONSHIP RALLY"

relatively young and I was experienced with high-speed race cars. The only thing I needed to figure out or experience was new roads and getting used to them." He has competed in rallying on a semiregular basis, entering the Dakar in 2021, and is working on plans to belatedly make his WRC debut on the Central European Rally in October after driving a Toyota Yaris course car on last year's inaugural event.



FROM THE ARCHIVE

The one-off, four-wheel-drive Porsche 961 had impressed with a seventh-place finish in the hands of Rene Metge and Claude Ballot-Lena on its debut at the Le Mans 24 Hours in 1986. But when it returned the following year in Rothmans livery it suffered a dramatic fate. Mid-morning on Sunday, Kees Nierop – who had only joined the crew of Metge and Claude Haldi after the works 962 he'd been due to drive was destroyed by Price Cobb in a fiery practice crash – lost control and hit the barriers, triggering a ruinous conflagration that required a two-year rebuild for the now-museum piece.



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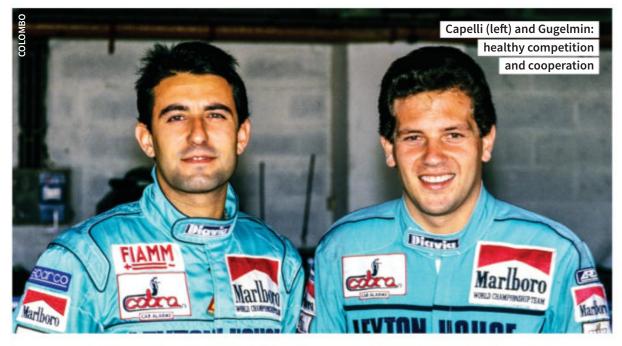






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IVAN CAPELLI MY FAVOURITE... TEAM-MATE



Mauricio Gugelmin

F or a span of 62 Formula 1 events from the 1988 Brazilian Grand Prix to the 1991 Spanish GP, the Leyton House March team paired Ivan Capelli with Mauricio Gugelmin. Over those four years the pair shared plenty of heartache but weren't without their triumphs. They logged four podiums, three from Capelli, who needs no second invitation to name Gugelmin as his favourite team-mate.

"We were really sharing the project of Leyton House," says the Italian. "We were fighting to achieve good results and get to the top. The four years that we shared together we were really sharing everything, in good and bad times. I remember very well how strong we were in terms of friendship and at the same time pushing each other to the limit."

Capelli had been March's sole driver in 1987, the first F1 campaign for the Bicester company since 1982, and welcomed Gugelmin's input in developing Adrian Newey's Judd-powered 881 that helped the team to finish sixth in the 1988 constructors' table. Capelli remembers the drivers trading stories of scraped elbows and bruised knuckles, so tight was the cockpit. "The relationship really worked," he says. "We were competing against each other, but without any back-stabbing political attitude or so on. Just enjoying life and racing together."



But 1988 proved the team's competitive peak. In 1989 and 1991, Leyton House only managed one points finish in each season, both times slumping to 12th in the constructors' table. But Capelli and Gugelmin remained unified on what they wanted from the car, and provided a known quantity on the occasions when parts weren't up to scratch. "We were quite similar in terms of understanding the car," confirms Capelli. "We didn't have differences so important or so crucial in the set-up."

Amid the team's worsening financial situation, Capelli was stood down for the final two races of 1991 to conclude his time with Gugelmin. "Having Mauricio was a good thing for me, for the team, for everybody," says Capelli. "Mauricio was a very honest man. We could have a very good atmosphere." JAMES NEWBOLD



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UK +44 (0) 344 848 8817 Overseas +44 (0) 1604 251451 Email help@asm.secureorder.co.uk Back issues 0344 8488817

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Autosport, ISSN number 0269946X, is published weekly by Motorsport Network Media UK Ltd, The Power House, Isleworth, TW7 6QG, United Kingdom. Air freight and mailing in the USA by World Container Inc., 150-15, 183rd Street, Jamaica, NY 11413, USA. Periodicals postage paid at Brooklyn, NY 11256. Subscription records maintained at Motorsport Network Media UK Ltd, The Power House, Isleworth, TW7 6QG. Air Business Ltd is acting as our mailing agent. Postmaster: Send address changes to Autosport, Air Business Ltd, c/o World Container Inc., 150-15, 183rd St, Jamaica, NY 11413, USA.



CIRCULATION TRADE ENQUIRIES

Seymour Distribution Ltd, 2 East Poultry Avenue, London, ECLA 9PT. Tel: +44 (0) 20 7429 4000. Printed by William Gibbons & Sons Ltd, 28 Planetary Road, Willenhall, Wolverhampton WV13 3XT. ISSN 0269-946X. Autosport is published weekly by Motorsport Network Media

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UK Ltd, The Power House, Isleworth, London, TW7 6QG

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THE RISE OF AI SHOWS NO SIGNS OF SLOWING DOWN



o, we haven't been given a first look at a futuristic new autonomous racing series. The cover image *was* created

by artificial intelligence, an idea that not long ago might have been deemed fanciful. Use of AI is growing rapidly in society at large (although this writer has yet to jump on the bandwagon with automated transcription software!) and the automotive/motorsport industries are no exception. You don't have to be an autonomous racing aficionado to recognise the direction of travel.

Stellantis brands DS and Peugeot will have ChatGPT installed to complement voice-recognition software in their cars later this year, while AI companies are starting to replace crypto as fashionable sponsorship partners. IndyCar squad Ed Carpenter Racing's deal with askROI, an AI tool for small- and medium-sized businesses, is just the latest example.

There is, perhaps understandably, some unease around AI's expansion. And just like any tool, it has to be used responsibly. But, as we unpack in the cover feature (p10), the motorsport industry at large is simply getting on with making AI complement its expertise. As with every technological innovation, there's an element of 'adapt or risk being left behind' and the focus on innovation that has always been so imperative in motorsport means it's been widely embraced, not shunned.

Elsewhere, last weekend marked the start of the new MotoGP season and a first chance to see its new sustainable fuels in action. Lewis Duncan finds out more about Dorna Sports' plans to limit its environmental impact (p18), while Marcus Pye meets the unusual Rover V8-powered 2CV special saloon (p22). Lucas di Grassi Our regular columnist says drivers aren't exempt from harnessing Al ENGINEER'S VIEW

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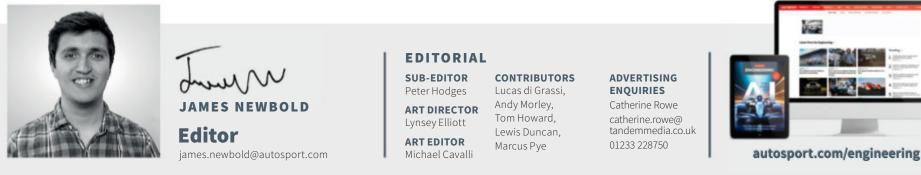
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Peter Wyss de Araujo

The Swiss engineer shares his top tips from a fascinating, varied career



FIA REVEALS PLANS FOR HYDROGEN STORAGE DEVELOPMENT

Emphasis to be placed on storage in liquid form

The FIA has presented its vision for future hydrogen fuel technologies and plans to focus development efforts on storage in its liquid form. Following the latest meeting of the World Motor Sport Council, it was announced last month that in the context of hydrogen combustion applications "development and promotion of solutions based on hydrogen stored in liquid form" would be prioritised over gas storage. No reference was made to fuel cell applications, but this is not understood to indicate that the technology's potential is being discounted by the governing body.

An FIA statement said: "Given the [liquid] tank's characteristics, lower volume and weight compared to compressed gas tanks, liquid storage form is better suited to the demanding environment of motorsport competitions, where optimisation is key. This also allows the powertrain layout to remain closer to the one of a conventional combustion-powered car compared with vehicles accommodating compressed gas tanks." It added that "solutions utilising compressed gas storage type will be considered as an interim solution, provided minimum safety and technical requirements are met".

