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The true position of where Alonso and Aston sit in F1

In the early months of last season, Fernando Alonso and Aston Martin provided the sliver of hope amid Red Bull domination. Alonso's five podiums in the first six grands prix suggested it could be the team in green that was most likely to give Formula 1 the fight at the front it desperately needed. But things changed rapidly.

Since then, Ferrari, McLaren and Mercedes have won races, with McLaren's Lando Norris currently the biggest threat to Max Verstappen. Aston Martin lies a distant fifth in the constructors' table.

In this issue, Jake Boxall-Legge hears from some of the key players and finds out why the team feels its 2023 form was artificial. And how it could still climb towards the front as new resources and fresh faces bolster the squad ahead of the new F1 ruleset for 2026 (see page 24).

Aston boss Lawrence Stroll has tried hard to get hold of design genius Adrian Newey, who has yet to announce where he is heading next season once he is finished at Red Bull. Newey was part of the Red Bull celebrations at the Goodwood Festival of Speed (p38) and helped reveal his RB17 hypercar. He speaks to Alex Kalinauckas on p32 about the project that aims to provide F1 performance.

The first big international motorsport title of 2024 gets decided in London this weekend with the Formula E finale. Jaguar drivers Nick Cassidy and Mitch Evans, who both won races in the capital last year, head the standings but history shows that anything can happen in the all-electric series. Stefan Mackley takes a look at the contenders on p4 and we'll bring you his full report in next week's issue (25 July).



Kevin Turner

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The new Extreme H machine, Ford's Pikes Peak-winning F-150 and Reynard's successful 1994 arrival in Indycar are all part of our latest free 28-page Engineering supplement.

PIT + PADDOCK



Cassidy leads seven-way electric title fight into London ExCeL finale

FORMULA E

Just two weekends after a British Grand Prix thriller, UK motorsport fans have an FIA world-title decider to anticipate between seven contenders as Formula E descends upon London's ExCeL Arena for a double-header this Saturday and Sunday.

Jaguar driver Nick Cassidy sits in prime position to claim his maiden FE crown, 12 points clear at the top of the table in his first season with the team. After finishing runner-up in 2023 with customer squad Envision, Cassidy has taken two wins this term in Diriyah and Berlin, along with a further six podiums, propelling him to the top of the standings since the German event in May.

But the Kiwi enters the London E-Prix double-header after failing to score in either race last time out at Portland. He spun out of the lead on the penultimate lap of the opener when on course to all but secure the title with victory.

"You walk into the fight with guns up

and you go for it," said Cassidy of his situation. "That's motorsport and that's the position I'm in but I'm not giving up, I'm still leading the thing."

Cassidy's disastrous US outing has opened the door for Jaguar team-mate Mitch Evans and Porsche's Pascal Wehrlein, both of whom sit just 12 points behind. Like Cassidy, Evans has taken two wins this year and, for the fourth season in a row, heads to the finale with a title shot.

Wins in Mexico City and Misano mean that Wehrlein is within touching distance of his first FE crown. The German led the standings at various points earlier in the campaign, but more recently it has become his Porsche team-mate Antonio Felix da Costa who has been the driver in form. He enters the final round with four wins from the past five races. The Portuguese's late-season spurt has lifted him to fourth in the standings, 33 points behind Cassidy with 58 available over the weekend.

"An impressive run of races, I'm not going to deny it, and considering where we

started the season [with three non-scores], if you told me four, five months ago that I would have won four races this year I would not have believed you," said da Costa, who is the highest-placed previous winner of the FE crown.

The best-placed Brit remains Oliver Rowland, despite the Nissan driver missing the two races in Portland due to an illness believed to be linked to an ear infection. Rowland sits 36 points behind Cassidy and has been the dark horse of the season. He inherited a victory at Misano following da Costa's disqualification for a technical breach, and has taken five other podiums this season, but had yet to be confirmed fit for the weekend as Autosport went to press.

Two points behind Rowland is DS Penske's Jean-Eric Vergne. The two-time FE champion is the only title contender yet to take a win this season, and his consistency has led to 13 points finishes across the 14 races this season. Reigning champion Jake Dennis also has a mathematical shot of repeating his crown, 12 months on from

HOW THEY STAND IN FORMULA E



POS	DRIVER (CAR)	POINTS
1	Nick Cassidy (Jaguar)	167
2	Mitch Evans (Jaguar)	155
3	Pascal Wehrlein (Porsche)	155
4	Antonio Felix da Costa (Porsche)	134
5	Oliver Rowland (Nissan)	131
6	Jean-Eric Vergne (DS Penske)	129
7	Jake Dennis (Andretti Porsche)	122

winning the 2023 title on home soil. But the Andretti Porsche driver is 45 points behind and admitted as early as Shanghai in May that “for sure I’m out of the championship”.

Two other titles remain up for grabs this weekend, with just 33 points separating Jaguar and Porsche in the teams’ race, while the German manufacturer holds a 19-point margin over its British rival in the manufacturers’ battle.

For the first time this season, the races will be shown on free-to-air TV channel Quest after broadcasting behind a paywall with TNT Sports this year.

STEFAN MACKLEY

SPA REPLACES RED BULL RING FOR F1 SPRINTS

FORMULA 1

Formula 1 has announced the six grand prix weekends that will feature sprint events in 2025, with Spa reinstated as the Red Bull Ring drops off the sprint list for the first time since 2021.

Five of the events on the sprint calendar remain the same from 2024’s schedule: Shanghai, Miami, Austin, Interlagos and Losail will continue to host Saturday races.

The Belgian Grand Prix last held a sprint race in 2023, but this and the Azerbaijan GP sprint were omitted from this year’s calendar and replaced by the returning



Chinese GP and the Miami round.

F1 has revealed an increase in viewing figures for sprint weekends over traditional GP events featuring three practice sessions, underlining its decision to continue with the format.

It is expected that the scheduling used in 2024, in which the sprint race takes place on Saturday prior to grand prix

qualifying, will remain in place. This was changed for this season to allow parc ferme to open between the sprint race and qualifying proper, ensuring that teams could address any set-up mistakes to make up for the loss in practice time.

It ensured that the sprints became more of a standalone event, rather than directly affecting the full-length grand prix.

JAKE BOXALL-LEGGE



Bearman: Saudi GP was key

FORMULA 1

Ollie Bearman has said that his Ferrari cameo at the Saudi Arabian Grand Prix was a major factor in gaining his 2025 Formula 1 seat at Haas, amid a tough F2 season.

The British teenager was announced in the build-up to his home grand prix as one of the Ferrari customer squad’s race drivers for his first full F1 season.

“I think Saudi showed what I was capable of, showed that rookies and people with lack of experience aren’t really so far behind the normal cohort,” said Bearman, who is dovetailing a second F2 campaign

with Prema Racing with FP1 outings with Haas. “I think I did put a good showing for myself in Saudi, and of course, with the F2 campaign going the way it is, it’s hard to ignore that. I still felt that I could do a good job in the free practices, but let’s say I’m happy that Saudi happened because I think it’s a major contributor to why I’m here right now.”

Of his F2 showings, he said: “I don’t have an answer yet. I hope that I can put the inconsistency down to something else rather than myself, because I honestly feel like I’m performing as high as I ever have.”

BEN VINEL, JONATHAN NOBLE & JAKE BOXALL-LEGGE

Aston Hypercar given its first shakedown

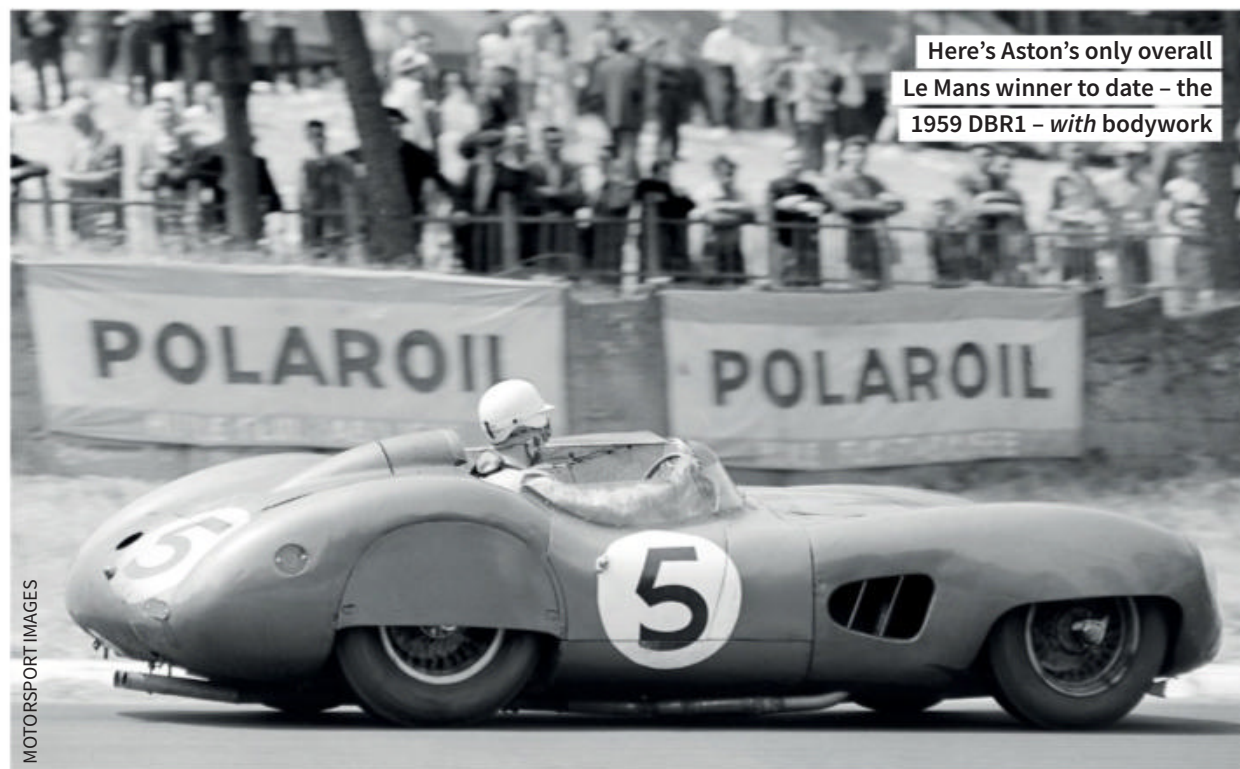
WEC/IMSA

Aston Martin's Valkyrie Le Mans Hypercar is on its wheels and running. The car that will fly the flag for the British marque in the World Endurance Championship and the IMSA SportsCar Championship from next year has undertaken its first shakedown – minus bodywork.

The run earlier this month was described as a “systems check” by Ian James, team principal of the Heart of Racing squad that will field the Valkyrie AMR-LMH in both series from 2025. He confirmed that the V12-powered Aston ran as “a spine without bodywork”.

“It was just a short test to check that the drivetrain, the braking system and everything is working properly before we start testing with the completed car,” James explained. “That should be in the next couple of weeks if everything goes to plan.”

The location of the test has not been



divulged, although James confirmed that it was not on a pukka race circuit and that the running was of the straightline variety. He did reveal, however, that driving duties were handed to former Aston Martin driver Stefan Mucke, who has close links with the Multimatic organisation involved in the development and running of the car from his stint on its GTE Pro line-with the Ford GT. The German was brought in because

of a lack of availability of a suitable driver from Aston's factory roster.

A shakedown this month means that the Valkyrie AMR-LMH remains on schedule ahead of its projected race debut at next January's Daytona 24 Hours, the IMSA series opener. Aston earmarked a start to its test programme early in quarter three of this year on the launch of the car last October.

GARY WATKINS

Ferrari gives race debut to 499P evo updates

WEC

Ferrari brought the first revisions to its 499P Le Mans Hypercar on stream at the Interlagos World Endurance Championship round last weekend. It had revealed at the Le Mans 24 Hours last month that it was planning to introduce the first evo joker updates before the end of this season or at the start of next, but opted to blood them at the earliest opportunity.

Ferrari sportscar racing technical boss Ferdinando Cannizzo revealed that the Italian manufacturer's success at Le Mans and its return to contention in the WEC title race were two of the factors behind the early introduction. The upgrades are centred on improving rear braking efficiency, and Cannizzo explained that there was a desire to have them in place as soon as



possible in order to prepare for the latter rounds of the series when there will be a premium on braking efficiency, most specifically Bahrain. “As long as we had this improvement in the pocket, why not start directly?” said Cannizzo. “This will give us the

opportunity to get familiar with this modification – we need to readjust.”

Running the joker updates at Le Mans was never considered for two reasons, Cannizzo explained. The first was that Le Mans is not, he said, “stressful for the brakes”, and the second was

that the rulemakers – the FIA and the Automobile Club de l'Ouest – demanded that it would have needed to be on the 499P for two WEC rounds beforehand in order for its effect to be assessed for the Balance of Performance.

That would have meant an introduction at Imola in April, which would have been too early in the development of the upgrade. The new parts didn't run on the car until March.

The modification of the brake cooling at the rear has been undertaken “so as not to give us a compromise in the set-up choice”, explained Cannizzo. It has involved changes to the underfloor and the upper bodywork surfaces in order to rebalance the car with the regulatory aero window.

GARY WATKINS

➔ P14 INTERLAGOS REPORT



DAKAR RALLY Ford went public on its new Dakar Rally contender last week ahead of its first exposure to the masses at the Goodwood Festival of Speed. The Raptor T1+ will make its debut on the event in January in the hands of Carlos Sainz Sr and Nani Roma, but before then will take in the Baja Hungary on 8-11 August and the Morocco Rally in October. The machine, built and run by Cumbrian Blue Oval powerhouse M-Sport, is powered by a five-litre Coyote-based V8 engine, and has completed 10,000km of testing to date. **Photograph by Marcin Kin/Red Bull Content Pool**

Neck pain forces Harvey onto sidelines as Daly stands in

INDYCAR

Conor Daly replaced Jack Harvey for the second element of the IndyCar Series double-header at Iowa Speedway last weekend, after being denied the first.

Harvey had been battling significant neck pain since the previous weekend's race at Mid-Ohio. The Briton made three qualifying attempts on Saturday at the Iowa oval in his Dale Coyne Racing car after hybrid woes impacted two of the runs. He was seen gingerly trying to get out of the cockpit, and needed the assistance of his team members each time.

Plans for Harvey to be replaced by Daly, his team-mate at ART during the 2013 GP3 season, in time for Saturday night's race

were denied by IndyCar, since Daly had neither practised nor qualified the car. That meant Harvey (right) had to start the race, but he was forced to park after 28 laps, telling NBC afterwards that he was "in agony in the car".

Daly, whose only previous IndyCar start this year came in the Indianapolis 500, when he finished 10th for Dreyer & Reinbold Racing, was able to take part in Sunday's race, but he didn't finish either after mechanical woes put him out.