Momentum has slowly gathered

behind hydrogen as an alternative to electric power as a pathway for sustainable motorsport. Plans are in place for a H2 class at the Le Mans 24 Hours, which after several delays is slated to begin from 2027, with it hoped that hydrogen-powered machines will be able to compete for outright victory. It can be interpreted from the FIA's announcement that liquid storage will form part of the regulations. The first all-hydrogen racing series will begin next year (see story below), with the new Extreme H series set to use fuel cell technology.

Meanwhile, the FIA has moved to appoint Austrian company AVL RaceTech as its official supplier of vehicle simulation software. Its lap-simulation expertise is utilised for developing technical regulations across a range of FIA championships, including Formula 1, Formula E, the World Rally Championship and the World Endurance Championship.

Chief technical & safety officer Xavier Mestelan Pinon credited the partnership with unlocking "unprecedented simulation capabilities within the FIA Technical Department from which the entire FIA benefits". He also revealed that it is "currently instrumental in moulding the next generation of Formula E cars".





EXTREME H APPOINTS NEW HYDROGEN FUEL CELL PROVIDER AHEAD OF LAUNCH

Another piece of the puzzle for the nascent Extreme H series fell into place last month as Symbio was announced as its official hydrogen fuel cell provider from 2025. The French manufacturer co-owned by Forvia, Michelin and Stellantis, will provide a 75kW hydrogen fuel cell for the new breed of cars built by Spark Racing Technology. A prototype has started testing and completed a shakedown before Christmas. The announcement follows Symbio commencing the mass-production of hydrogen fuel cells at its new SymphonHy gigafactory, based on the



The all-electric Extreme E championship is expected to morph into Extreme H next year, with all infrastructure and staff retained for the new venture. It began its fourth season in Saudi Arabia last month by announcing Kempower as its new charging partner. Managing director of Extreme E Ali Russell said the Finnish company is "changing the game" with its fast-charging technology that he expects "will help us get the cars out on track even sooner". Russell also hailed its reliability credentials in extreme environments that he said "suit us perfectly".

outskirts of Lyon, in December. "We believe motorsport offers a unique laboratory in extreme and real-life conditions that enables us to test and adapt our technology to the most intense and demanding uses," said Symbio CEO Philippe Rosier.



UPGRADED ASTON MARTIN F1 SAFETY CAR MAKES DEBUT

Aston Martin formally presented its upgraded Formula 1 safety car days before the latest iteration of the Vantage was put into action for the first time in Jeddah last weekend. Having been put through its paces at F1's pre-season test, the new Vantage was given a maiden outing in Saudi Arabia after the Mercedes AMG GT Black Series it shares safety car duties with was deployed in Bahrain.

The outgoing Aston model was almost 200bhp less powerful than the Mercedes, produced less downforce and was 45kg heavier. But the latest version, heavily updated with revised bodywork, modified underfloor aerodynamics and a new grille as part of a mid-life refresh, also boasts a power increase of 150bhp to 656bhp. This is courtesy of bigger turbochargers, more cooling and new camshafts for its AMG-supplied four-litre twin-turbo V8. Aston Martin says the 2024-spec safety car required no additional engine or braking upgrades from the latest road-going model. Long-serving safety car driver Bernd Maylander said his first impressions were "very positive".

"I could immediately feel the improvement in handling and, of course, power," he said.

SCHOLARSHIP CHANCES FOR BRIGHT SPARKS

Prestigious scholarships at Cranfield University and Aston University have been opened up for aspiring engineers.

Applications for the second iteration of the FIA's Motorsport Engineering Scholarship in partnership with Cranfield will close on 1 April. Created to promote opportunities for underrepresented groups, the inaugural winner selected in 2022 was Argentinian Jesica Salvini (pictured below), who said the prize had "completely transformed" her career. The successful candidate will receive fully funded tuition to obtain a Master's in Advanced Motorsport Engineering at Cranfield, as well as living expenses.

Aston University meanwhile announced that members of the winning team in the F1 in Schools 2024 UK National Finals will have the chance to interview for a full mechanical engineering scholarship. Held



BINOTTO HEADS POWERTRAIN DEVELOPMENT AT TEXA

Mattia Binotto has been hired as the new managing director of an Italian technology company, taking his first role since leaving the Ferrari Formula 1 team at the end of 2022.

The former Ferrari team principal has been linked with several opportunities in F1, including with Alpine and Audi, but will instead help spearhead electric powertrain development at TEXA, the Italian acronym for Electronic Technologies for Automotive. The Treviso

IN BRIEF



KW'S DEBUT PODIUM SWEEP

German suspension specialist KW automotive enjoyed a World Endurance Championship debut to remember in Qatar, locking out the top four spots in LMGT3. The supplier of five-way adjustable heave dampers to GT3-spec Porsche, Aston Martin and BMW machinery also celebrated a finish on the competition debut for Lamborghini's SC63 Hypercar that features KW's three-way adjustable roll dampers.

ADRIAN REYNARD AWARD

British Touring Car Championship organiser TOCA and its technical partner Cosworth Electronics were recognised with the Adrian Reynard Motorsports Medal by the Institution of Mechanical Engineers (IMechE) last month. Its joint application of hybrid power into the BTCC from 2022 was honoured with the first prize for outstanding achievement in motorsport engineering at Silverstone.

BREMBO GROUP'S LOCKOUT

Italian braking manufacturer Brembo has retained its market dominance in Formula 1, with all 10 teams once again using calipers produced within its group. As in 2023, all but one team use its calipers, the 10th supplied by the Coventry-based AP Racing company that is owned by Brembo. Eight teams use AP clutches, while four have Brembo brake-by-wire systems.

MONCET'S NEW ROLE

Hyundai Motorsport's former powertrain director Julien Moncet has been appointed in a new role as project manager for circuit racing, overseeing its TCR programmes. Andrea Cisotti has become project manager for its Rally2 efforts, with Benoit Nogier installed as customer

at the Magna Science Adventure Centre in Rotherham, the Finals concluded on 14 March (today) after going to press.



company, founded in 1992, is best known as a leader in vehicle diagnostic tools but has interests across multiple areas. Binotto has been entrusted with the strategic coordination of its E-Powertrain division, which is aimed at designing, producing and supplying new automotive components for electric vehicles. Binotto said: "What attracted me to TEXA was the strategic audacity of its project to build Italian excellence characterised by the most advanced technologies in new mobility. TEXA intends to establish itself as the reference technological standard on a global level." JONATHAN NOBLE racing manager. Moncet and Cisotti will report to technical director Francois-Xavier Demaison.







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ENGINEERING



DRIVING CHANGE

DRIVERS AREN'T EXEMPT FROM HARNESSING AI'S ADVANTAGES

It's not only engineers that can make use of artificial intelligence. Our columnist believes that drivers can also yield gains by embracing advances in technology

t is evident that artificial intelligence (AI) holds transformative potential across various domains, a fact often

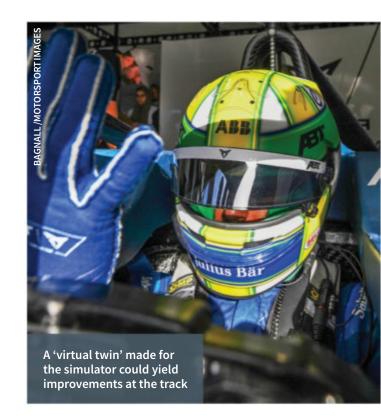
misconceived by many. Contrary to popular belief, mere automation does not equate to AI. True AI involves software that learns, improves, and autonomously makes decisions. Currently, in the realm of Formula E, the use of AI beyond social media applications remains limited. However, the prospect of its broader integration looms on the horizon.

Central to making AI work effectively is the availability of quality data. Given the wealth of data generated in motorsport, it stands as an ideal candidate for embracing the AI revolution. Beyond enhancing performance, there also exists a vast opportunity to leverage AI systems commercially. Superior solutions across myriad areas, from optimising electric motor coil wiring to streamlining magnetic flow or reducing weight, can result from the development of specific models.