Harvey now faces a battle for fitness for this weekend's round on the Toronto street circuit with DCR, which has run no fewer than eight drivers this year across its two-car line-up.

JOEY BARNES & CHARLES BRADLEY



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BTCC chief Gow seeks new, 'quality' two-car teams

BTCC

British Touring Car Championship boss Alan Gow always made it clear that he felt the 30-odd cars that battled it out not so long ago was a few too many. Not enough pit garage space, not enough quality in some places, and too many interruptions from shunts and mechanical failures.

But the reduction of the field from 27 last year to an average of 20 for 2024 was a step a little bit *too* far, and Gow has now gone public on seeking newcomers for next year. Interestingly, in light of some of those who fell by the wayside last winter but said that they may return, he has stipulated that he is seeking 'fresh, high-quality' operations.

"I've opened the door for expressions of

interest from up to two two-car teams who are looking to join the championship from 2025," said the Australian. "With high and consistent levels of quality and competitiveness throughout the current grid, the final number could then be capped at 24 cars/TBLs."

When pressed as to whether he would turn away, say, a three-car team or a very high-quality one-car operation, he expanded: "The *ideal* is to have two two-car teams. A lot of people think it's a closed shop and that there are no licences available. Every time someone has requested a licence, there hasn't been one, but the changes during the off season [of 2023-24] have made some available.

"I'm going to try to keep it to 24 cars,

but if it transpires that you have two teams – one of three cars, one of two – and you end up with 25, that's OK."

Gow has reiterated his explanation earlier this year in an exclusive interview with Autosport that the new BTCC car ruleset, to be introduced in 2027, will be an evolution of the existing NGTC machinery and not a wholesale change.

"Current cars will remain eligible with very minor updates," he said. "Those updates will actually be cost-saving updates, and we won't be making any current cars redundant. Therefore, cars purchased or built by current or new teams will also be valid to use during that next phase of the regulations."

MARCUS SIMMONS

Ogier back from injury for return on Rally Latvia



WRC

Sebastien Ogier will return to the World Rally Championship in Latvia this weekend after being declared fit to compete following a reconnaissance crash that ruled him out of the recent Rally Poland.

The eight-time world champion and co-driver Vincent Landais escaped serious injury after being involved in a head-on

collision with a road car while preparing pacenotes in Poland. Toyota called up two-time world champion Kalle Rovanpera at the eleventh hour, and the Finn went on to win the rally.

Ogier has undergone further medical checks after returning home, and last week was back behind the wheel at the Goodwood Festival of Speed.

"After some rest, and some good help from my

medical team, I could recover pretty quickly and I'm looking forward to being back in a rally car in Latvia," he said. "The challenge of a new rally is generally something I like, and that's one of the reasons we added this event to our programme."

Ogier joins Rovanpera, Elfyn Evans and Takamoto Katsuta in Toyota's line-up for the Latvian event.

TOM HOWARD

Proton's solo 963
in action at Interlagos
last weekend



Proton in line for extra Porsche

WEC

Proton Competition could expand its presence at the pinnacle of sportscar racing with Porsche's 963 LMDh. The German team has aspirations to go from one to two cars in both the World Endurance Championship and the IMSA SportsCar Championship for next year.

"It is always better running two cars than one," said Proton boss Christian Ried. "It makes sense, but we need the customers and sponsors first."

Ried, whose one-car WEC and IMSA campaigns with the Proton-run 963 came on stream in mid-2023, added that a decision could be made "in the next few weeks".

Porsche has confirmed that there will be further 963s available for next season after a temporary hold was put on the build of new cars late last year. Capacity to provide support for customers will be freed up when Jota switches from the 963 to become Cadillac's factory representative in the WEC, a deal that should be

confirmed late this month or early next.

Urs Kuratle, project chief on the 963 programme, explained that there is demand for 2025, but stressed that no decisions had been made about whether Porsche will push ahead with plans to build more cars. "We are in discussion with other customers," he said. "If the situation demands that we should sell some more, we will sell more."

What is not clear is whether there will room for an additional Porsche run by Proton or another team in the WEC. The expansion of the grid to 40 cars means space for 22 entries in the Hypercar class, up from this year's 19. Two of the slots will be taken by Aston Martin's arrival in the top category with the Valkyrie AMR-LMH, and Cadillac will also have to double its assault with the new rule demanding that factory teams must run a pair of cars. Should Isotta Fraschini remain in the series – and therefore field two Tipo 6 LMH Competizioni – there would be no space for a further privateer Porsche.

GARY WATKINS

ISOTTA CHIEF DEPARTS

Former Maserati racing boss and Ferrari Formula 1 team manager Claudio Berro has left his role as WEC entrant Isotta Fraschini's motorsport director. The responsibilities of Berro, who joined the relaunched Italian marque in September 2022, have been taken over by company CEO Miguel Valldecabres.

DERANI BACK IN LMP2

Two-time IMSA champion Pipo Derani returned to the LMP2 ranks for the first time since 2017 at Mosport last weekend with AF Corse. The Brazilian, who races for the Action Express Cadillac GTP class team in the full IMSA series, drove the AF ORECA-Gibson 07 with team regular Luis Perez Companc in the absence of Matthieu Vaxiviere, who was on duty for Alpine in the WEC at Interlagos. GTP cars did not compete at Mosport.

LEUPEN IN 'GAGGING' FINE

Toyota Gazoo Racing race director Rob Leupen has been handed a suspended €10,000 fine by the stewards of the Interlagos WEC round for talking to the press about the Balance of Performance, which is forbidden in the series sporting regulations. The fine was suspended, pending no further infringement in 2024 by Leupen, because it is the first time that the rule has been enforced.

ANOTHER SLATER HAT-TRICK

Britain's Freddie Slater took another Italian Formula 4 hat-trick at Mugello last weekend to further extend his points lead. The Prema Racing-run 15-year-old passed Australian Jack Beeton (US Racing) late on to win the opener, and led all the way in the second to beat Beeton's team-mate Akshay Bohra. Slater withstood pressure from Beeton in the finale.

ROWE N24 APPEAL FAILS

An appeal by the Rowe Racing BMW team into the restarting of the fog-marred Nurburgring 24 Hours has failed. The decision of the court of German motorsport federation the DMSB means that the Scherer Sport PHX Audi squad keeps its victory.

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
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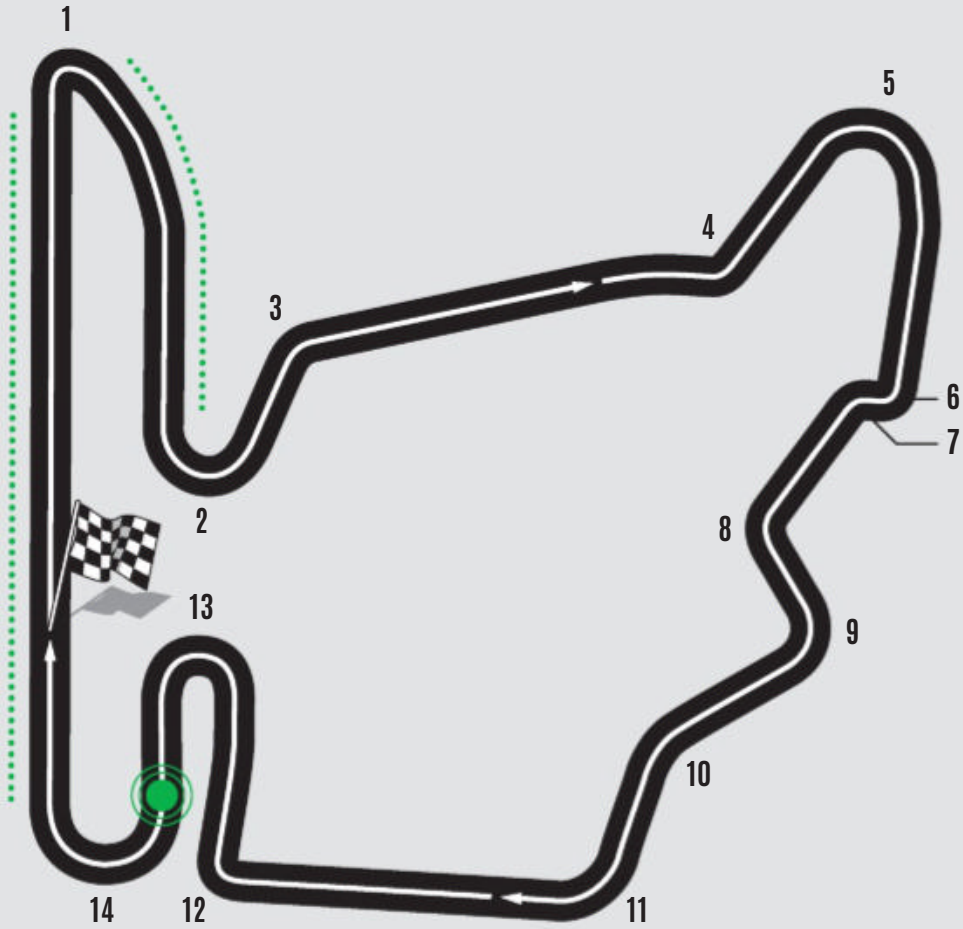
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Hungaroring
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Number of laps 70

 DRS detection
 DRS zone



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Saturday 20 July
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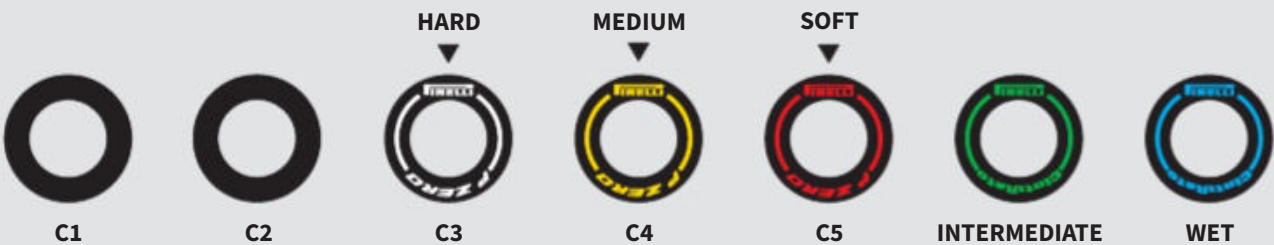
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CHAMPIONSHIP POSITIONS

Drivers			Constructors		
1	Verstappen	255	1	Red Bull	373
2	Norris	171	2	Ferrari	302
3	Leclerc	150	3	McLaren	295
4	Sainz	146	4	Mercedes	221
5	Piastri	124	5	Aston Martin	68



Hulkenberg has more points than Perez in past six events

HUNGARORING STATS

Previous winners

2023	Max Verstappen	Red Bull
2022	Max Verstappen	Red Bull
2021	Esteban Ocon	Alpine
2020	Lewis Hamilton	Mercedes
2019	Lewis Hamilton	Mercedes
2018	Lewis Hamilton	Mercedes
2017	Sebastian Vettel	Ferrari
2016	Lewis Hamilton	Mercedes
2015	Sebastian Vettel	Ferrari
2014	Daniel Ricciardo	Red Bull

2023 POLE POSITION

Lewis Hamilton
1m16.609s

POLE LAP RECORD

Lewis Hamilton
1m13.447s (2020)

RACE LAP RECORD

Lewis Hamilton
1m16.627s (2020)



Caffi qualified his Scuderia Italia Dallara third in 1989

Hungaroring podiums

Lewis Hamilton	11
Kimi Raikkonen	9
Michael Schumacher	7
Ayrton Senna	7
Sebastian Vettel	7
Damon Hill	5
Fernando Alonso	5
David Coulthard	5
Max Verstappen	4
Nigel Mansell	4



Here comes F1's Barbie moment

Apple's upcoming Formula 1 movie starring Brad Pitt has more in common with last year's doll-inspired box-office smash than might immediately be obvious

ALEX KALINAUCKAS

“B7... miss. C2... miss. F1... hit?” Battleship might seem like an unusual place for a Formula 1 column that references *Barbie* in its headline, but the links are intrinsic. Many a childhood hour/tantrum might have been given over to playing the board game, but have you ever heard of the 2012 film of the same name, *Battleship*? Given it was a commercial and critical flop, possibly not. Barbie, however, is a world-renowned toy and, a year from its opening, a global box office hit movie.

Enter *F1*, the staggeringly route-one name for Apple's Jerry Bruckheimer and Joseph Kosinski-helmed, Brad Pitt-starring, Lewis Hamilton-co-scripted F1 film.

F1 as global motorsport retains at its core an obsession with expensive, amazing toys. And with this officially endorsed, access-all-areas production, our hyperbolic Venn diagram is complete. Because *F1* is another entry in Hollywood's current obsession with intellectual property (IP) efforts.

According to *The Rest Is Entertainment* podcast, to whom this column owes a considerable debt of gratitude, only three of the top 50 films of the past 10 years have not been an IP movie of some sort. The comic book-based superhero movies top the bill, now the toy story market is exploding in a very different way to those beloved Pixar movies and a decade on from *Battleship*'s failure.

Mattel's push to sell the film rights to *Barbie* eventually resulted

“The story is going to live in the real 2023-24 sporting world. But its central premise is flawed”

in last summer's smash hit, along with the very successful co-marketing embrace with *Oppenheimer*. Mattel's Hot Wheels scale model toy car business is soon set to get its own movie makeover via JJ Abrams's Bad Robot production company. Plenty of other toy series have sold movie rights of late.

It's in this zeitgeist thrust that Formula 1's film will reside. That alone explains the production's essentially eponymous title, revealed over the recent British Grand Prix weekend. F1 the championship wants *F1* the film to wave everything its IP contains at potential new customers.

Barbie succeeded critically and commercially for multiple reasons. Its cast – Margot Robbie as lead star and co-producer, and Greta Gerwig as writer and director – was guaranteed to generate interest. *F1* with Pitt as its lead star is hoping for something similar.

But two other elements ensured *Barbie*'s success. The first was its massive reach thanks to its existing position in millions of homes around the world. The second was the strength of its story – about what it meant to be a woman in the 20th century compared to now and what Barbie dolls represented through their history.

Here, *F1* has snags. The championship and the film's producers are hailing it as utterly “authentic” – hence the access granted to the fictional Apex GP team at Silverstone and elsewhere. The story is going to live in the real 2023-24 F1 sporting world. But its central premise is flawed. Former F1 drivers racing in other categories in their fifties (and Pitt is 60 in real life) just *never* get tempted back to compete at motorsport's pinnacle. A cliché, within a cliché, if you will. And, per the film's Silverstone-released teaser, F1 drivers don't ask team staff to compromise car design safety for performance reasons in the 2020s.

But in getting audiences to take their popcorn into this story, *F1* is hoping that *F1* will swell its consumer base and make it less niche. It's simply the next step on the *Drive to Survive* marketing journey enacted under Liberty Media. Bernie Ecclestone might have hoped similar about early involvement with Sylvester Stallone's *Driven*, but that bombed and was about Champ Car anyway, let alone possessing *DTS*'s reach with a different audience from the traditional motorsport fan.

Now, to a certain extent, starting from a smaller awareness position compared to *Barbie*'s doesn't matter, because *F1* is purely about swelling that consumer base within a different medium of storytelling. “Toyetic” films are about subsequent sales of related merchandise. For *F1*, this means future ticket sales and race viewing numbers that convert to advertising cash.

A big part of this project is the tie-up with Apple as *F1*'s co-producer and distributor. Once it's had its theatrical run next summer, the film is going to be released on Apple TV+. That means it will sit available each day in an undoubtedly prominent spot on screens for 25million potential viewers. Ridley Scott's *Napoleon* biopic got this treatment, after all. Here it's worth considering how one of Apple's core products sits in the pockets of over a billion people too – something that could well be used to promote *F1*. After all, it's in Apple's interest for the project to succeed, around what are rumoured to be ballooning costs.

The *F1* teaser was all very Academy Award winner (for Best Sound, in 2023) *Top Gun: Maverick* and showcasing F1 speeds. The two share Bruckheimer and Kosinski as producer and director after all. And so, while Autosport understands other titles were considered for this film, even if the story fails to match the project's ever-increasing hype, the possibility of the phrase “And the Oscar goes to... *F1*” one day being uttered explains everything about its existence. 🏆

YOUR SAY

Full marks for moving to an app-based approach to tickets and event timetables, but... and there is so often a 'but'

ALAN HENDRY

Praise for Silverstone, with reservations

Just wondering if others had the same thoughts on the British Grand Prix, a great race and a wonderful result (for British fans).

Full marks to Silverstone for managing the crowds at the start of the day, even if it did mean we walked away from our preferred entrance. People were processed through the entrance gates without long queues that we had in the past.

Full marks for getting cars in and out of the car parks – although I have heard horror stories of long, long waits if you stayed after the race.

Full marks for moving to an app-based approach to tickets and event timetables, but... and there is so often a 'but'. The use of apps and encouraging people to get involved on social media only works if you have the infrastructure in place.

My mobile network seemed to struggle – I got a series of updates as I walked away from the circuit which had not arrived while I was in the grandstand. In the grandstand I could not post to X (aka Twitter). Accessing the Silverstone Events app failed repeatedly with a 'connection timed out' message. Not a technician, but that sounds like a server that couldn't cope.

Yes, I could use the free wi-fi. The free wi-fi worked at 0800, but subsequently didn't connect.

Good idea, but less than perfect execution.

Alan Hendry

By email

When a 'race meeting' becomes an 'event'

I wholeheartedly agree with Steve Mundy's letter (4 July) regarding the exorbitant cost of attending the British Grand Prix. This was my 44th visit (so appropriately won by car number 44!) and I attended all three days of track activity. The issue I have is that this is no longer a 'motor race meeting' for the hardcore enthusiast but an 'event' for the masses with numerous sideshows including several concerts all paid for by each customer, whether they are interested in the non-motor racing activities or not!

The car park behind Vale where I have always parked over the years has now been absorbed by a huge blue marquee with all sorts of inconsequential nonsense going on! I therefore had to park my

old Volvo on a slope in a muddy field some 20 minutes walk from the circuit, but not before Silverstone had taken £95 from me for the privilege of a three-day parking pass, up by 26% on last year!

I get it that cost is driven by demand, that the British GP is self-funding without government backing and that Liberty Media are now looking to attract a different type of audience, but it seems to me that this event has now grown completely out of proportion (apart from the toilet blocks which continue to be at an undesirable and undignified level!).

Charles Cowley

Ashted, Surrey

Can't wait for return of Group C

I read with interest the story in the national news section of last week's Autosport (page 61) about a new Group C series to be launched next year. Being a sportscar fan, this will be a great addition to the racing calendar. The cars of that era are some of the most iconic racing machines ever made and to see and hear them on track again, racing, will be nothing short of fantastic! My only hope is that one of the "three or four" races that are proposed to assess interest in the category is at Silverstone. Fingers crossed...

MA Smith

By email



HAVE YOUR SAY GET IN TOUCH

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LMGT3

Toyota leaves the rest behind at Interlagos

As the World Endurance Championship returned to a previous stomping ground, it produced an old-school feel with the Japanese marque dominating

GARY WATKINS



Toyota tried to play down any status as pre-race favourite at Interlagos last Saturday evening. It was pretty disingenuous given that it had just taken a 1-2 on the grid and that the temperatures were heading upwards for race day. It remains the king of looking after its tyres in the World Endurance Championship, despite losing its dominance in the series this year. Surely hot conditions at a venue with an ultra-aggressive track surface were going to play into its hands.

And so it proved. Toyota notched up a second victory of the season and did so at a canter. There was luck involved, as on the occasion of its first win of 2024 at Imola, but only in determining which of the GR010 HYBRIDS prevailed in the Sao Paulo 6 Hours. This time it was Brendon Hartley, Ryo Hirakawa and Sebastien Buemi who came out on top after a rare technical issue on the Japanese manufacturer's Le Mans Hypercar.

Team-mates Mike Conway, Nyck de Vries and Kamui Kobayashi really should have won on Sunday, but their eventual finishing position only served to highlight the advantage the GR010 enjoyed around the 2.68-mile Autodromo Jose Carlos Pace. They were able to fight back to fourth after losing three minutes at the very start of the third hour. The Toyota was just plain quicker than its rivals on the WEC's return to Brazil after an absence of 10 years.

Buemi crossed the line a minute and nine seconds up on Toyota's closest pursuer, the #6 Penske-run Porsche 963 LMDh shared by championship leaders Laurens Vanthoor, Andre Lotterer and Kevin Estre. In turn, the second Porsche Penske Motorsport entry of Michael Christensen, Matt Campbell and Fred Makowiecki was a further 7.6s behind.

Ferrari, meanwhile, never looked likely to repeat its Le Mans 24 Hours victory of last month and score a first win for the 499P

Fortune helped swing the race in favour of Hirakawa, Buemi and Hartley's #8 Toyota



ALL PHOTOGRAPHY: JEP/MOTORSPORT IMAGES

LMH in a regular WEC round: it could do no better than fifth with the AF Corse works entry driven by Antonio Giovinazzi, James Calado and Alessandro Pier Guidi. The German and Italian marques were P2 and P3 in the pecking order, but a long way behind the dominant force of the weekend.

Toyota had a good six tenths a lap in hand over Porsche, and one or two more over the Ferrari, which put its deficit at a full eight tenths. Ferrari pointed to the Balance of Performance, though of course without mentioning those words. Doing so is precluded under the sporting regulations of the championship. They were arguing, in the vaguest possible terms, that it had swung against them at the start of the second half of the 2024 campaign, but there was more to Toyota's victory than that.

The two tyre specifications taken to Brazil by sole Hypercar class supplier Michelin were the medium and the hard. Toyota could make

the former work on a warm winter's day when the thermometer rose to 25C. The GR010s exclusively ran on the softer of the two tyres, whereas Porsche and Ferrari had to bring the hard into play. It was a significant component of the Toyota domination at the weekend, even if there were attempts to play it down at Ferrari.

Sunday was all about "tyre strategy and tyre management", reckoned Toyota Gazoo Racing Europe technical director David Flourey. It tried the hard during the second free practice session on Friday and, he continued, "worked on the set-up to make the medium work and be consistent". "If you start with mediums all round, go to the hard and then try mediums on one side, it looks a bit like a test session," said Flourey cheekily of the others' less consistent strategies. "Obviously not all the combinations can work."

Ferrari, which also took sixth with the second factory 499P driven by Antonio Fuoco, Nicklas Nielsen and Miguel Molina, wasn't sure >>



Runner-up Vanthoor/
Lotterer/Estre Porsche
more than a minute adrift

“We were very disappointed in being unable to fight. It is clear that there is something missing”

that Toyota had pulled off some kind of masterstroke with the tyres. Ferdinando Cannizzo, technical boss of the marque's sportscar programmes, reckoned that if you have a clear performance advantage you can basically do what you want with the tyres: “They were out of range – I don't think they would have had a problem on either compound.”

Cannizzo didn't mention the words Balance of Performance, of course. But he did point out that the 499P was the heaviest car in the race – along with the Toyota it must be said – but also the least powerful. He suggested that such a situation “makes it very difficult to find the right window to optimise the car”. “We were very disappointed in being unable to fight,” he said. “I am not saying that there is not room for improvement, but it will be very difficult if things remain the same. It is clear that there is something missing.”

Cannizzo reckoned that Ferrari was pretty much on a par with Porsche at Interlagos, though that would be stretching it. The German LMDh had a clear but slender advantage in the region of a couple of tenths per lap over the Ferrari, which was running its first evo joker update for the first time (see p6), on Sunday. That was borne out by the results. The two factory PPM 963s took second and third despite suffering not insignificant delays along the way. The only issue for Ferrari was a drive-through for the fifth-placed 499P for a Full Course Yellow infringement early in the race.

The issues sustained by the two PPM cars ultimately decided which one finished ahead. Vanthoor lost time with a front-right puncture early in the race in an incident with Will Stevens in the #12 Jota customer car. The Brit was held up ever so slightly by an LMGT3 class entry on the exit of Curva da Sol (Turn 3) and moved over on the factory car on the run to T4. He was correctly adjudged to have been at fault and was handed a 30s stop/go penalty.



Conway converts
Kobayashi's pole into
the lead at the start

The early stop put Vanthoor and his team-mates out of sync, but they were up to a genuine third behind the sister car when it needed repairs of its own – or rather PPM was told to make repairs. Christensen had been hit up the rear by one of the WRT BMW M4 GT3s, though the aero numbers suggested that the damage was barely slowing the car. Race control decided, however, that the team couldn't continue with part of the tail section flapping in the airflow. The 21s lost when Campbell took over for the run to the flag reversed the order of the two PPM entries, Estre bringing the championship-leading entry home seven seconds ahead.

There wasn't a lot to choose between the two cars on pace – they were separated by hundredths rather than tenths in the averages – despite divergent tyre strategies. Not for the first time this year, PPM played the percentages. The third-placed #5 entry started on mediums all round, while the #6 set out with a hard Michelin on each corner. Only at the end of the race did #5 use the hard, the car twice getting one on the highly stressed right-rear corner in the final hours. The sister car, on the other hand, was mixing and matching through the race.

Ferrari also split its strategy over the race: the sixth-placed #50 car driven by the Le Mans 24 Hours-winning crew used more hard tyres than its stablemate. Cannizzo insisted that there was little between the two strategies, though an analysis of the averages shows that #51 had an advantage of somewhere in the region of a second.

Neither PPM car was the fastest Porsche last weekend. That honour



Ferrari was never really
in the fight, the #51 car
coming home in fifth place



TOYOTA'S 'WRONG' WINNER

The wrong Toyota won at Interlagos. Wrong in terms of the one the Japanese manufacturer would have wanted to win given its position in the championship, and wrong in terms of pace displayed on track during the race. The #7 entry, third in the points going into the Brazilian weekend compared to the sister crew's eighth, was the quicker car.

Brendon Hartley didn't pretend that he, Sebastien Buemi and Ryo Hirakawa would or could have beaten their team-mates on Sunday. He conceded that they had a significant advantage both in terms of outright pace and tyre degradation.

"We got the victory but #7 was flying today – they went a different direction on set-up," he explained. "They were quicker than us and had much less tyre deg."

That much was apparent on track. Mike Conway converted Kamui Kobayashi's pole into the race lead as Hartley went off on the asphalt run-off at the Senna S. He explained that he wanted to brake as late as possible to ensure he wasn't overtaken at the same time as avoiding his team-mate.

After that, he could only watch as Conway, back in harness after missing last month's Le Mans 24 Hours through injury, disappeared up the road. Hartley was a

couple of seconds down inside two laps and more than five in arrears before the race was into double-figure laps.

That had turned into 12s by the time of the first Toyota pitstops, both cars remaining on the four medium tyres on which they had started. The gap stood at nigh on 20s when Conway had to take a drive-through for speeding under the first of the race's three FCYs. The Brit was only behind for three laps before retaking the lead.

"My tyres fell off a cliff and I was suddenly two or three seconds a lap slower," said Hartley. "There was nothing I could do before I made that early first stop [eight laps before the leader]."

Still, Hartley enjoyed himself on his first race start since joining Toyota for the

"We got the win but #7 was flying today. They were quicker than us and had much less tyre deg"

2019-20 season. He and Buemi swapped roles for Interlagos, the Swiss taking qualifying duties for the first time since the opening round of that season and giving Hartley the chance to kick things off. "We haven't had a great season," said Hartley. "We just wanted to mix things up a bit."

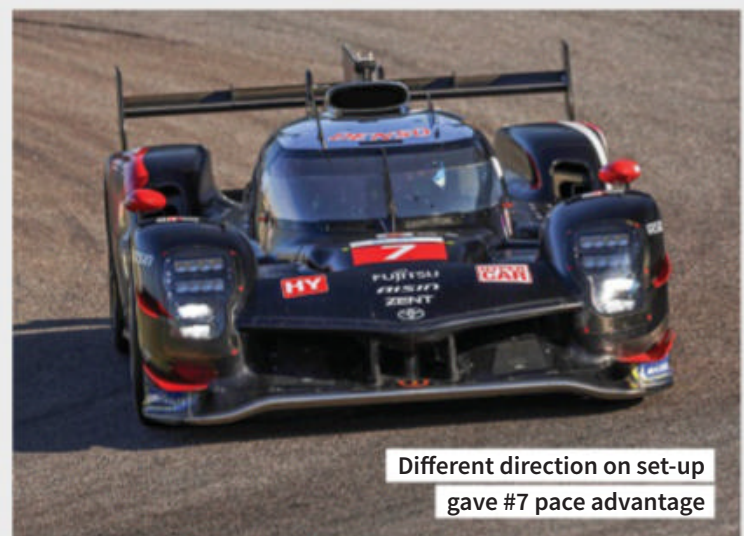


Privateer honours for Rasmussen/Button/Hanson Jota Porsche

went to the #12 Jota car that Stevens shared with Norman Nato and Callum Iott. It was another car to use only the softer Michelin, sometimes putting new tyres on the right side and sometimes on the rear. Its comeback took the 963 into the top six before Iott spun on cold tyres after his final pit visit, a stop for a new rear body section leaving the car three laps down in 18th position at the chequered flag.

Jota, winner at the pre-Le Mans Spa round, should still have come away with a top six with its second car shared by Phil Hanson, Oliver Rasmussen and Jenson Button. The last-named was fending off Pier Guidi for fourth when he was forced to pit with five minutes left on the clock for a five-second stop-and-hold penalty because the car had run its rear tyre pressures below the prescribed minimum. That dropped a car that had twice overtaken the #51 Ferrari over the second half of the race to an unrepresentative seventh.