When employed judiciously and complemented by adept software development, AI emerges as a potent tool for enhancing efficiency, reliability and safety. Its implementation facilitates the processing of vast data volumes and expedites simulations, thereby improving the cost-effectiveness of motorsport operations more widely.

The magnitude of data generated during a race weekend surpasses human capacity for comprehension and performance extrapolation. AI, however, can swiftly process car data to devise solutions that might easily elude human cognition and achieve potentially better outcomes.

Failure to embrace AI translates to falling behind the curve. Analogous to not using the internet, abstaining from AI adoption is self-defeating because it deprives people of access to crucial data reservoirs. While



and human-driven stints, with AI learning and optimising from human input, is entirely conceivable. In the interim, we may witness real-time car set-up adjustments based on AI analysis of cornering tendencies when tyres degrade. Drivers currently do this via the steering wheel, but if the hardware they want to adjust like the diff or wings were software-controlled rather than mechanical, they could already be primed to embrace the possibilities of AI.

Furthermore, AI holds promise as a tool for drivers in pre-event simulator sessions as the technology matures.

"Drivers of the future will compare data with their optimised virtual twin and learn from it"

its adoption remains voluntary, integrating AI into racing team operations or software development emerges as a logical consequence for optimising performance and problem-solving efficiency.

Envisaging human-AI collaboration across various domains is plausible. In the long run, a scenario in endurance racing where cars alternate between autonomous Transitioning beyond the driver-in-the-loop model entails creating simulator drivers mirroring human limitations while striving for perfection. The prospect of a realistic 'virtual twin', combining the qualities of the world's top drivers, presents unprecedented opportunities for performance benchmarking and enhancement.

The commitment of significant hours to simulator sessions before every race underscores the value drivers place on preparation. But an optimised virtual twin capable of accumulating extensive simulated experience can serve as the ultimate reference point to refine on-track performance comparisons. It's clear to me that drivers of the future will compare data with their optimised virtual twin and learn from it. This is just a matter of time. In light of these developments, the inevitability of AI's ascendancy is indisputable. Those who fail to embrace its potential, including racing drivers, risk being left in the wake of progress. Motorsport has and always will be so.



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ENGINEERING



ENGINEER'S VIEW
ANDY MORLEY

TACKLING CHALLENGES AND OPPORTUNITIES

Hewland is one of motorsport's leading transmission suppliers, and its MD is well-placed to explain how it's responding to fast-changing industry trends



ormula 2 launched its all-new 2024 machinery late last year and, while the visually striking aerodynamic changes

dominated the headlines, it was all change under the bodywork too. This included a new six-speed longitudinal Hewland sequential gearbox, replacing the previous iteration which had been used since 2018.

One challenge in developing this latest product was the FIA crash regulations, which necessitated a substantially different design in terms of the case and strength. The rear impact tests, for example, were increased substantially. But the general architecture of the gearbox is well-proven.

That's the key for motorsport gearboxes; it's all about reliability and cost-per-mile ownership. F2 is a bit more simplified with respect to the architecture compared to Formula 1, but it does the job for a single-make series of being a competitive and a really high-performance product.

Ownership of the vehicle is important to consider when it comes to GT racing, as OEMs have to sell as many of the vehicles as they can. The focus on delivering a competitive but cost-effective product that is reliable is amplified here. As a supplier, we need to ensure that we're not the point of failure, ending someone's race.

To achieve this with the new Lotus Emira GT4, the gearbox is more aligned to a TCR-type product. There's slightly higher torque with the GT4 and, since the engine is at the back, certain changes have been made. There's a bespoke casing to mount to its Toyota V6 and slight differences around internal wires; it's on a similar theme to our high-torque touring car gearboxes that we've used previously. There's naturally a differentiator with having the sequential gearbox from the perspectives of product sales and performance. It's a balancing act to provide a quality product while meeting



quality standards. Every customer is pushing the boundaries on service, and we're continually having to raise our level.

Looking to the future, while AI is an area of industry focus it's a little soon to adopt in our core processes, as safety-critical parts require a loop of validation before being used in any new product. That said, we've started using it in 3D-printed structures that a human would normally design. But there are a number of elements involving automation we're proactively engaged in. One is a more efficient manufacturing system, which will help with reducing material waste and energy consumption

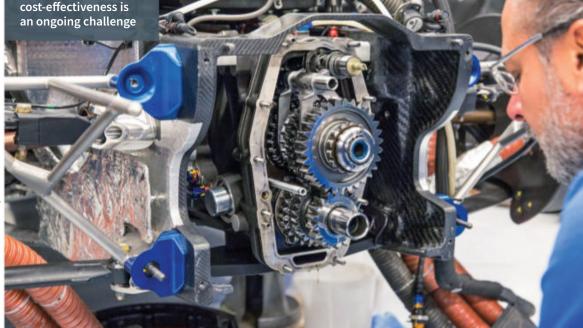
"The key challenge is to ensure relevance for larger OEMs that keeps them involved"

the category's cost requirements through efficient design and manufacturing.

The skillsets we've acquired through motorsport have enabled Hewland to work on other areas such as aerospace, and we're able to apply our learning about the new interior techniques back to the motorsport and automotive sectors while ensuring from a sustainability perspective.

The opportunities and challenges we face are constantly changing, but aren't so dissimilar from the ones facing motorsport generally. The key challenge is to ensure relevance for larger OEMs that keeps them involved and developing innovative cars. Those manufacturers that aren't involved with combustion racing might be doing electric or hydrogen, where the technology and development involved is no less great. From a transmission perspective, the complexity may change as electrification increases and more road-relevant categories come on-stream. But at a base level, the goal of supporting our customers by making products as efficiently and reliably as possible hasn't changed all that much since Hewland started out in 1957. It's a great end-to-end story continuing to be involved in the highest categories of motorsport. Motorsport is ever-changing and we look forward to the next 60-plus years of having transmissions that are leading grids across the world.







HOW MOTORSPORT IS EMBRACING THE OPPORTUNITIES OF AI

The role of artificial intelligence in modern life is increasing, and motorsport isn't being left behind

BY JAMES NEWBOLD



Abu Dhabi Autonomous Racing League will host its first race with adapted Super Formula cars in April

1 Abran

NAVE





acklash to the virtual female influencer introduced by Mahindra on the eve of the current Formula E season that resulted in it being swiftly scrapped showed how artificial intelligence in motorsport is a long way from gaining universal acceptance. Criticism directed at the short-lived PR campaign fronted by 'Ava' (above),

described as a 'Sustainable Tech Queen & Racing Rebel Robot', largely coalesced around the decision not to 'employ' a human for the role and ultimately rendered its continued existence untenable.

Team boss Frederic Bertrand explained that its intention was "just to add one tool to our toolbox for communication and to have one additional possibility for people to ask questions and get answers". Its value, he added, was "as an addition to what we are doing and then it's not replacing anyone". But it was a point he acknowledged Mahindra "probably didn't explain enough and that's where we have failed".

"It's arguable that however much it's explained, many would remain unconvinced"

It's arguable that however much it was explained, many would remain unconvinced. Concerns over the possibility that AI will replace creative jobs aren't going away. As motorsport artist Jake Yorath puts it: "My job is always under threat because people want to do it for free, or really cheaply anyway. Now we can add in various apps that people use to make their postcards or posters. They're fine, but it's a classic

> 'you get what you pay for' situation. "And with AI as well there's going to be people wanting to use it to create 'better' or ▶

cheaper art. We saw McLaren do a livery [for the Formula E London E-Prix in 2023] that was part-designed by AI. I guarantee that there was still a lot of people on the back end of that making it fit the car. I don't buy the 'it democratises art' argument, because artists have to work for years developing a style and learning their craft."