Cadillac finished in an even more unrepresentative 13th with Alex Lynn and Earl Bamber, two laps down on the winning Toyota. The solo Ganassi-run V-Series.R had again shown genuine pace in qualifying, Lynn putting the car fourth behind the two Toyotas – Kobayashi ahead of Buemi – and Campbell in the best of the Porsches. Bamber slipped down the order over the course of his opening double stint because the team had opted to get rid of two of the medium tyres on which the car had qualified at the start of the race. They did the first two hours on the left side of the car, while the team went from »



Different direction on set-up gave #7 pace advantage

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Cadillac shone in qualifying, starting fourth, but ended up 13th and two laps down



hards to mediums in the middle of his stint on the other side.

Lynn was given hard rubber when he took over, only to hear a strange grinding noise that was initially presumed to be a problem with the brakes. It turned out that the front-right wheel hadn't seated probably on the hub, the resulting pitstop robbing Caddy of another chance to show the true potential of its LMDh. "The pace was still good over the remainder of the race," said Lynn afterwards. "But if you have to make an extra pitstop in this championship, you're done. A small error will cost you dearly."

The privateer AF-run Ferrari finished a couple of places higher in the hands of Robert Kubica, Yifei Ye and Robert Shwartzman after delays of its own. Kubica was tapped into a spin early in the race, and then Ye was given a drive-through following contact with the #20 WRT BMW M Hybrid V8. Lynn's comments could very much be applied to the yellow Ferrari as well.

Peugeot was best of the rest at Interlagos with the revised 9X8 2024 that came on stream at Imola in May. Nico Muller, Mikkell Jensen and Jean-Eric Vergne scored the best result for the French manufacturer's Mk2 version of its LMH, surpassing the ninth position it claimed on its debut. Muller shone in the second half of the opening double stint – "I've never overtaken so many cars in this programme," he said – but the truth was that the Pug wasn't the fastest of the cars in the midfield pack. It owed its unofficial class win to a tyre strategy based on exclusively running the hard until going onto the mediums used for qualifying as the temperatures dipped at the end.



“If you have to make an extra pitstop, you're done. A small error will cost you dearly”

"If you can't be fast, you've got to try to be smart," said Peugeot Sport technical director Olivier Janssonie. "We had low deg right through the race, which is why even with pace that wasn't so good we were able to finish where we did."

BMW took ninth with the #15 M Hybrid of Dries Vanthoor, Raffaele Marciello and Marco Wittmann that ran exclusively on the hard Michelin. Marciello reckoned eighth was about as good as it was going to get for the Bimmer. "We did a very good race, no mistakes or problems, but it would have been very difficult to be any higher," he said. "But of course we want to be fighting at the front – we need to continue working hard to improve and catch up."

Alpine was back in the points after its Le Mans disaster, when both Signatech-run A424 LMDhs were out within six hours. In Brazil there was no repetition of what was confirmed as a valve problem – a known issue on the car's 3.4-litre single-turbo V6 – despite new parts having yet to arrive. Team boss Philippe Sinault explained that Alpine would be "managing the engine in a different way to avoid having this problem again" ahead of the race.

For Sinault, the important thing wasn't scoring a point for 10th with the car shared by Nicolas Lapierre, Matthieu Vaxiviere and Mick Schumacher, but that the programme was back on track after the disappointment of Le Mans. "The main subject is to come back on the right dynamic project," he explained. "We have a line – Qatar, Imola and Spa – that was broken at Le Mans. Now we are back on the line."

Lamborghini ended up 17th with its Iron Lynx-run SC63 LMDh, but the Italian car, fresh from scoring a point at Le Mans largely down to reliability, was in the battle with Peugeot, BMW and Alpine. It was pretty much on a par with the French manufacturers and quicker than the German. Its race was undone by a puncture when Mirko Bortolotti took over from Edoardo Mortara right at the end of hour four. "It was really unfortunate because it was looking good," said Daniil Kvyat, who started the car. "I think today we showed that we are in the fight for points."

P20 WEC LMGT3 REPORT

HYPERCAR

LMGT3

Powerful Porsche pace continues

After winning at Spa and Le Mans, Manthey continued its LMGT3 run – but this time with its other car, which now leads the championship

GARY WATKINS

Porsche took a fourth LMGT3 class victory in five races and the Manthey PureRxcing Porsche 911 GT3-R shared by Klaus Bachler, Joel Sturm and Alex Malykhin a second of the season to follow its first-time-out triumph in Qatar. To say that they dominated on the way to reclaiming the lead of the championship wouldn't be quite right, but it needs to be said that they led 160 of 214 laps completed in class and were never headed from late in the third hour.

The winning Porsche with Malykhin at the wheel had to play second fiddle to the Iron Dames Lamborghini Huracan GT3 EVO2 driven by class polewinner Sarah Bovy at the start of the race. Four or so hours later, Bachler came under real pressure from the Prodrive-run Heart of Racing Aston Martin Vantage GT3 shared by team boss Ian James, Daniel Mancinelli and Alex Riberas, who was at the controls for the final stints.

Malykhin, who'd qualified second to Bovy, trailed the Iron Lynx-run Lambo through the first stint and only moved ahead midway through the second half of his double. The Italian car was sliding more and more, and the British-based Belarusian was able to make it past and pull away into a five-second lead before the two bronze drivers handed over to their respective silvers, Sturm and Rahel Frey. Both cars had taken new right-side Goodyear mediums – the one slick compound available from the LMGT3 tyre supplier in Brazil – at their first stops, but the lefts were clearly giving up on Bovy.

"The Lambo was too quick for us in qualifying, but we did a very clear and smart strategy," said Malykhin, whose car was carrying

20kg of success ballast last weekend. "I looked after my tyres and after 30 minutes in the second stint I saw that I was quicker in sector 3, through Turns 8,9 and 10. I was chasing Sarah and knew I had an advantage on the tyres at that point."

Come the end of the race it wasn't the Lambo with which the Manthey PureRxcing trio was battling. Its challenge disappeared midway through hour four. Frey brought the car in on schedule to hand over to Michelle Gattling, at which point it dumped its coolant all over the pitlane as a result of a pipe coming loose. A repair was made and the fluids topped up, and Gattling completed a couple of laps to check the car over before it's put in the container for shipment to the US for September's Austin round. With 16 minutes lost, the team reckoned there was little point in continuing.

The Aston took up the chase of the Porsche when the Lamborghini hit trouble. Riberas was able to close down a gap that stood into double figures approaching the final round of pitstops, before falling back when he took four tyres and Bachler just two on the left. The gap went up to 16 seconds and the race appeared to be over before the





Manthey
PureRxcing trio
Bachler, Sturm and
Malykhin took back
points lead

“The Lambo was too quick for us in qualifying, but we did a very clear and smart strategy”

Aston driver suddenly gained massively under a final Full Course Yellow early in the final hour. Riberas was pinged for speeding, the resulting stop/go leaving him 30s behind the Porsche, though a lap down in the official classification because the Toyota that won overall took the chequered flag between them.

Third place went to the best of the two United Autosports McLaren 720S GT3 Evos in which Marino Sato was joined by Nico Pino and Josh Caygill. They ended up 49s in arrears of the Aston on the way to taking a first podium for the Anglo-American team on its return to the GT ranks in the WEC this year. It was a good day for United as its second McLaren shared by Gregoire Saucy, Nicolas Costa and James Cottingham took fourth at the head of a closely packed three-car train. Local driver Costa, who revealed that he’d watched the 2014 WEC race from the adjacent karting track because he didn’t have a ticket, held off Maxime Martin in the best of the WRT BMW M4 GT3s, which in turn had Alessio Rovera right behind in the lead AF Corse Ferrari 296 GT3. Just a second and a half separated the trio, a silver-rated driver leading home two factory contractees.

The second Porsche, the Manthey EMA entry that led the points heading into the Interlagos weekend, had qualified fifth in Yasser Shahin’s hands despite carrying 45kg of success ballast after its Spa and Le Mans class victories. The Australian, who was teamed with Richard Lietz and Morris Schuring, had a disastrous start to the race, however. He was twice penalised for avoidable contact, the second offence gaining him a one-minute stop/go penalty and also costing the car time in the pits to front-end body repairs. ❧

➡ **P23 FULL RESULTS**



Riberas, James and Mancinelli celebrate second-place finish



Al Harthy/Rossi/Martin fifth in best of the WRT BMW M4 GT3s

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RESULTS

WORLD ENDURANCE CHAMPIONSHIP ROUND 5/8, INTERLAGOS (BRA), 14 JULY (236 LAPS – 631.887 MILES)

POS	DRIVERS	TEAM / CAR	CLASS	TIME
1	Brendon Hartley (NZL) Sebastien Buemi (CHE) Ryo Hirakawa (JPN)	Toyota Gazoo Racing / Toyota GR010 HYBRID	Hypercar	6h01m02.554s
2	Laurens Vanthoor (BEL) Kevin Estre (FRA) Andre Lotterer (DEU)	Porsche Penske Motorsport / Porsche 963	Hypercar	+1m08.811s
3	Frederic Makowiecki (FRA) Matt Campbell (AUS) Michael Christensen (DNK)	Porsche Penske Motorsport / Porsche 963	Hypercar	+1m15.993s
4	Mike Conway (GBR) Kamui Kobayashi (JPN) Nyck de Vries (NLD)	Toyota Gazoo Racing / Toyota GR010 HYBRID	Hypercar	+1m23.571s
5	Antonio Giovinazzi (ITA) Alessandro Pier Guidi (ITA) James Calado (GBR)	Ferrari AF Corse / Ferrari 499P	Hypercar	+1m27.395s
6	Nicklas Nielsen (DNK) Antonio Fuoco (ITA) Miguel Molina (ESP)	Ferrari AF Corse / Ferrari 499P	Hypercar	-1lap
7	Phil Hanson (GBR) Jenson Button (GBR) Oliver Rasmussen (DNK)	Jota / Porsche 963	Hypercar	-1lap
8	Nico Muller (CHE) Mikkel Jensen (DNK) Jean-Eric Vergne (FRA)	Peugeot TotalEnergies / Peugeot 9X8 2024	Hypercar	-1lap
9	Marco Wittmann (DEU) Dries Vanthoor (BEL) Raffaele Marciello (ITA)	BMW M Team WRT / BMW M Hybrid V8	Hypercar	-1lap
10	Mick Schumacher (DEU) Nicolas Lapierre (FRA) Matthieu Vaxiviere (FRA)	Alpine Endurance Team (Signatech) / Alpine A424	Hypercar	-2laps
11	Robert Kubica (POL) Robert Shwartzman (ISR) Yifei Ye (CHN)	AF Corse / Ferrari 499P	Hypercar	-2laps
12	Paul-Loup Chatin (FRA) Ferdinand Habsburg (AUT) Charles Milesi (FRA)	Alpine Endurance Team (Signatech) / Alpine A424	Hypercar	-2laps
13	Earl Bamber (NZL) Alex Lynn (GBR)	Cadillac Racing (Ganassi) / Cadillac V-Series.R	Hypercar	-2laps
14	Rene Rast (DEU) Sheldon van der Linde (ZAF) Robin Frijns (NLD)	BMW M Team WRT / BMW M Hybrid V8	Hypercar	-2laps
15	Neel Jani (CHE) Julien Andlauer (FRA)	Proton Competition / Porsche 963	Hypercar	-2laps
16	Loic Duval (FRA) Paul di Resta (GBR) Stoffel Vandoorne (BEL)	Peugeot TotalEnergies / Peugeot 9X8 2024	Hypercar	-2laps
17	Daniil Kvyat (RUS) Mirko Bortolotti (ITA) Edoardo Mortara (CHE)	Lamborghini Iron Lynx / Lamborghini SC63	Hypercar	-2laps
18	Will Stevens (GBR) Callum Ilott (GBR) Norman Nato (FRA)	Jota / Porsche 963	Hypercar	-3laps
19	Alex Malykhin (BLR) Joel Sturm (DEU) Klaus Bachler (AUT)	Manthey PureRxcing / Porsche 911 GT3-R	LMGT3	-22laps
20	Ian James (GBR) Daniel Mancinelli (ITA) Alex Riberas (ESP)	Heart of Racing Team (Prodrive) / Aston Martin Vantage GT3	LMGT3	-23laps
21	Josh Caygill (GBR) Nico Pino (CHL) Marino Sato (JPN)	United Autosports / McLaren 720S GT3 Evo	LMGT3	-23laps
22	James Cottingham (GBR) Nicolas Costa (BRA) Gregoire Saucy (CHE)	United Autosports / McLaren 720S GT3 Evo	LMGT3	-24laps
23	Ahmad Al Harthy (OMN) Valentino Rossi (ITA) Maxime Martin (BEL)	Team WRT / BMW M4 GT3	LMGT3	-24laps
24	Francois Heriau (FRA) Simon Mann (USA) Alessio Rovera (ITA)	Vista AF Corse / Ferrari 296 GT3	LMGT3	-24laps
25	Ryan Hardwick (USA) Zacharie Robichon (CAN) Ben Barker (GBR)	Proton Competition / Ford Mustang GT3	LMGT3	-24laps
26	Tom van Rompuy (BEL) Rui Andrade (PRT) Charlie Eastwood (GBR)	TF Sport / Chevrolet Corvette Z06 GT3.R	LMGT3	-24laps
27	Clement Mateu (FRA) Erwan Bastard (FRA) Marco Sorensen (DNK)	D’Station Racing (Prodrive) / Aston Martin Vantage GT3	LMGT3	-24laps
28	Darren Leung (GBR) Sean Gelael (IDN) Augusto Farfus (BRA)	Team WRT / BMW M4 GT3	LMGT3	-25laps
29	Takeshi Kimura (JPN) Esteban Masson (FRA) Jose Maria Lopez (ARG)	AKKODIS ASP Team / Lexus RC F GT3	LMGT3	-25laps
30	Yasser Shahin (AUS) Morris Schuring (NLD) Richard Lietz (AUT)	Manthey EMA / Porsche 911 GT3-R	LMGT3	-27laps
31	Christian Ried (DEU) Mikkel Overgaard Pedersen (DNK) Dennis Olsen (NOR)	Proton Competition / Ford Mustang GT3	LMGT3	-28laps
32	Claudio Schiavoni (ITA) Matteo Cressoni (ITA) Franck Perera (FRA)	Iron Lynx / Lamborghini Huracan GT3 EVO2	LMGT3	-28laps
33	Thomas Flohr (CHE) Francesco Castellacci (ITA) Davide Rigon (ITA)	Vista AF Corse / Ferrari 296 GT3	LMGT3	-45laps
R	Jean-Karl Vernay (FRA) Antonio Serravalle (CAN) Carl Bennett (USA)	Isotta Fraschini (Duqueine) / Isotta Fraschini Tipo 6 LMH Competizione	Hypercar	149laps-engine
R	Sarah Bovy (BEL) Rahel Frey (CHE) Michelle Gatting (DNK)	Iron Dames (Iron Lynx) / Lamborghini Huracan GT3 EVO2	LMGT3	139laps-cooling
R	Hiroshi Koizumi (JPN) Sebastien Baud (FRA) Daniel Juncadella (ESP)	TF Sport / Chevrolet Corvette Z06 GT3.R	LMGT3	133laps-transmission
NS	Arnold Robin (FRA) Clemens Schmid (AUT) Kelvin van der Linde (ZAF)	AKKODIS ASP Team / Lexus RC F GT3	LMGT3	accident

In each car, first-named driver started the race. **Winners’ average speed** 105.010mph. **Fastest lap** Conway 1m24.801s, 113.665mph. **LMGT3** Bovy 1m35.777s, 100.639mph.

QUALIFYING 1 Kobayashi 1m23.140s;
2 Buemi 1m23.262s; 3 Campbell 1m23.331s;
4 Lynn 1m23.396s; 5 Estre 1m23.408s;
6 Fuoco 1m23.532s; 7 Ilott 1m23.639s;
8 Button 1m23.701s; 9 Pier Guidi 1m23.910s;
10 Frijns 1m24.078s; 11 Schumacher 1m23.927s; 12 Andlauer 1m23.955s;
13 Milesi 1m23.962s; 14 D Vanthoor 1m24.065s; 15 Shwartzman 1m24.066s;
16 di Resta 1m24.406s; 17 Vergne 1m24.445s;

18 Kvyat 1m24.554s; 19 Vernay 1m24.863s;
20 Bovy 1m34.413s; 21 Malykhin 1m34.804s;
22 Caygill 1m34.860s; 23 Cottingham 1m34.911s; 24 Shahin 1m35.471s; 25 Leung 1m35.562s; 26 Heriau 1m35.656s; 27 van Rompuy 1m35.931s; 28 James 1m36.211s;
29 Flohr no time; 30 Hardwick 1m36.085s;
31 Al Harthy 1m36.163s; 32 Koizumi 1m36.169s;
33 Mateu 1m36.415s; 34 Kimura 1m36.817s;
35 Schiavoni 1m37.944s; 36 Ried 1m38.004s.

CHAMPIONSHIP
Hypercar drivers 1 Lotterer/Estre/L Vanthoor 117; 2 Fuoco/Molina/Nielsen 98; 3 Kobayashi/de Vries 95; 4 Makowiecki/Campbell/Christensen 71; 5 Hartley/Hirakawa/Buemi 69; 6 Ilott/Stevens 60.

Hypercar manufacturers 1 Porsche 126; 2 Toyota 122; 3 Ferrari 109; 4 Alpine 25; 5 BMW 25; 6 Peugeot 20; 7 Cadillac 14;

8 Lamborghini 11; 9 Isotta Fraschini 0.

LMGT3 drivers
1 Malykhin/Sturm/Bachler 100; 2 Schuring/Lietz/Shahin 75; 3 Farfus/Leung/Gelael 74; 4 Riberas/Mancinelli/James 55; 5 Rovera/Heriau/Mann 49; 6 Al Harthy/Martin/Rossi 46.

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CAN ASTON M ITS CURREN

The sensational early results from 2023 haven't been replicated, and may have



ARTIN VANQUISH T LOSS OF FORM?

flattered to deceive, yet the ambitions for this work-in-progress squad remain uncompromised

JAKE BOXALL-LEGGE

Aston Martin's
Technology Campus
is still growing as
investment
continues



T

he white paint on the walls had barely dried before the media tour of Aston Martin's newest additions to its plush new Silverstone factory. The first building on its 37,000-square-metre facility, known as the Technology Campus to lend a studious feel to its nomenclature, had been completed in 2023 and houses the workshops, the

CNC and milling machines, and other kit needed to put the car together. As for the rest, including the sections housing the wind tunnel and final remaining design offices, these are currently missing the final touches.

Nonetheless, the tour provided a sense of the team's scale – or at least, the scale to which it aims to grow as the investment in its future continues. When the wind tunnel and associated offices are finished, the staff still working from the old Jordan 'tunnel' in Brackley (of which the wind tunnel isn't actually used, since Aston uses Mercedes' facilities) can be integrated into the new building.

When it comes to the subject of Aston Martin, there's a tangible sense of the transitional. There's the slow disposal of the old era's ephemera under the rebrand, the start of Dan Fallows's technical leadership, the build of the new factory and, soon, the calibration of the new wind tunnel to ensure it can churn out the right numbers. Nothing appears truly settled; not yet at least, because more change is afoot with additional signings of high-value personnel.

It seemed during 2023 that the team was on the up, certainly during the early phases of the season. The streak of podiums that Fernando Alonso – enticed from Alpine's apparent inertia by the vision of figurehead Lawrence Stroll – chalked up at the start of the year demonstrated a sudden leap from the midfield mire it had previously occupied.

But, says team principal Mike Krack, this was not entirely a fair reflection of where the team stood off-track, suggesting that 2023 was a display of overperformance relative to the basis that the team had in place.

"I think, and I already mentioned it at the time, that we will always be measured on this phase: where others were underperforming and we were overperforming in the competitive order," Krack explains. "We managed to score a lot of podiums, a lot of points in a phase where others were really not having done their homework. And I think this was flattering, and probably not a true reflection of where we really were as a team. Not much had changed until then, we were still in our old campus, we had grown a little bit more, but in the whole process of the development of the team, this came in a little bit too early.

"And now we are all measured on that. And that puts obviously huge pressure on everybody, which is fair, which is also normal and to be expected. But I think we are maybe caught in a bit of reality now, because we all thought it was easier than it really is."

Has Aston Martin stagnated in 2024?

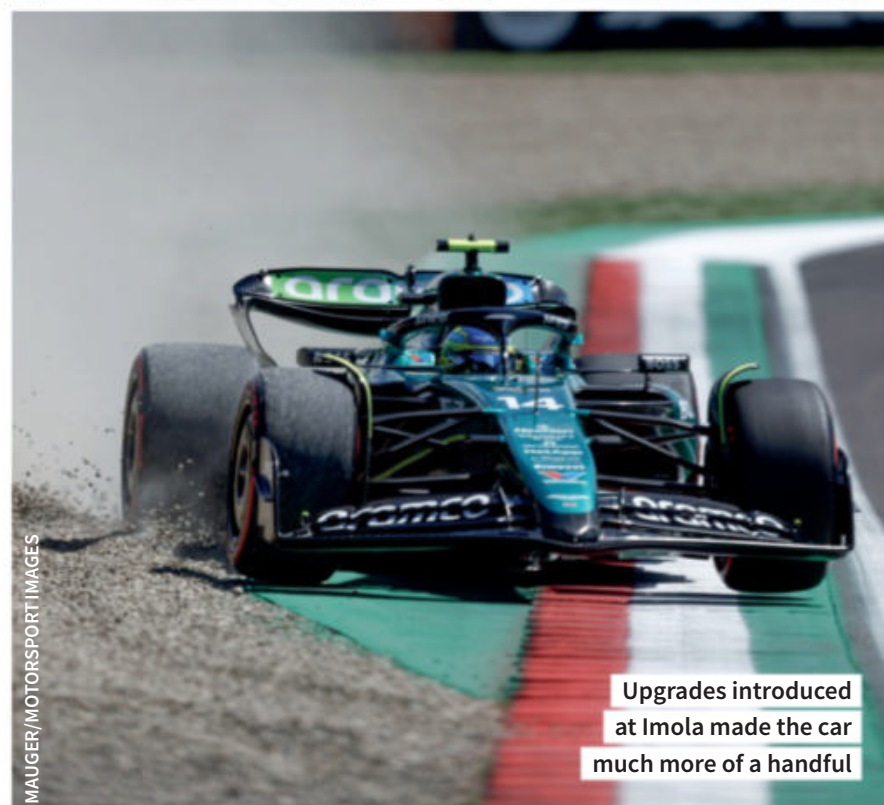
Which brings us to this season, which Krack says has been a fairer reflection of where the team expected to be at the beginning of the year. And, despite not hitting the high notes that it managed at the start of 2023, qualifying performances had generally been strong and set up a period of diligent points-scoring in the opening rounds.

Then came a series of upgrades introduced at Imola in May, which the team hoped would start to push it towards the top four. A new front wing set off the introduction of a new floor, reshaped bodywork, and new rear suspension fairings to improve the aerodynamics top to bottom.

Instead, it made the AMR24 far more difficult to drive, and the new parts instigated a dismal weekend at the Emilia Romagna Grand Prix. Alonso, in an incident uncharacteristic of his usual demeanour, clouted the wall at Rivazza during FP3 after skittering across the gravel, and then tickled the kitty litter again during qualifying. And, although Lance Stroll rescued a brace of points with a solid drive that weekend, it became patently clear that the hoped-for improvements had not emerged despite the volume of upgrades introduced.



Team principal Krack (left) with performance director McCullough



Upgrades introduced at Imola made the car much more of a handful

As the likes of McLaren and Mercedes continued to move forward, Aston soon came at risk of being challenged by RB across the next phase of the season; performance was strong at the Canadian GP, but this appeared to be a function of circuit characteristics when the team wavered in Spain and Austria.

"We've got some balance characteristics that made the car a little bit harder to set up and drive," explains performance director Tom McCullough. "But I think most people are battling those. It's always a compromise. That said, we're needing to add just base performance to the car to be competitive with the people we're trying to race.

"We fell a bit short [in Spain and Austria] and the nature of those tracks; we had the same spec car in Canada and had a much more competitive weekend. We sort of understand the reasons for that. But there's lots of updates coming."

It had been suggested that, given the lack of performance delivered by the upgrades, Aston was facing difficulties with correlation. As simulation tools develop, engineers can use real-world data to account for everything, beyond just the usual examples of computational fluid dynamics to approximate wind tunnel data. Full races can be simulated, using aero data, tyre models, and mathematical reproductions of almost every variable.

But when the performance on track doesn't necessarily reflect the simulations, the validity of the data being used starts to come into question. This has been the case for a few teams, however. Ferrari's >>


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Barcelona upgrades exacerbated a bouncing characteristic in high-speed corners that the team rolled back on, while RB spent the Austria round chopping and changing parts of its own Spanish GP package as rear wing flutter appeared to unsettle its VCARB 01 chassis.

Aston Martin has had to undo deleterious effects produced by upgrades too, which McCullough reckons is simply “the case for everyone up and down the pitlane; we’re bringing parts which sometimes they deliver a bit more, sometimes a bit less, sometimes the characteristics aren’t quite the same”. From the outside, we just don’t necessarily see those fluctuations from everybody, especially if they can mitigate those effects with set-up.

“When we look at our relative performance, I think we can identify Imola as one of the points because everybody brings upgrades to Imola,” Krack says. “And, if yours is not delivering what you expect and the others do, which I do not know but I have to assume, you take a step backwards. That’s the hard reality of Formula 1.”

Did Silverstone offer signs of a return to form?

When it became apparent that the Imola upgrades hadn’t quite gone to plan, Aston Martin needed to plot its course back into regular points contention to consolidate fifth in the championship. The upgrades hauled across the road to the British GP were not all-encompassing and amounted to ‘just’ a new front wing, along with revisions to the car’s rear brake duct aerodynamics. The team hoped that these minor changes would help to unlock its current upgrade oeuvre.

It’s hard to read too much into it, given that the race was very much rain-affected, but a solid run to Q3 with both cars and a double points finish suggested that the AMR24 was in a much stronger frame of performance thanks to those tweaks.

That said, Krack was sensibly not willing to count his chickens post-race: “First of all, we need to have a look. The ranking is better than the previous two. We don’t have to be blind to see that, but we must analyse if the performance is better. We have changed some parts on the car, so we need to see what is the effect of that and then decide how we move on.”

Modest tweaks for
Silverstone brought a
decent clutch of points



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DUNBAR/MOTORSPORT IMAGES

Stroll Sr knows exactly what he wants from the team and the expenditure that involves

“We need to be careful comparing these races. When we were in Austria, it was 50 to 60 degree track temperature with the softest tyres. You come [to Silverstone], it’s very cold, you have the hardest tyres, so I think these are the effects that you have to isolate and separate, not that you get lost in just being driven by the ranking and the position.”

That said, the driver feedback was positive. Alonso reckoned that the team had taken a step towards earlier in the campaign. Having been vocal about the AMR24’s increase in difficulty to drive, he stated that the revisions to the car at Silverstone – not just in upgrades, but in set-up breakthroughs too – had helped bring the car into a more prosperous window.

Although Alonso ‘occasionally’ has a penchant for hyperbole, he was keen to point out that the team’s next moves with upgrades needed to be strong. He reckoned that it was all very well scoring seventh and eighth at Silverstone, but it was up to the team to back >>



The logo for Autosport Plus, featuring a checkered flag icon followed by the word "AUTOSPORT" in white on a red background, and "PLUS" in blue on a black background.