But apprehension over the growth of large language models such as Chat GPT, the best-known generative AI tool, and the increasing influence of AI more widely in motorsport is not shared in the engineering sector. Machine learning – whereby software imitates decisions of humans using data, without explicit instructions – is instead viewed as a complementary tool.

World Endurance Championship squad Jota has been working with AI company Monolith since 2021, claiming the LMP2 title and Le Mans 24 Hours victory in 2022. Jota technical director Tomoki Takahashi says that when its partnership began, "it was 'here's a cool toy, go and play with it' – it was brought in with open arms as opposed to, 'I've found a computer programme to replace you'."

AI'S GROWING ROLE

Problem-solving using computers is nothing new. Algorithmic approaches have been used to drive decision-making from data across all industries for many years. But improvements in computing power and the resultant possibility of processing significant quantities of data means that "the ability to access machine learning has become much more available", according to Monolith's head of automotive, defence and motorsport Sam





Emeny-Smith. "This is just a step on and allowing you to use a lot more data in smarter ways, and allowing experts to make the same decisions they would have been looking to make anyway, just faster and more informed," he says.

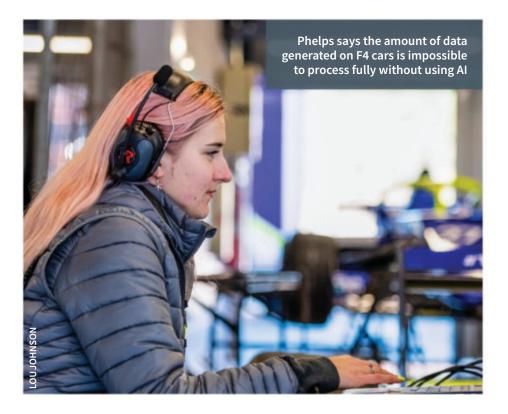
When applied to a motorsport context, AI is being adopted to help engineers use their time more efficiently by focusing on their areas of specialism, accessing more insights and avoiding consuming brainpower where it doesn't need to be. Formula 1 teams have been using machine learning for many years, but that is trickling down the ladder. As freelance race and data engineer Charlotte Phelps explained in a discussion panel at Autosport International's business forum, "even from an F4 car, we get so much data you can't deal with it all at once".

"On a day-to-day basis, we do use a very minimal amount of data," she said. "But the amount that's available to us to help us in the wider season, we just can't use without machine learning, but it's there and ready to be used."

As a result, there's widespread expectation that AI will be a focus of significant resource in the future. "This is kind of the



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"You can quickly interpret data and you're able to highlight the areas of interest within the data"

next frontier of where we'll probably be going," Alpine F1 head of vehicle performance Richard Frith said at ASI.

Takahashi says that for Jota, as a privateer squad taking on fully fledged factory teams in the Hypercar class, "we're trying to gain personnel via computing power". It has benefited from optimised wind tunnel runs and seven-post rig tests, while on-track tests have also been made more efficient. And Jota isn't alone in finding gains through such partnerships – fellow WEC stalwart United Autosports is entering the third year of a relationship with Valkyrie AI that focuses on strategic insights and car maintenance.

"For a small team on a farmyard in Kent, you would like to think we were one of the first to try and embrace that kind of technology," Takahashi says. "And it's because we're small that we've tried to do it."

"Using an AI tool like Monolith means that you can quickly interpret data and you're able to highlight the areas of interest within the data. In a seven-post scenario, we've made X change on the car and it has had an influence on this and you can see

Jota has reaped fruit from its partnership with AI company Monolith in the WEC



WHAT AI MEANS FOR DRIVERS

"It does everything else for us; it writes your social media posts, it does your emails, your photoshop images, but how do we make it applicable to us, to work in our industry? It's fascinating and something that, because we don't understand it, makes it more interesting."

Tom Ingram's presence among the audience at Autosport International's Business Forum session on AI was notable as a sign that drivers are taking notice of its growing role in motorsport. In the case of the 2022 British Touring Car champion, machine learning isn't just about improving performance – although that clearly is his biggest focus.

Ingram says that there's a strong desire to "make it work for what we need to do with it, which fundamentally is how do we make the car go around a corner faster", but also make the team work more effectively and improve his own driving. But knowing where to start isn't easy. "How do we make everything work better and using lessons that are there, through technology, but not actually being put into action currently?" is the crux

of what he wants to know.

Ingram says he's not dissuaded by negative perceptions of AI "because we literally have zero use of it so far". He reasons that if it has the potential to help him save money and go faster, it will be a worthwhile route to explore, **"IF WE CAN START NOW, THEN WE CAN BE A LITTLE BIT AHEAD OF THE COMPETITION"**

because if he doesn't jump on the bandwagon then others doing so may gain an edge.

"When it comes to being slightly easier to implement it, or more accessible or more cost-effective, if we've already done all of the behind-the-scenes work to make our data sets applicable to it, to make the data readable to the right people at the right times, we can then hit the



ground running with it," he says. "If we can start now to begin to work at it, then it means we can be a little bit ahead of the competition when it does come in a year, two years, 10 years or however long that may be."

Train the model
history = model.fit(
 train_generator,
 steps_per_epoch=100,
 epochs=10,
 layers.Dense(512, activation='relu'),
 verbose=1)

Save the trained model
model.save('racing_car_model.h5')

that within Monolith. It also has the capability to suggest the next test, but also you can go, 'OK, that's interesting so we'll keep going in this direction'. That analysis previously would have taken a lot more time, and you would have to know what you were looking for. Whereas in this scenario, it's kind of showing you a direction."

That's why BeyondMath co-founder Alan Patterson describes AI as "more of an assisted technology". Speaking at ASI, he noted that it represents a trade-off of speed, accuracy and efficiency that enables engineers to "do their jobs better and actually focus on the stuff that they're really good at". As he put it: "We're talking to people with a PhD in aerodynamics and they spend 95% of their time configuring the tools, and they should be spending 100% of their time on the aerodynamics."

Aside from enhancing performance, AI is being used in battery modelling to speed up the deployment of electric vehicles and avoiding unreliability too. Phelps has considerable experience in implementing machine learning to predict when failures would happen from her time at Mercedes High Performance Powertrains working as a strategy engineer.

"What the wider industries and general public are seeing is AI as a catch-all solution and it's not"

"You can use a lot of channels and trends to see when things will happen, but you can't see that with your eye," she said. "You have to look at months' worth of data and watch the trends slowly change, and you will see the differences that can then help you predict something that you just can't do with your eyes. You don't have the time or the brain capacity to do it, especially if you're also trying to run a car and a driver and a team of mechanics."

TACKLING MISCONCEPTIONS, BUILDING TRUST

It's fair to say that there remains a significant knowledge gap when it comes to artificial intelligence in wider society. That also

angleague



applies to its best use cases, with Bertrand admitting he found it "a bit frustrating" that Mahindra was made to "look stupid on something where we thought we would maybe look smart".

To Emeny-Smith, AI is at its most effective when there is "a problem or some margin of gain to make", rather than treating it as "just a solution that's going to make something generically better".

"AI is a solution for a lot of very specific problems," he explains. "What the wider industries and the wider general public are seeing is AI as a catch-all solution and it's not. AI has meant many different things for years.

"Like anything, you're always going to build trust in something before you use it. There's so many different areas that you can apply machine learning and AI to. But not everything is going to work."

HAMA

NAVAN

Building trust is a common theme whenever it comes up in discussion. "I'd be interested to see how long it will take for the AI to get to a place where everybody has confidence in it," remarks 2009 Le Mans winner David Brabham, an interested



McCarthy hopes A2RL will be a vehicle to increase acceptance of AI's use in society train_generator = train_datagen.flow_from_directory(
 'path_to_training_data_directory',
 target_size=(150, 150),
 batch_size=20,
 class_mode='binary')

HOW A2RL IS PUTTING AI IN ACTION

"Over the past 12 months that Chat GPT has come out, people have put up their defences against AI," said Dr Tom McCarthy on stage at ASI. The executive director of the ASPIRE company that is heading up the Abu Dhabi **Autonomous Racing** League views the grasp of generative AI as "one of humanity's greatest challenges" in the coming years and hopes that his nascent racing series known as A2RL - will "be



able to make some minor contribution to bringing people along with understanding, while at the same time having a bit of fun".