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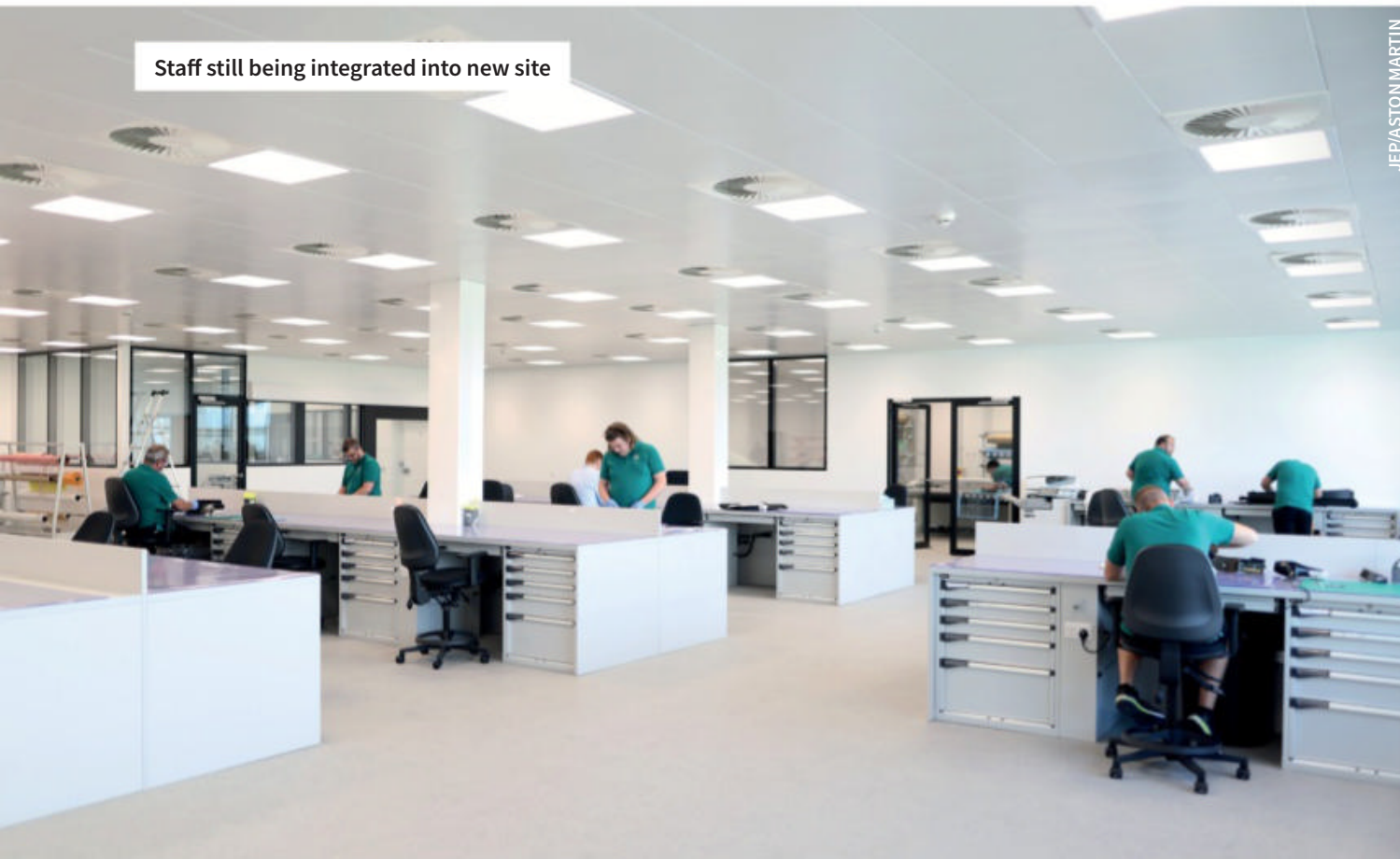
Imposing entrance indicates sheer scale

ASTON MARTIN



Sense of an organisation in transition means drive to garner more contemporary silverware

ASTON MARTIN



Staff still being integrated into new site

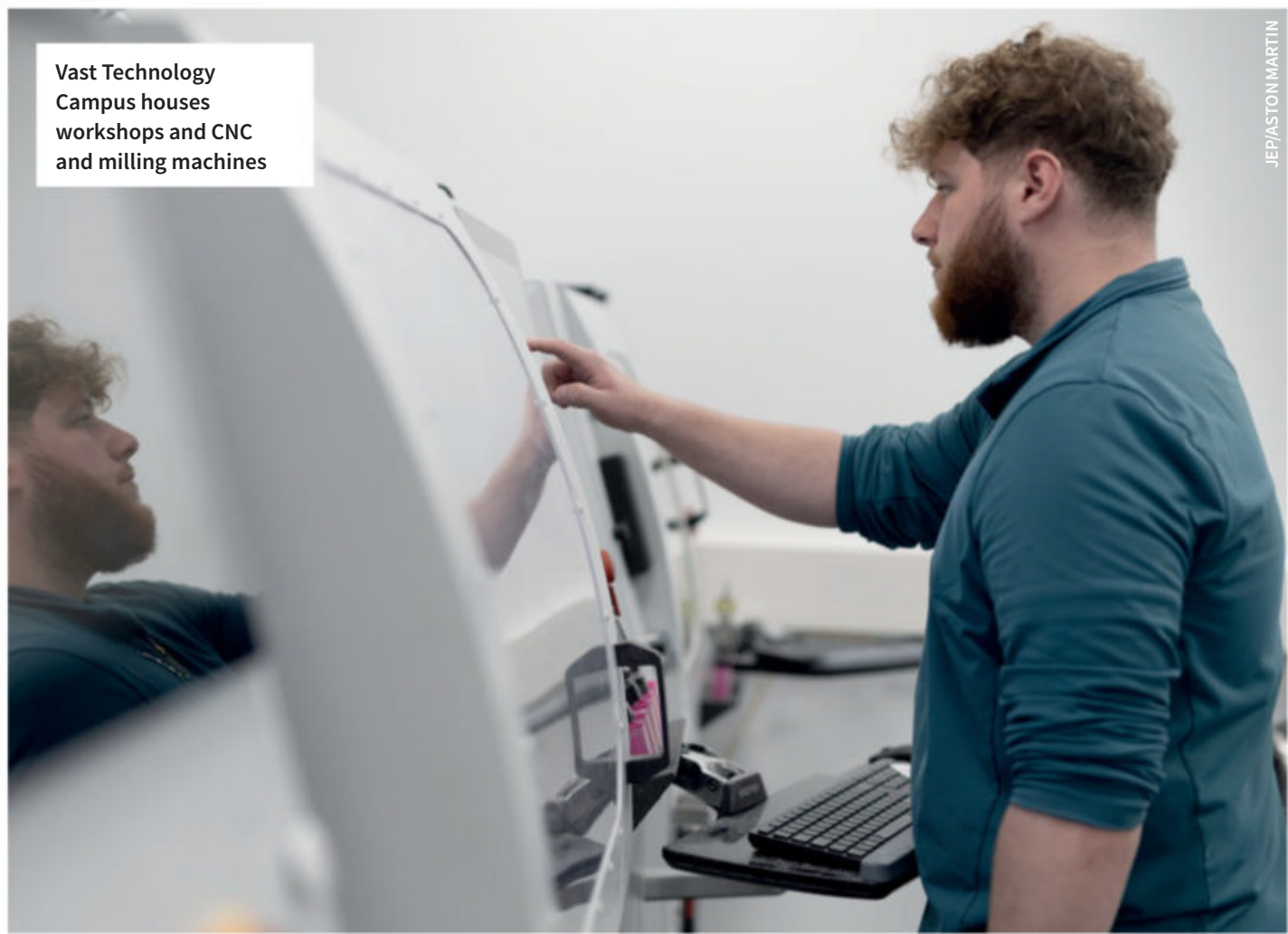
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Vast Technology Campus houses workshops and CNC and milling machines

JEP/ASTON MARTIN

it up in the two races prior to the summer break: “[Silverstone] was pretty good. I mean, the feeling was back to normality. We were the fifth, sixth fastest team. Nico [Hulkenberg] I think was very fast the whole weekend, but we could fight for points, seventh and eighth I think are more or less the positions we were before Imola. We came back to our more natural position, so I’m happy for that.

“It has been better: after Austria we regrouped a little bit, we understood a couple of directions that maybe were not right. And as I said, I’m happy to be back in the points, it felt more competitive.

“[But] we need to prove it. We need to not talk, and deliver the results. You know, we’ve been bringing in a lot of new parts to the car and some of them work, some of them don’t. So hopefully in Hungary [this weekend] we have a positive surprise. We saw last year McLaren showing us how much you can change car performance in a season. And this year we have Mercedes. So there are two examples that it is possible: so it’s up to us.”

Is Aston prepared for the future?

That covers the tentative optimism that Aston Martin carries into the rest of 2024, but what about beyond that?

More transition beckons ahead of 2026, when the team starts its union with Honda as its new powertrain supplier on a works basis. This has created a few knock-on changes for the team’s technical output, in that it can no longer take its rear suspension and gearbox from Mercedes under the transferrable parts regulations because the architecture will be different.

The wind tunnel should be finished in time to prepare for 2026’s reforms, where the teams will race with active aerodynamics and a reduced ground-effect floor to complement the greater hybridisation present in the powertrains.

Team owner Stroll has also been busy with his chequebook to refresh the team’s technical line-up. In recent hirings, Enrico Cardile has been snapped up from Ferrari to serve as chief technical officer, while ex-Mercedes engine chief Andy Cowell now comes in as group CEO as Martin Whitmarsh leaves.

Cowell, one of the architects of Mercedes’ hugely impressive start to the V6 turbo-hybrid era, has a larger remit than just focusing on powertrains, and hopes to help Krack guide the team into more prosperous waters. Even so, his experience will be invaluable to Honda, which eventually enjoyed its own success as a turbo-hybrid powertrain builder after its dismal start with McLaren in 2015.

Krack is aware that, with a new CEO coming in, it is likely to herald more changes to ensure that the team can remain on track with its aim to become a championship-winning operation. But he’s relishing the chance to work with Cowell, and hopes that the Briton can bring his Midas touch over from his Mercedes days.

“Andy’s track record speaks for itself,” Krack says. “I think when he was managing director at Mercedes, it was like a phase of total dominance over many years, which speaks for him. Personally, I’ve never worked with him. I’m curious to see how that will go. But I think, when you see everything that he has done before, we all have reason to really be looking forward to it.

“The big targets are given by Lawrence. They are broken down into smaller ones, and smaller ones are cascaded down. I think the prime objective of Lawrence is very clear, and then we have to sit together and decide: ‘This is our roadmap as we have it today, do we need to adjust with the new CEO? How does he see things and what areas do we have to strengthen?’

“You always look for the balance between this department and that department, in terms of organisational development or the campus: do we need additional facilities here or are we not making enough use of that? These are all discussions that are going to happen, a review of our current plan and an adjustment, and I’m looking forward to that.”

And, of course, there’s the elephant in the room: will Adrian Newey make his final F1 act on the Aston Martin stage? It is understood that the revered designer was given a private tour of Aston’s new facilities as he considers his options upon leaving Red Bull early next year, and an Aston move would offer the chance for him to renew his working relationship with Fallows.



New technical director
Fallows was aero
maestro at Red Bull



Recent regroup has led
to measured optimism
for rest of the season

Thing is, Newey cannot communicate any decisions about his future until September, so it won’t yet be clear where his future lies. Ferrari remains an option, with a void for him to fill now that Cardile has left, but it is uncertain that Newey would wish to relocate to Italy. Stroll Sr will happily pay whatever it takes to bring him to the team, but the final decision will be Newey’s alone.

Since buying the Force India team when it stood upon the cusp of its demise, Stroll has been a demanding F1 team owner, but that’s only fair given the investment placed into the team’s facilities and personnel. There’s a feeling that, once the new factory is fully complete, the team can start to build momentum and challenge – sustainably, rather than fleetingly – for race wins on a more regular basis.

Perhaps Newey will be that final piece of the jigsaw, the wise old head who’s been there, won that, and collected the T-shirt on myriad occasions. While McLaren has built a genuine frontrunning car after years in the wilderness, it has often lacked that last smidgen of knowhow – the kind that turns occasional wins into a more frequent cadence of victories.

Aston Martin, if it gets its lines right over the next couple of seasons, is going to need that too. If Red Bull’s hegemony over F1 titles is starting to end, the Silverstone squad will aim to fill that void. Building a race-winning car is one thing, and that’s Aston’s current aim. But using it effectively is quite another, and that’s where the star power comes in... ❄️



‘It’s literally a two-



seat Formula 1 car'

*Adrian Newey's RB17 has finally broken cover. He tells us what it's all about
and explains the factors that have shaped this very special machine*

ALEX KALINAUCKAS

W elcome, finally, to Adrian Newey's last Red Bull masterpiece. The RB17, revealed last Friday at the Goodwood Festival of

Speed, has been nearly four years in the making. It's a near-£6million hypercar, with a V10 engine capable of hitting 1000bhp. And only 50 will be available to buy. But there are less tangible, much more emotive elements to this car.

First, although Red Bull will have unveiled its 2025 F1 challenger by the time Newey exits the team next March, this will be the final car produced by the energy drinks giant really imbued with his vision. How strange it will soon be to see Newey adorned in the colours of another team, but then we all got used to him out of Williams blue and McLaren silver...

But secondly, the RB17's name completes Red Bull's F1 car naming sequence, which had been missing this entry due to 2020's RB16 being carried on into the following year as the RB16B due to the COVID-19 pandemic-enforced one-off rules tweak mandating carryover cars. Red Bull's first ground-effect machine in 2022 was then bafflingly called the RB18.

The RB17 does fit the naming sequence perfectly. Because, since he was unable to go skiing or visit his wife's family home in South Africa due to the lockdown restrictions of Christmas 2020, Newey instead started work on the car introduced to the world last week. This was immediately before the RB16B was finished.

But Newey's first thoughts behind this concept go even further back. "In terms of the research and design, [Aston Martin's] Valkyrie project from Red Bull Advanced Technologies' viewpoint was complete around 2017ish," Newey recounts in an exclusive interview at the team's Milton Keynes campus. "And then in the intermediate years, up to and including through 2020, I started to think, 'OK, well, what's next?' And I batted various ideas around in my head, jotted bits and pieces down and started to come up with the concept of, 'I've been lucky enough to drive a huge variety of cars on tracks through my career, from historic cars through to Formula 1 cars. I greatly enjoy driving historic cars, but the sheer adrenalin and speed of driving a Formula 1 car is breathtaking.' And so, I started to think, 'Could we design a car that is capable of [F1 speeds]?'

"It's a two-seater, so that you can enjoy it with your partner,



Newey started thinking about the RB17 project during the pandemic

a friend or indeed, a coach, and is capable of Formula 1 car lap times. But it's accessible to people of varying degrees of ability. It probably wouldn't be sensible to make this your first time on track, but catering for people who have had a relatively limited amount of track experience. And so, over the Christmas of 2020 going into 2021, I started to do my first drawing of what that could be, and got that drawing out and to the guys [at RBAT] in January of 2021.

"We then came out of the concept phase in January, so that gave us three years of examining the concept in a lot of detail, evolving it and trying to achieve the goals that I just mentioned."

Aston's Valkyrie was built in collaboration with RBAT and co-designed by Newey when he was less enthused by F1 during the early years of the V6 turbo hybrid era. Both are ground-effect machines, but it differs from the RB17 in that the Aston Martin uses a 6.5-litre V12.

For Newey, however, building a hypercar solely with an F1 operation rather than an OEM meant vital other distinctions too. "First of all, [being] masters of our own destiny," Newey says of this, having also seen Gordon Murray work with Mercedes on the SLR GT road car during their shared time at McLaren, something Newey suggests wasn't frictionless. "We can work to the timescales we want to work to and that we feel we need to, to absolutely do the best job possible. And you say, 'OK, well, that's just negotiation'. But I think one of the things with an OEM is when we went into this project, we didn't know how long we were going to need to get through this concept phase.

"If you'd asked me, 'Would it take three years?' When we first went into it, I'd have said, 'No, it will be way quicker than that'. But that's how long it's taken until we've all been completely happy with it.

"Also, the main reason for limiting it to only 50 cars is that it allows us to manufacture and assemble using the same suppliers, both internal and external, as we use in Formula 1."

Newey feels the RB17 also "starts with a different remit" compared to the Valkyrie. That is currently being adapted to race in the burgeoning World Endurance Championship from 2025.

The Aston machine is also credited with keeping the ground-effect research that became key to Red Bull's current F1 dominance fresh in Newey's mind – worth remembering, considering it's only recently that other teams have begun to catch on to the ride and balance qualities of the RB18, RB19 and RB20 consistently, beyond being seduced by theoretical peak downforce levels





“Drivers with limited experience have the potential to do F1 lap times”

offered by other approaches to the ground-effect rules.

“The remit for the Valkyrie was a road legal car that has incredible performance and can be enjoyed on track,” Newey adds. “This is somewhat different to that.

“It just means it’s a different car. Valkyrie, in terms of from the very initial concept stage to the start of detail design, was [different in] that with hindsight [the Valkyrie had] an overly compressed timeline. Whereas this benefits from having that very extended timeline, where really the car we’re doing now is sort of the third evolution of the original car.”

Having presented the first drawings of the RB17 to RBAT in January 2021, simulator trials of a 4WD approach with an electric motor on the front axle led to that being abandoned for weight-saving reasons. This leaves the RB17 as rear-wheel drive, which Newey prefers since “it’s also easier and more satisfying to drive than a 4WD car”. As we’ll get to, there was also a big change in engine choice.

But the main idea behind the RB17 is that Newey wants it to be a car where drivers can build up to enjoying F1 speeds. “The fundamental thing I was chasing is what I would liken to perhaps learning to play golf or tennis,” he explains. “At some point you say, ‘Right, I’d like to play golf’ and perhaps initially just hit a ball about, then you realise you probably need a coach or a caddy, and then the enjoyment is not simply playing the game. It’s also the challenge of how to get better at playing the game.

“And this is very much the same model, where drivers with relatively limited experience can start driving it, have a coach if they wish to in the passenger seat, and develop their way knowing that ultimately the potential is to do F1 lap times.

“And so you say, ‘OK, how do you make it so that’s accessible

to that relatively inexperienced driver and they don’t feel completely intimidated by it?’ The solution we’ve come up with is first of all to have three tyres of different grip levels.

“We have a partnership with Michelin to develop tyres especially for the car. The ultimate level, what’s known as the Michelin Confidential [slick tyre], has got huge grip but is relatively temperature sensitive. So, you’d need to be experienced enough to get it up to temperature and the slip angle curve is relatively peaky, so you need to have the control to be able to handle that.

“The intermediate level tyre is a still a slick, but it has a compound which just has a wider operating window and a construction that is less peaky. And then the third tyre is a treaded tyre. A road tyre, basically, but adapted for this, which is a further step in terms of still very good grip, but not as much. Obviously it has the advantage [of] if it’s a little bit damp, you can use it, or there is actually a proper wet tyre as well.

“And then I’ve combined those three tyres with I think the main key in terms of the chassis adaptability, the active suspension. Because not only does that allow you to tune the downforce, it also more importantly allows you to tune the mechanical balance. Combine that with active aerodynamics, which is another way of also obviously changing the downforce level, and you then have a car where you can adapt it very easily, in principle.”

The RB17’s dashboard has a series of knobs to allow, says Newey, its drivers to “select stability versus edginess”, and “through the corner entry phase, apex, exit, low speed, high speed etc” too. He and RBAT have worked hard to ensure this process means the owners won’t have to keep “delving into a laptop to adjust this”. >>



Newey and Horner unveil the RB17 at Goodwood

THOMPSON/GETTY IMAGES/MOTORSPORT IMAGES



“We’ve got the car to comply with LMH regs without hurting the styling”

Another critical thing for Newey was that the RB17 had to look and sound good. To achieve the latter around the 1000bhp goal, adapting an F1-inspired V8 – as per the original plan – wasn’t going to cut it.

So, in conjunction with Red Bull Powertrains, the RB17 has been fitted with a naturally aspirated V10, 15,000rpm, 150kg, 4.5-litre engine. Because for Newey, “a lot of people would agree, the height of the audio soundtrack for Formula 1 was the high revving V10s until the end of 2005”.

For the styling, he says the car had to be a “work of art that you’re happy to display as such in your house or your garage or whatever it might be”. “Derive enjoyment simply from the art aspect,” Newey adds.

But “the blue car”, as Newey calls it, unveiled at Goodwood will be slightly different compared to the finished RB17. Build of this has only just started, with suspension parts being produced now before the chassis and gearbox are made in the coming months. The first engine is to be dyno tested on a similar timescale and track testing will then follow.

The final RB17 will be slightly smaller, and have a different look, because Newey and RBAT “were anxious that it should comply with all the Le Mans Hypercar safety regulations”. “And where it doesn’t comply with the letter, it complies to the spirit,” he adds. “The FIA/ACO has a set of aerodynamic regulations and stipulations but because one of the things is that the car must be a piece of art, we didn’t want to ruin its styling by cutting holes above the wheels and so forth. So, that’s actually been about four months of aero work – of getting the car to comply with the LMH regulations, but without hurting the styling.

“In fact, as it turns out, the features we’ve then put into the car,

everybody who’s seen it virtually agrees that it actually looks better for it. So, the car has continued to develop. It continues to develop, as I said, in terms of the bodywork, but not in terms of the core structure. Now, we just keep working away at it.”

During our interview in Red Bull’s MK-7 events space – where 14 of the team’s F1 creations are arranged effectively on stage for visitors to enjoy – Newey won’t be drawn on any of the other hot 2024 topics regarding his soon-to-be-former employer. That’s the Christian Horner behaviour scandal and the new F1 2026 car rules, or even his exit and whether it’s important for his new team to have a related technology business to build other projects.

For RBAT, this includes a submarine commissioned by former Red Bull supremo Dietrich Mateschitz to move around his private island. Newey worked on that “a little bit” and reveals “it’s always one that’s frightened me slightly”.

But one project that could only excite motorsport fans would be the prospect of the RB17 taking on the Valkyrie – and Ferrari, Porsche, Toyota et al – in the brilliantly bustling Hypercar era at the Le Mans 24 Hours endurance classic.

Newey says “it is possible”, but feels “it would be quite a big redesign of, particularly, the aerodynamics”. “I think the rest of the car wouldn’t be so bad, but the aerodynamics... well, you’d have to take the active suspension off and you would have to completely redesign the aerodynamics because it’s got far too much downforce for the LMH regulations. But the core mechanical hardware, yes, that would be perfectly capable of doing Le Mans.”

Max Verstappen has long been open about his desire to compete in the famous endurance race one day. But what about Newey?

“If somebody came along and wanted to do it, then yes, of course.” Tantalising. ✨



NEWHEY'S LAST MONTHS AT RED BULL



Adrian Newey will leave the Red Bull Formula 1 team in March 2025 after what will have been a 19-season stint with the squad. That was announced in early May, but he has since been seen at several F1 race events: Miami, Monaco and Silverstone.

That is unusual for a motorsport engineer destined for pastures new. But the classic gardening leave cliché isn't the case for Newey, given the RB17 project is ongoing.

"It's very much an extension of the Formula 1 team," Newey says of how building and then selling the 50 RB17 cars relates to what he can still offer Red Bull. "And everybody, therefore, is involved not only in the 17 itself, but in how Red Bull goes about F1 weekends.

"That will continue regardless of my physically being present. Because of the way we're doing it and also my son Harri [2015 BRDC Formula 4 runner-up and 2017-18 Asian Le Mans Series champion] – he will continue to work on 17 through to its completion and indeed beyond when I stop working here in March next year. [Until] then I will still be fully involved in working with the guys on queries and I'll be attending track tests and so forth."

Until he exits, the Red Bull F1 squad is still going to benefit from Newey's many years of experience. The races he's attended so far are considered F1 trade shows in many regards – although for Silverstone it's the track's proximity to the UK's 'motorsport valley' that means industry figures swell

"UNTIL MARCH I WILL STILL BE FULLY INVOLVED ON QUERIES AND I'LL BE ATTENDING TESTS"

its paddock, in addition to the enormous numbers of fans packing the grandstands. But when not contributing to the RB17 sales efforts, Newey is still out in Red Bull team kit – checking out rival F1 designs on the grid and trying to help the team win races in one specific way.

"When I have been [at F1 races]," he explains, "then primarily [it's about] talking to the drivers [Max Verstappen and Sergio Perez]. And then a bit involved in strategy through the races. But it's also been meeting customers – 17 clients and customers."





Appreciation was mutual between F1 champ Verstappen and the Goodwood crowds

Red Bull heads the hillclimb highlights

Formula 1's benchmark team was out in force at Goodwood, and there were plenty of other stars – from tin-tops to rallying

SAM HALL, TOM HOWARD & BEN HUNT

Red Bull Racing took centre stage at the Goodwood Festival of Speed as the Formula 1 team celebrated the 20th anniversary of its formation. The current F1 pacesetter sent seven cars up the hill, including reigning world champion Max Verstappen driving his 2021 title-winning RB16B. The team's first driver pairing of David Coulthard and Christian Klien also drove, the Austrian behind the wheel of the RB1 from 2005.

Former Red Bull grand prix winners Mark Webber and Daniel Ricciardo drove the RB6 and RB7 respectively, while team boss Christian Horner got behind the wheel of Sebastian Vettel's title-winning RB8. Verstappen was joined by team-mate Sergio Perez, who was in a 2022 RB18, and Red Bull-backed F1 Academy driver Hamda Al Qubaisi drove up in her current Tatuus. Soon-departing technical chief Adrian Newey piloted an Aston Martin Valkyrie. Britain's newest F1 star Ollie Bearman

made his debut at the West Sussex show in a Ferrari SF71H originally driven by Vettel in 2018. Bearman, who is part of the Ferrari Driver Academy and will drive for Haas in F1 next season, said: "It was really a special weekend. Thanks to Goodwood and to the Ferrari family for having me and for giving me the unique opportunity to drive a SF71H up the hill. I had a lot of fun these past few days and it was really emotional to feel the support of all the people who stopped by for a picture and to cheer





Team boss Horner took wheel of Vettel's RB8

2024 GOODWOOD FESTIVAL OF SPEED CLASS WINNERS			
CATEGORY	WINNER	VEHICLE	TIME
Pioneers	Mark Walker	Darracq 200HP	1m14.0s
Pre-War Racers	Julian Majzub	Bugatti Type 35B	1m01.8s
Sports Racers	Kenny Acheson	Sauber-Mercedes C9	51.9s
Single Seaters	Michael Lyons	Gurney Eagle FA74	47.3s
Tin Tops	Johnny Cecotto	BMW 318is STW	55.3s
Modified & All-Wheel-Drive	Romain Dumas	Ford Supervan 4.2	45.0s
Production GT Racers	James Wallis	Porsche 992 GT3 Cup	48.1s
Production Cars (2-seat)	Gavin Kershaw	Lotus Evija	51.6s
Production Cars (4-seat)	Gethin Jones	Genesis GV60 Magma Concept	53.5s

REIGNING WORLD CHAMPION LEADS THE CELEBRATIONS

Max Verstappen was a man in demand as fans clamoured for a sight of the Formula 1 world champion. The Dutchman was making his first visit to Goodwood Festival of Speed and was blown away by the size of the crowds.

Verstappen was cheered as he stood on the balcony of Goodwood House alongside the team's other drivers and team members. "That was fantastic," he said of his run up the hill. "Luckily it was not raining and it was great to see all these cars on the track. It was quite bumpy and the car was bottoming out quite a bit, but it was great to see all the fans."

Team-mate Sergio Perez got two runs up the hill and also got the chance to drive Ford's Red Bull SuperVan 4.2. The lightning-quick EV has 1050kW battery – 1400bhp in old money – and Perez admitted the power made it a handful. "In terms of starting, when you jump on the throttle, I cannot hold my head forward," he said. "It starts really quickly. It's a really fast car."

The whole of the Cathedral Paddock was signed over to Red Bull, which had all 20 of its F1 cars on display along with a motorhome and other activities. **BH**



Verstappen tells Chandhok about "fantastic" experience

for me. I hope they enjoyed watching me driving and doing donuts as much as I did. I can't wait to do it again!"

There were plenty of other highlights across the four-day event, including Mercedes celebrating 130 years of motorsport. The German powerhouse displayed items such as the Daimler two-cylinder V-engine from 1894 used in the Paris-Rouen race, and an original Mercedes Targa Florio racing car from 1924. **BH**

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One-Day: On-the-day price Adult **£25** Concessions (65+) **£20**

Full Weekend: On-the-day price Adult **£35** Concessions (65+) **£30**

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Public Admission for Clubs.**

FITTIPALDI AND McLAREN:
HALF A CENTURY ON

Along with Red Bull, there was sizeable Formula 1 representation from McLaren, Williams, Mercedes, Ferrari and Alpine at the Festival of Speed.

McLaren paid tribute to the late Ayrton Senna by firing up the 1991 MP4/6, the Brazilian’s final world title winner, for his nephew Bruno Senna to drive up the hill. The legendary British team also celebrated the 50th anniversary of its first F1 constructors’ and drivers’ championships in 1974, won by Emerson Fittipaldi, who drove one of the Cosworth DFV-powered M23s that took him to his second crown.

It was the Brazilian’s maiden season for McLaren after joining from Lotus, and he reckons that jumping in the M23 was straightforward following his time in the Lotus 72, in which he was 1972 champion. “The McLaren was a very conventional



car,” said the 77-year-old. “It was very easy to work with and easy to get the set-up right. McLaren at that time had very good logistical planning for every GP, we had three different wheelbases and we had the most technical people and kept it competitive in 1974 and 1975. It was a strong car, very fast and stable in fast corners. It had very good weight distribution and was an amazing car to drive.”

Seven-time grand prix winner Juan Pablo Montoya was reunited with his 2004 Williams-BMW FW26, and drove the three-litre V10 up the hill on Saturday. Williams was also represented by its current driver pairing of Alex Albon and Logan

Sargeant, while team boss James Vowles got behind the wheel on Sunday. Alpine’s Jack Doohan pulled off some donuts in the Lotus E20, and Mercedes was represented by reserve driver Frederik Vesti, the 2023 Formula 2 runner-up.

As ever, F1 was not the only major single-seater category represented. Jaguar’s Formula E team took part, with Sky pundit Karun Chandhok driving the latest Gen3 car. And it was a similar story when it came to stars outside the F1 world, with NASCAR legend Richard Petty and 15-time world motorcycle champion Giacomo Agostini among the line-up. **BH**

BTCC ACES OUT IN FORCE

The British Touring Car Championship remains the UK’s top national series, and this status was reflected in the size of its stand at Goodwood.

Four cars were on display, with onlookers able to get up close with one of the NAPA/Alliance Racing Fords, an Excelr8 Hyundai, a Power Maxed Racing Vauxhall and one of the Speedworks Motorsport Toyotas. With no barriers separating spectators from the machinery, this was access that goes beyond anything possible across a

regular BTCC weekend.

While getting cosy with the cars is one thing, enthusiasts were also able to speak directly to the drivers across the weekend. Champions Tom Ingram, Ash Sutton and Jason Plato, plus race winner Josh Cook, were often to be found milling around on the stand, posing for pictures and signing autographs. And there was ample opportunity to hear from them in one of the panels or during an official autograph session.