Driverless racing is nothing new, with the formative steps taken by the now dormant Roborace entity, followed up by the Indy Autonomous Challenge that has held events in North America and Europe using adapted Indy NXT cars. A2RL will go a step further by using Super Formula's Dallara SF23, widely regarded as the closest performance level to Formula 1. McCarthy believes the choice of chassis "should be seen as epitomising our values" since it opens up opportunity for unfavourable comparison should the cars need to run significantly slower when operated autonomously. The first race on 28 April will come just 15 months after McCarthy first met with Dallara.

"The world is about taking on almost impossible challenges and meeting them," says McCarthy. "For any individual today, understanding what AI is and understanding what it can potentially mean in the future is a huge challenge, so we've got to say, 'Hey, we're not scared about these challenges.'"

McCarthy is clear that A2RL is "not trying to replace something like F1", and believes there are significant safety improvements on the road that can result from a greater acceptance of AI "if they can sit alongside drivers comfortably and be adaptive". He therefore welcomes the existence of other autonomous driving series on the market, and the possibility for more to follow, which he hopes will change consumer attitudes from pushing back against autonomous features to being more accepting of them.

"If nobody else was interested in doing this, I'd think I had a problem," he adds.

AI IN MOTORSPORT



observer at ASI's Business Forum. "One day the driver turns up, he's on it, the next time he's not and that happens. So how does that AI understand that?"

At this juncture, it's unclear how AI should be regulated in a way that avoids stifling innovation, and indeed whether enough knowledge exists to do so effectively. But a need for caution is recognised by Phelps, who said that its rollout "needs to be done on a small scale first and really proven, not just run away with things and surround us before we're ready for it".

Patterson agrees: "It's got to be fit for purpose. There's no point trying to coordinate something that is going to cause negative impact, or even mistrust. There's a need to be able to trust the data, trust the system, trust those models to do what you want."

HERE TO STAY

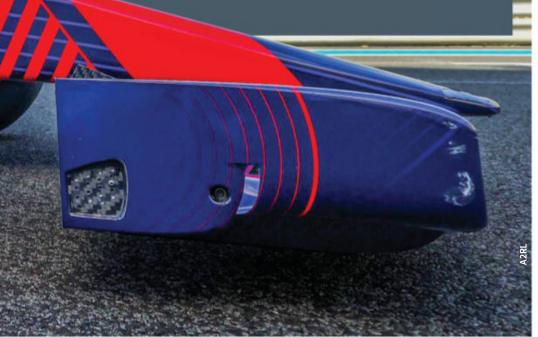
There's widespread confidence from industry experts that AI will go from strength to strength once it has earned the trust of users. The seminal moment from which there is no turning back is surely not far away, with the FIA also jumping on board to help staff with processing track limits violations.

"If AI is able to assist engineers and drivers with finding a quicker solution, you're not going to stop them are you?" notes Brabham.

"We can all go back to pen and paper, but you quickly get beaten by someone using a laptop, right?" adds Takahashi. "This is effectively that next step."

If, as expected, AI is here to stay, will increasingly developed machine learning only lead to a homogenised racing product that ceases to entertain, and inevitably results in a loss of interest?

"If there's a 'perfect' solution, and AI is trained to find it, then everyone will find that solution," Yorath asserts. "We live in a world that's becoming more and more homogenous and AI is only going to hasten that." Whether he's proven right will depend on how motorsport's latest arms race plays out. Frith conceded that entirely replicating the human-machine interface in simulation is "far from a trivial task". When it comes to modelling what a human would do, he said "there's plenty of distance to go". Emeny-Smith agrees that "there's a lot more to come" because AI is still "in its junior stages". But while he doesn't think engineers will be replaced by AI, he believes things are only going one way, and that engineers who don't use the technology may in time be replaced by those who do. "Motorsport is about innovating first and using that to your advantage," he says. "And AI is being at the forefront of finding that at the moment."





TOYOTA GR YARIS RALLY2 WRC'S LATEST CUSTOMER WEAPON

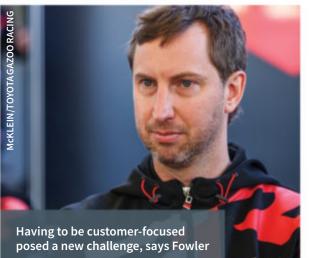
The crowded Rally2 market has a new contender from Toyota, which takes inspiration from its Rally1 conqueror

BY TOM HOWARD



or the past three years, Toyota has been the dominant force in the World Rally Championship, sweeping aside

the opposition to win a stunning drivers'



European Rally Championship's top level, and WRC's second tier: WRC2. To ensure it hit the ground running against opposition from Skoda's Fabia RS, Citroen's C3, M-Sport Ford's Fiesta and the Hyundai i20 N, Toyota conducted 18 months of development on the GR Yaris Rally2 and logged more than 9000 miles of testing between Kalle Rovanpera, Juho Hanninen, Stephane Lefebvre and Toyota team boss Jari-Matti Latvala. While Toyota's GR Yaris Rally1 is the WRC's proven vardstick, winning 16 of 28 rallies it has contested to date, building a car to defined regulations specifically for customers of varying abilities is an altogether different task. "The biggest challenge is getting the focus of the project correct because it's

and manufacturers' treble. But this year the Japanese marque is taking on a new challenge and has entered the Rally2 customer sphere with the GR Yaris Rally2 – "the aggressive sibling of the GR Yaris Rally1", according to Toyota WRC team technical director Tom Fowler.

Rally2 cars are to rallying what GT3 and TCR cars are to GT and touring car racing; off-the-shelf vehicles built to specific FIA regulations available to anyone who can stump up €200,000-€300,000. Rally2 regulations have been overwhelmingly successful since the birth of the ruleset

under the R5 name in 2012, with 1500 of these four-wheel-drive, 1.6-litre cars on the market. Rally2 is the base for most national championships, the

STATS

TECH

ENGINE Three-cylinder, 1.6-litre turbocharged (87.5mm bore x 89.7mm stroke) GEARBOX Five-speed sequential SUSPENSION MacPherson

> WEIGHT 1230kg (including one spare tyre)

> > LENGTH 3995mm

GR Yaris Rally2 took its first outright stage win on Swedish snow last month

a customer project that is out for sale," Fowler explains. "It's the first car we've designed like that as a company. In the past, our customer was only our factory driver, so we could easily understand what the need of the project was because the drivers are there with us. Now the driver could be anyone, so we had to really understand the focus and how to approach that.

"The regulation has been around for so long and there are lots of evolutions of all the other cars – it's a very competitive market to come into. Everything has to work really well to match what everyone else has done as all the other cars are so good. Our first one has to be almost evo 3 or 4 straight away. That's not just performance; it's reliability, usability, everything has to be what everyone else has been doing for several years." There's evidence of its Rally1 bigger brother's DNA in the car, with Toyota successfully capturing a scaled-down version of the Yaris's striking look. Fowler says its "aggressive features" were necessary "to be on the same level as the latest cars". But, as he explains, the lessons from Rally1 carried over into the Rally2 car and vice versa. "There are certain components in Rally1 and Rally2 where the regulation is the same or very similar," he says. "We were able to use a lot of the design philosophy and learning we had done for Rally1 to help with Rally2. But also in the other direction, we found some improvements for Rally1 based on what we have done for Rally2. "One of the big benefits from the way we structured the project to have

it within the same design team as the Rally1 car was this ability to learn in both directions." MAIN PIC: THUILLIER/TOYOTA GAZOO RACING

The GR Yaris Rally2 was reliable but struggled for outright performance on its WRC debut in Monte Carlo. Its best-placed driver Sami Pajari was fifth in class, almost five minutes adrift of the WRC2 winner, Citroen driver Yohan Rossel. But on the Swedish snow it notched up an outright stage win courtesy of Georg Linnamae, while second-in-class Pajari led home a quartet of GR Yaris Rally2s. A first WRC2 victory appears a matter of time for Rally2's newest car on the block.

ENGINEERING

MotoGP gave a competition debut to its new 40% sustainable fuel blends in Qatar last weekend

MOTOGP'S LOW-KEY SUSTAINABLE SHIFT

Lap times haven't suffered from MotoGP's adoption of sustainable fuels, meaning it has gone largely under the radar. But the transition is nonetheless significant **BY LEWIS DUNCAN**

y the time you read this feature, a little bit of motorsport history will have been made. The 2024 B MotoGP Qatar Grand Prix was the first in the series' history to have been completed by a grid using fuels of part-non-fossil origin. As MotoGP celebrates its 75th anniversary, it's a milestone moment a far cry from the first premier class grand prix completed on the Isle of Man back in 1949 by Harold Daniell on a 500cc Norton. The world is swaving into a crisis point, as global warming is fast reaching a catastrophic point for humanity. That poses an ethical question for motorsport. As the director of technology at Dorna Sports – MotoGP's commercial rights holder – Corrado Cecchinelli tells Autosport, "it's clear that if the goal was simply reducing racing carbon footprint, then the maximum impact on event sustainability is to not hold the event at all".

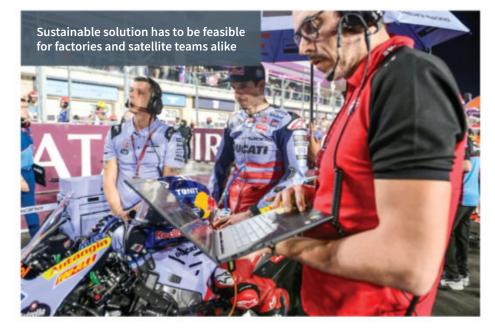
It's the truth, but thinking it's as simple as that is to have an idealised view of the world. It's a capitalist society and we all have bills to pay; not staging things for the good of the planet simply isn't an option. And nor would it actually help to address the problem. If you remove motorsport, there are still well over 1.5 billion vehicles in use around the planet. Some racing events not taking place on the weekends is a drop in the ocean compared to that. Motorsport has a major role to play in the world getting greener at the cost of the event's footprint. Formula 1 is on course to introduce 100% sustainable fuels in 2026. MotoGP is targeting 2027 to have its grid powered by fuels of 100% non-fossil origin. The fuels will be created in a laboratory, using components sourced from a carbon capture scheme, or derived from municipal waste or non-food biomass.





MOTOGP'S SUSTAINABLE FUEL



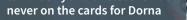




"There are some fundamentals that Dorna believes can't be compromised on"

or electric future for MotoGP was "not that practical in the fallout of actual production". And so we end up at sustainable fuels.

MotoGP pioneering this advancement comes with a balance. It has to move in a direction that is beneficial to the manufacturers - in this case Honda, Yamaha, KTM, Aprilia, Ducati - involved in the series while also ensuring the championship's needs are met in terms of providing a product worth buying into. "The general answer is it's very difficult," Cecchinelli responds when asked how hard it is to balance MotoGP's sustainability goals without compromising its show. "It's an interesting question because it's not at all clear to the public that this sort of compromise is influencing literally any decision we are taking. "It seems to me there are always people who live in another world and say something like, 'How stupid they are, why don't they just say everything is free [open regulations]'. OK, if we say that, the business is over because it's like committing [business] suicide."



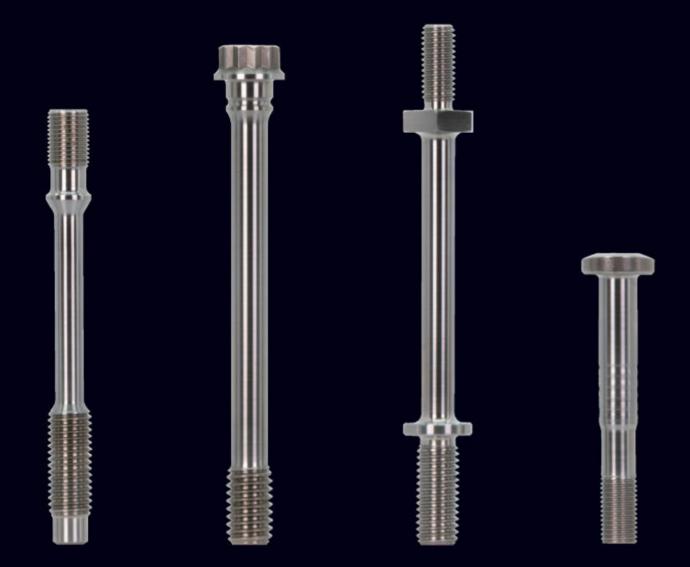
But that's the end goal. Right now, MotoGP is racing with fuels of 40% non-fossil origin. This, Cecchinelli explains, was something first discussed about three years ago. While the motoring industry is focusing more on hybrid and electric power routes, these "were soon easily discarded because nobody currently racing was convinced these were the way to go for two wheels".

The demands for car and motorcycle manufacturers are, of course, different. And the bike industry has always generally lagged behind in this realm. As such, Cecchinelli says, a hybrid

There are some fundamentals that Dorna believes cannot be 🕨



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compromised on, such as MotoGP remaining a prototype championship. But within that framework, there are changes that can be made for the betterment of the show

"We realised that 100% non-fossil fuel may bring some issues that may need a longer time to handle"

the seals, the rubbers and everything. "Possibly the deadline

was going to be 2027 anyway even with no intermediate step. So, we think this is a

without compromising the series' integrity. One such example is the move to a standard ECU in 2016. It was initially resisted by some manufacturers but they were persuaded and the championship ultimately benefited with a closer field and the removal of a big entry barrier.

The move to sustainable fuels will not present such a radical shift for MotoGP as that did, but it is a necessary one. Road relevance may not be "the primary goal" for Dorna, but Cecchinelli notes it is "an important factor". "Road relevance means that the racing budget that every manufacturer allocates to MotoGP has a return on investment," he says.

Put simply: the more technology return you are seeing for your efforts, the bigger your profits. That's true for the manufacturer all the way down to its smallest sponsor. Environmental sustainability is one thing, but it does have to go hand in hand with economic sustainability.

That's why this move to sustainable fuels was never considered to come under the banner of a single supplier. MotoGP has several big-name fuel companies working with manufacturers, from Repsol to BP, while a number of different brands act as sponsorship partners with various satellite teams. This new fuel regulation ultimately has a practical application for those firms, and in turn could invite other fuel makers to invest in MotoGP.

So why, you may be asking, delay introduction of 100% non-fossil origin to 2027?

"When we were considering the non-fossil fuels, we realised that 100% non-fossil fuel may bring some issues that may need a longer time to handle. Something on the engine may need to be done," Cecchinelli explains, "even just for the materials, smoother process which helps everyone to get familiar with these new fuels without too many troubles all at one time. It looked like a more reasonable path."

In terms of the integration, the teams have found a "smooth transition" because the new fuel is what is known as a 'drop-in' – which is exactly what it sounds like: fuel that goes straight into the tank and away you go, minus some small tweaks to fuel mapping. For the suppliers it's a new challenge to make a fuel that works seamlessly with current engine technologies, but it's one that they accept willingly, with some able to draw on their experiences developing similar fuels for cars.

For fans, sustainability is sometimes seen as a bit of a dirty word. When F1 went to its turbo-hybrid formula in 2014, it was derided because of its underwhelming noise. Formula E gets a hard time just for being all-electric. But times change and motorsport has to move with them. MotoGP understands this, but the sustainable fuels won't offer any noticeable difference for fans at home and at the track.

Lap records in both pre-season tests in February were smashed. So, MotoGP is going faster than ever before *and* being kinder to the environment. What more can you ask for?

Of course, the 2027 shift to 100% non-fossil origin fuels will also coincide with a major technical regulation shake-up. Chief among this is a proposed downsizing of engines. The exact rules framework for 2027 is yet to be laid out publicly, but all manufacturers asked about it so far have generally spoken favourably about the shift. And while the next few years will be spent ironing out the kinks of 100% non-fossil fuels, when they arrive in 2027 they will merely be powering

the grid – not noticeably depleting performance.



Aero war in MotoGP means there has been no offset in lap time

As well as MotoGP, its feeder Moto2 and Moto3 categories are moving in the same direction and operating under the same fuel framework as the premier class. This will be provided by Malaysian oil giant Petronas. While it may not seem like much, sustainable fuels are a step to safeguarding MotoGP's future and helping make a difference in the wider world.

CREATING THE MOST RADICAL 2CV EVER

The Special Saloons grid will have a car truly befitting that description this year in the form of Peter Thurston's one-off V8-powered beast BY MARCUS PYE



his is going in an Autosport Engineering supplement," says Peter Thurston incredulously

faces." Societe Nationale des Escargots de Fer enthusiasts read on.

Peter Thurston Racing in Faversham,

two that changed direction abruptly and a very competent kit car of which a few dozen may have been sold before the local enterprise hit the buffers, like so many in the industry, now in its 75th anniversary in Britain having been pioneered by Derek Buckler in 1949.

as he reveals his extraordinary Citroen 2CV8 racer, yet to turn a wheel. In place of a wheezing 602cc air-cooled flattwin engine making a whopping 45bhp in racing trim sits a gruff 4.6-litre Rover V8. Even in mild tune, developing 280-300bhp, this powerplant should propel the circa 700kg bolide at a fair lick in a straight line. "It's anti-engineering really, something I've put together from parts lying around my workshop, purely for my own amusement," he says. "Will it work? I don't know, but I've always raced for fun and this is guaranteed to put a smile on spectators' Kent, is one of Britain's longest-established and best-respected classic Jaguar restoration specialists. The business dates back to 1992, but Thurston worked in his father's garage long before setting it up. "I have no formal engineering qualifications," smiles Thurston, 61, "but I've spent my entire life playing with old cars, watching what skilled people do and learning from them. I had 30 working for me at one time. We've done cars for celebrities and prestigious film work, but I've always been a sucker for a project." The Citroen is the sum of three ideas;

"A customer commissioned me to build a sort of Austin Seven Salamander replica, which looked old but had a modern engine," explains Thurston. "As he wanted it to handle, I reckoned a [Lotus] Sevenesque chassis would be ideal.

"It was about half-done when I found an Austin Big Seven chassis with an identity and the plan altered [to use that]. I'd made the two-seater boat-tailed body from wood



"It's anti-engineering, really, put together

from parts lying around my workshop"

Mild-tune (for now) 300bhp V8 takes place of 45bhp flat twin

and aluminium, and the 1600cc Ford crossflow engine on twin Weber carbs is done, but the owner prioritised other cars so it's on the back burner. As I'd agreed to buy the GTS Panther 'show chassis' from agent Rally Design [to underpin it], I wasn't going to renege on the deal. I got it in 2016 or 2017, so it had been gathering dust on the mezzanine for seven or eight years. "I'd also been asked to restore a Triumph Stag with a Rover V8 engine and transmission instead of the originals, thus acquired everything before the customer changed his mind. I sold the car to a Triumph specialist, but 'won' the engine and new Rimmer Brothers LT77 gearbox. That set me thinking about marrying them with the Panther chassis and dropping a saloon body over the top. The idea first struck me in 2004 when battling Ben de Zille Butler's crisp-handling Caterham at Brands Hatch in the Group C2 Spicesuspended Honda Prelude-Cosworth YB turbocar. I'd outrun him past the pits, ►







but he'd outbrake me into Paddock. Very frustrating."

The man behind the GTS Panther – described as "a genius" by veteran kit car guru Steve Hole, publisher of *TKC* magazine – was Darren George, who had worked with John Barnard of Lola Cars and F1 Ferrari fame. "They spoke the same language," said Hole. However, like so many clever engineers focused on cars, George's business failed, despite him being credited with solving the steering issue Achilles' heel of Ron Champion's original Locost design, and selling countless parts to fix it.

So Thurston's bolide should be persuaded to go round corners, at least once adjustable rose-jointed suspension

"It should be entertaining and go like stink in a straight line"

replaced the standard headwear. The chassis, which Thurston has panelled beautifully and added further stout roll hoops, cross braces, door bars and stays, resembles a steroidal caricature of the fabled Deux Chevaux while retaining its charm. While the wheelbase of the utilitarian French machine is an inch different to the Panther's, the body's height alters the proportions radically.

Indeed, the underpinnings create a curious 'back seat' driving position, accessed through rear-hinged suicide doors. From the cockpit, front corner visibility, crucial for apex-clipping, looks compromised. It's not dissimilar to the six-wheeled F1 Tyrrell P34s' of 1976-77,

Peter Thurston grew up around motorsport. His NSU scooter dealer father, also Peter, raced a front-engined Elva-BMC 100 Formula

A THIRST FOR SPEED

Paul Sleeman and Tim Barry in Formule Libre at Lydden and when I saw a Royale RP29 for sale I couldn't resist. It scared me initially, but and Scot Walter Robertson. They installed a 3.5-litre Rover V8 from a P5B found in a field, but Pete went the whole hog. A spectacular

Junior in 1961, then put a Heron Europa kit car body over it, naming it Prima GT. When Thurston Sr's wife banned him from buying a Lotus 22, he made his own early Formula Ford, from which young Pete saw him ejected at Brands Hatch and hospitalised. Undeterred, Jr grass tracked as a teenager, then tried bangers "with a Ford Capri 3000GT. I was on £40 a week and in my third meeting won £36. But it wasn't for me!

"John Sabourin [winner of the 1974 Luanda 2 Hours sportscar race, sharing a March 74S he prepared] got me into circuit racing. He'd moved to Kent and worked for me. We watched I said I would so went through with it. I was 26." In the ex-Chris Hall works Jamun M89, he became Lydden FF champion in 1990, his first season. "When John persuaded me I needed a ground-effect F2 car for Libre, I bought the ex-Quique Mansilla March 832 back from South Africa with a Mazda rotary engine," he adds. Turbocharging the raucous unit quietened it, and much fun was had tearing round with Eddie McLurg's BMW M12-powered 822. But Thurston is synonymous with the DJ Invicta radio Ford Escort Mk1 that Barry Costello and Maurice Lyon bought as a shell, traced back to Whitley Bay tailor Johnny Blades ride, *ClassicFord*'s January 2003 cover star bounced back from massive shunts at Lydden and Brands to thrill anew. Having raced the Honda Prelude – built by ex-Alan Mann Racing engineer Jim Morgan for Rod Birley – in the interim, Thurston sold the Escort back to the Costello family in 2009, but misses it. Later dalliances with the ex-Pat 'Revolution Wheels' Mannion FF2000 Delta-based Stiletto-Ford [now Ray Rowan's], Holden Special Vehicles [Tom Walkinshaw] built Commodore VZ and unique self-converted Jaguar XJ40/300 hybrid underline his enduring passion for tin-tops.



but without a helpful cockpit side window. Thurston may find himself peering through the air vents under the windscreen for accurate placement until he gets used to the unconventional sightline.

The shell itself had its floor cut out, but the rag top aperture is filled with sheet aluminium fixed to steel ribs for rigidity and covered in vinyl. "No 2CV is complete without a knobbly roof," grins Thurston, who crafted the striking fibreglass front wheel arches, a foot wider than the originals at 71 inches, and the clamshell bonnet with its cheeky grille. The rear arches are work in progress as 13in Compomotive wheels in 10 and 12in widths with different offsets will replace the temporary 8s and 10s from the parts bin, and shroud the Wilwood brakes up front.

"The rear wing is something I knocked up in a morning to complement the aesthetic," says Thurston. "But I'll probably work through several options, including a one-off whale tail made by a local fibreglass guy, another spoiler to generate frontal downforce and a rear diffuser, before deciding on the final look." The livery was created by Capri and Eurocar V8 racer Luke Bennett of Heron Workwear & Graphics, a neighbour on the trading estate.

Thurston has previous with the aluminium Rover V8s from his beloved Ford Escort, acquired from Lydden regular Mick Tester. Upsized to five litres, it was good for 160mph plus. The Citroen's unit is deliberately mild, at least to begin with.

"It's pretty standard, with iron crank, a Piper fast road cam, breathing through a quartet of Chinese copy Weber IDA downdraught carburettors," he says. "I found a Formula Ford 2000 dry sump and pump



on eBay, cut and shut the vee in the Pinto oil pan and added some baffles. When everything's working I could build a 4.8 or five-litre engine with cross-bolted mains to get 400bhp. That's over 600bhp/ ton, more than a Bugatti Veyron!

"People reckoned I'd have trouble getting the engine, 'box and exhausts in, but I enjoyed the challenge. The rear end is stock Sierra, so the propshaft is [a spliced] Rover front/Ford rear to mate with gearbox output shaft and diff, currently a 3.62:1 Quaife Powrlok unit." A similar five-speed 'box withstood the torque of the Escort's big engine without complaint: "To be honest I never changed the gearbox oil in 13 years, but rebuilt the ZF plate diff after every race."

Thurston's previous 2CV competition experience is a handful of events in a local Citroen dealer's Wall Clippers car in 1991 - "I was paid £200 per race" - and the Mondello 24 Hours in 1992, which needless to say was a hoot. Plus he drove one, packed to its gunwales with luggage and outboard engines, for 23 and a half hours solid from Dunkirk in France to Ancona, on Italy's east coast, a distance of 1500km. Following a ferry across the Adriatic, the epic journey continued south to his boat in Greece in 1994: "I lived on it for a year, using the Citroen as a runabout." His wacky racer is a very different kettle of fish. Since we saw it a couple of weeks back, the engine has been fired up for the first time from the driving seat. "I'm looking forward to getting it on track, driving it and finding out how it works," says Thurston. "I have no idea what to expect, but it should be entertaining and go like stink in a straight line. Considering how little it has cost to date it will be the cheapest car on the Special Saloon grid." And among the most photographed.

HOW TO BE AN ACE Engineer

Peter Wyss de Araujo looks back on a career digging into data and making cars quicker

BY JAMES NEWBOLD



eter Wyss de Araujo has sampled virtually every motorsport discipline from hillclimbing to Formula 1,

taking in a decade of touring cars and a Formula E stint along the way. But he's never stopped learning, and that mantra remains today in his current position race engineering an LMP2 car in the European Le Mans Series for Team Virage. Finding the ideal compromise for three drivers of differing size and experience levels at the Valencia team set up by an ex-colleague at Campos Racing, where the Swiss enjoyed his longest spell at a single team from 2005 until 2017, is the latest opportunity for Wyss de Araujo to exercise his curiosity – an asset he considers invaluable in racing.

"I force people to use their brains, and that's coming from curiosity," he says. "You want to understand why something is like that, then you can discuss it as a group, and maybe you will come to a solution that means you do something different to how you did it for 30 years."

His motorsport journey started out while studying, helping various Swiss drivers including Jo Vonlanthen and Patrick Studer. He learned to do all sorts of jobs himself. "The person engineering the car does everything – performance engineer, race engineer, psychologist, the whole thing," he notes, adding that all his lessons "I had to find out myself, I didn't have someone giving me advice".

Wyss de Araujo studied engineering for two years before deciding "I didn't want to learn to design bridges or trains". He then



switched to maths and completed a PhD at the University of Bern, saying it doesn't matter what your educational grounding is because "you will learn doing the job in the first years". More important, he believes, is an individual's mindset.

"If you are born in Switzerland, you're born with precision," Wyss de Araujo says. "Maths teaches you to be a logical thinker. That's what you use a lot in motorsport."

His time in F1 was full of hard knocks at an A-Z of low-budget teams. He started out in 1987 with Coloni, a team he'd joined in Formula 3000 the year before to run Gabriele Tarquini. They collaborated again in 1988, then at AGS in 1990-91 and at Fondmetal in 1992. In between, he toiled for Zakspeed (1989), Leyton House (1990) and Lamborghini (1991). Ending a run of 13 straight failures to qualify with Bernd Schneider at Suzuka in 1989 and finishing eighth in the 1991 US Grand Prix with a skeleton crew of six stand out as high points, underlining the theme of adversity that dominated his F1 career.

"In the old days where you did this job for passion mainly, those are moments

7/2 Aure

you never forget," Wyss de Araujo says.

Touring cars proved more successful. Introduced to CiBiEmme by Tarquini, he won the Italian super touring title at the first time of asking in 1993 with Roberto Ravaglia, a driver Wyss de Araujo refers to as "like the Alain Prost of touring cars", and in 1997 with Emanuele Naspetti. Wyss de Araujo relished building and developing his own chassis – "like DTM cars but only two litres" – and believes he would have stayed forever had CiBiEmme not lost its BMW support at the end of 2000. For 2003 he returned to single-seaters, initially at Coloni, before his lengthy stint at Campos yielded GP2 teams' titles in 2009 and 2011.

For a new challenge, Wyss de Araujo enjoyed two seasons performance engineering with Dragon in Formula E. He "learned a lot" delving into the details of energy management and developing his own dampers, but the requirement to move to the UK during COVID was unappealing. Now content in sportscars, Wyss de Araujo stresses he doesn't have a racing bucket list. But he's clear that, if he did, many things certainly aren't on it.



TOP TIPS FROM PETER WYSS DE ARAUJO

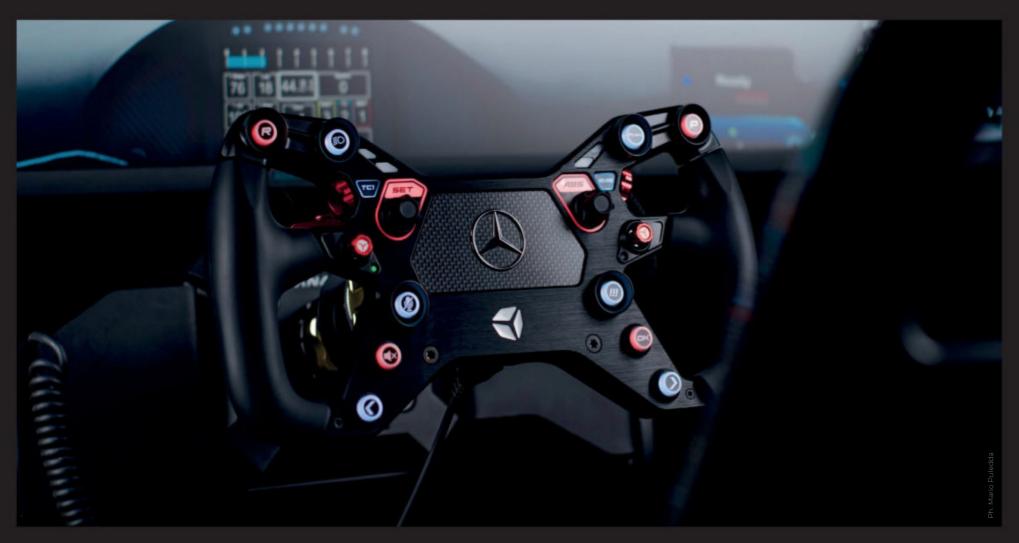
 Use your head to make common sense decisions.
 It's not magic, only physics.

 You don't need to be a genius, but you need lots of dedication.
 Passion and hard work bring you the result. What you study isn't relevant. Engineering is good but physics and mathematics are too.

Knowing your personality is important. I did a personality test on myself and it picked up some good areas to improve.



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