Inside the multi-tiered stand, the main



attraction was a series of simulators, with the challenge to beat BTCC drivers’ times around the Brands Hatch Grand Prix layout. With a *Top Gear*-style leaderboard in full view, it was safe to say that, at least in the early stages of the weekend, the professionals were certainly proving their worth! This was something to factor in more than a little time for, with the queue often quite long and not the fastest moving. Although, with the prize of a pair of weekend tickets for a BTCC event on offer, that was perhaps understandable.

The one downside was that only one modern car was taken up the iconic hill, with Cook strapping into Rob Huff’s Toyota Corolla for the short blast. This was not, however, a timed run and was more a demonstration. Will the BTCC shoutout ever return to Goodwood, we wonder...? **SH**

A GLIMPSE OF A DRIVERLESS FUTURE?

Somewhat hidden in the paddock was an easy-to-miss awning with some of the most interesting technology that the Festival of Speed had to offer – the IndyCar Autonomous Challenge.

Built using the same Dallara chassis run by Indy NXT, the cockpit has been stuffed with technology, including LiDAR, RADAR and optical lenses to help guide the car on track. Showcasing its machinery was the PoliMOVE-MSU team, which has been victorious in four of the six events so far this season and holds the autonomous land speed record after achieving 192mph for a sustained period in 2022.

This is not the team's first appearance at the Festival after attending last year with a display

in the Futures Lab. But this time around, there was a major difference to proceedings, with PoliMOVE-MSU sending its car up the hill each day. Given the problems that some of the best drivers have making the journey at speed, this was certainly a brave venture.

With safety in mind – and not wanting to write off their car on day one – the team began the weekend at a relatively sedate pace, giving those in the grandstands ample opportunity to marvel over the driverless technology. But as the weekend progressed, the speed was gradually ramped up. Needless to say, there was never a run that could be classed as a full-send effort, but the steady improvements gave a glimpse of what is possible.

It is also likely that the achievement caught the attention of those involved in the Abu Dhabi Autonomous Racing League, so could we be seeing another driverless car in the line-up next year?

Much like the other awnings at Goodwood, there were a host of team members hard at work throughout the weekend. But unlike those other areas, this number was largely made up of people sitting at laptops, rather than holding spanners and making changes to the car.

Make no mistake, autonomous racing is nowhere near the level of racing as we know it, but this glimpse at a rapidly evolving technology showed it might not take too long to catch up. **SH**



ROVANPERA AND OGIER AMONG THE RALLYING HEROES

The winners of a combined 16 World Rally Championship titles descended on Goodwood as rallying made an increased presence felt at the festival.

The WRC set up camp in the Sussex estate, bringing with it representatives and vehicles from Toyota, Hyundai and M-Sport Ford, while rally raid also enjoyed the limelight when Ford – joined by two-time WRC champion Carlos Sainz Sr – launched its all-new 2025 Raptor T1+ Dakar challenger (see Pit & Paddock).

Toyota took an arsenal of its current and past star drivers to pilot a range of its latest automotive and motorsport machines. Reigning and two-time world champion Kalle Roanpera left an indelible mark on the Festival courtesy of some wild tyre-smoking runs up the hill in his Toyota GR

Supra drift car. “It is my first time at this event, is so crazy and so cool,” grinned the Finn. “With the drift car I was able to put on a show for the fans. I think the runs up the hill are much more important than the rally stages in a way as there are loads of fans here and with the rally car you can do things that most of the other drivers and cars can’t.”

Eight-time world champion Sebastien Ogier got back behind the wheel after his Rally Poland recce crash, piloting the limited edition GR Yaris road car named after him. He also turned co-driver to actor and comedian Rowan Atkinson as they showcased Toyota’s hydrogen-powered GR Yaris. “It was a bit unusual [as co-driver] but it was an experience,” said Ogier. “The car is interesting.” Atkinson added: “It feels like a petrol-fuelled vehicle.”

WRC rally winners Dani Sordo and Hayden

Paddon were reacquainted with a version of the (2017-21) Hyundai i20 Coupe in which they scored three wins. It was Paddon’s first drive in the car for six years. M-Sport WRC drivers Adrien Fourmaux and Gregoire Munster also entertained fans with runs in the current Puma Rally1.

Rallying history featured Lancia, which announced a return to the sport earlier this year, celebrating 50 years since its famous Stratos won the marque’s first world championship in 1974.

The Forest rally stage once again proved a hit, with hordes of spectators witnessing rally cars from all generations tackle the technical 1.5-mile gravel test. Four-time world champion Juha Kankkunen was among the star names to roll back the years conducting runs in Toyota’s GR Yaris Rally2 car.

This year’s title contender Elfyn Evans also

DUMAS WHISTLES SUPERVAN TO TOP OF THE TIMES

Ford conquered Goodwood’s famous shootout with its mighty all-electric SuperVan in what proved to be a truncated timed showdown on Sunday. Two-time Le Mans 24 Hours winner Romain Dumas lit up the famous 1.16-mile hillclimb course to post a 43.987s effort behind the wheel of the 1400bhp Ford SuperVan 4.2, powered by four electric motors.

This time eclipsed former Toro Rosso Formula 1 driver Scott Speed, who had laid down a 46.075s effort piloting the wild 670bhp Subaru WRX Project Midnight, created specifically for this event.

Dumas’s success makes him a three-time Goodwood shootout winner, following triumphs in 2018 and 2019 driving the electric Volkswagen I.D. R. “Two corners from the end, I was quite close to the wall, so I was pushing quite hard I have to say,” related the Frenchman, who took his fifth outright victory in the famous Pikes Peak hillclimb aboard Ford’s F-150 Lightning SuperTruck electric demonstrator last month. “Goodwood is just amazing. It is quite impressive to go at this speed through a small field but it was a lot of fun. I’m quite happy that we won it. I didn’t know how fast Scott had gone on his run, but I knew that everyone was very motivated,



Dumas became a three-time shootout winner in Ford SuperVan 4.2

JEP/MOTORSPORT IMAGES



Quirky Alpine A110 Pikes Peak was fourth fastest

JEP/MOTORSPORT IMAGES

and we had good competition at this level. We all want to win.”

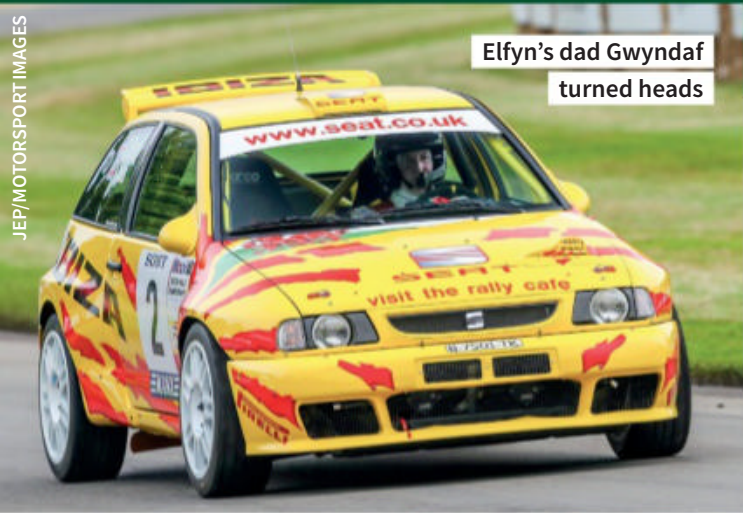
Porsche Carrera Cup GB driver James Wallis completed the podium after posting a 48.047s driving a Porsche 911 GT3 Cup car. Raphael Astier’s unusual Alpine A110 Pikes Peak was fourth (48.618s), ahead of Chris Ward (Czinger 21C, 48.818s) and British Touring Car Championship title contender Jake Hill, who once again entertained on his way to a 48.914s in a Nissan Skyline GT-R R32.

The shootout was punctuated by three incidents that brought out the red flags. Annette Mason, driving a Ferrari 512 BB LM, clipped the haybales on the exit of the Flint Wall, which caused steering damage, and a recovery truck was required to remove the car.

The red flags flew again shortly after this incident when Piero Longhi found the haybales at the first turn behind the wheel of the Glickenhaus SCG004C. Longhi clipped the grass on the inside of the corner, which spat the GT car into the haybales, causing significant damage to the front end.

Travis Pastrana’s spectacular run in the Subaru GL Family Wagon ‘Huckster’ came to a premature halt after a heavy impact at Molecomb corner. The popular American extreme sports and rally driver set the fastest opening sector time, but understeered at the tricky left-hander and ploughed into the bales.

This year the shootout underwent a format change, with timed runs on Saturday deciding the class winners (see table on page 39). **TH**



Elfyn’s dad Gwyndaf turned heads

JEP/MOTORSPORT IMAGES

demonstrated the Rally1 version on the stage, while his 1996 British Rally Championship-winning father Gwyndaf provided an event highlight by unleashing the unique sound of his SEAT Ibiza F2 car on the hillclimb. “A weekend like this helps to keep me young,” said Evans Sr. **TH**



Rovanpera had a hoot on the hill in his Supra drift car

BAKOS/RED BULL CONTENT POOL

IOWA ★ SPEEDWAY

McLaughlin makes his oval breakthrough

McLaughlin defied his own expectations to win

INDYCAR
IOWA SPEEDWAY (USA)
13-14 JULY
ROUND 10/15

This has been a roller-coaster year for Team Penske, so perhaps we shouldn't be surprised that Scott McLaughlin scored his first oval victory at Iowa Speedway last Saturday night, while Will Power claimed Sunday afternoon's race from 22nd on the grid – when he'd failed to win from seven previous poles here.

"An IndyCar driver is someone that can win on all three race tracks, so I've won on an oval now, along with a road and street course – proud moment," boasted former Supercars star McLaughlin, while Power profited when a caution fell perfectly for his strategy: "It's funny because I was trying to win this race for so long. I didn't *really* think I'd win today."

Oddly, Saturday's race on the 7/8-mile

track was only the second oval event of the year, the first of six in the final eight.

Colton Herta set his first oval pole at 187.655mph, and the Andretti Global racer initially led from McLaughlin and points leader Alex Palou. The race went yellow almost immediately, when David Malukas suffered a "dumb" spin at Turn 2 and collected both Juncos Hollinger Racing cars of Agustin Canapino and Romain Grosjean, but the top runners stayed in order following the restart.

Much later, McLaughlin grabbed the lead from Herta during the pitstops while Palou stalled. Chip Ganassi Racing's double champion mistakenly selected second gear, and plummeted to 19th.

Herta attacked McLaughlin hard at the lap 94 restart but couldn't get by. Scott Dixon moved up to third at team-mate Palou's expense, ahead of the Arrow McLaren cars of Pato O'Ward and Alexander Rossi.

Herta reported severe vibrations from his

front tyres just after half distance, and dropped four seconds behind McLaughlin, but was told to stay out to make the fuel window for a two-stop race. Herta pitted for the second time on lap 174 of 250 but, while the Californian was receiving service, Palou uncharacteristically spun across the start/finish line and hit the wall. That put Palou out of the race and, with everyone else pitting under the subsequent yellow, it dropped Herta to 16th. Dixon suffered a slow exit, allowing O'Ward to vault to second.

"Driver mistake, no reason why I needed to push from there having already made a mistake in the pits – unacceptable," said Palou, whose points lead was slashed.

Regular oval dominator Josef Newgarden, who struggled with his balance in qualifying and started 22nd, had leapt up to 14th on lap one after a hugely brave around-the-outside move at the first corner – admitting he was "flirting with disaster". He rose to 10th after the first round of pitstops, and gained more spots in the second cycle, restarting fourth behind McLaughlin, O'Ward and Dixon.

McLaughlin almost spun as he gunned the throttle on the lap 189 restart, but he held sway and scampered clear. Power's weird race from fourth on the grid included getting caught speeding in the pits and dropping outside the top 20. He rammed Pietro Fittipaldi into a spin at the restart with 20 laps to go; the Brazilian collected Ed Carpenter on his trip into the wall.

The final green flew with 12 laps to go, with McLaughlin stroking home 0.5s ahead of O'Ward, while Newgarden got around



Herta leads race one from his first oval pole position

ALL PHOTOGRAPHY: MOTORSPORT IMAGES
 TONS



Penske crew celebrates
Kiwi star's "proud moment"



Palou rued race-one error, then
followed up with second place

Dixon for third. "The pitstops allowed us to show our pace tonight," McLaughlin said.

McLaughlin led from pole in Sunday's second stanza, ahead of Palou's rebuilt car and Dixon, with Herta holding fourth from Felix Rosenqvist and the McLaren entries of Rossi and O'Ward. Newgarden ran 10th in the early stages, gaining four spots from another impressive start.

The race was in triple figures in terms of lap count when the first pitstop cycle began, but things got complicated when Canapino spun exiting the pitlane. Race control held off with the yellow just long enough to allow Palou to pit, while Power – who started way back after clipping the wall in qualifying – stayed out and briefly trapped the entire field a lap down. That reset the order with Palou leading Power (who pitted under yellow and rejoined second) and those who had stopped earlier: McLaughlin, Dixon, Herta, O'Ward and Rossi.

Power stalked Palou until the second round of stops and overcut him by 0.8s, thanks to some brilliant work in the pits from his team – enough to grab the lead and go on to score his 43rd career win after seeing off Palou's late-race challenge.

McLaughlin finished third from Dixon, Herta, O'Ward and Newgarden. Behind them, Rossi ran out of fuel on the final tour and was used as a ramp by Sting Ray Robb, who was a lap down and somersaulted down the back straight. Ed Carpenter and Kyle Kirkwood spun in avoidance but contrived to collide with Rossi in an almighty stramash.

CHARLES BRADLEY

RESULTS ROUND 10/15, IOWA (USA) RACE 1, 13-14 JULY (250 LAPS – 223.500 MILES)

POS	DRIVER	TEAM/CAR	TIME
1	Scott McLaughlin (NZL)	Team Penske / Dallara-Chevrolet	1h44m41.1172s
2	Pato O'Ward (MEX)	Arrow McLaren / Dallara-Chevrolet	+0.4814s
3	Josef Newgarden (USA)	Team Penske / Dallara-Chevrolet	+1.5174s
4	Scott Dixon (NZL)	Chip Ganassi Racing / Dallara-Honda	+5.0041s
5	Rinus VeeKay (NLD)	Ed Carpenter Racing / Dallara-Chevrolet	+6.5656s
6	Santino Ferrucci (USA)	AJ Foyt Enterprises / Dallara-Chevrolet	+7.4575s
7	Kyle Kirkwood (USA)	Andretti Global / Dallara-Honda	+8.4200s
8	Alexander Rossi (USA)	Arrow McLaren / Dallara-Chevrolet	+9.3425s
9	Marcus Ericsson (SWE)	Andretti Global / Dallara-Honda	+10.3770s
10	Marcus Armstrong (NZL)	Chip Ganassi Racing / Dallara-Honda	+11.4006s
11	Colton Herta (USA)	Andretti Global with Curb-Agajanian / Dallara-Honda	+11.8114s
12	Nolan Siegel (USA)	Arrow McLaren / Dallara-Chevrolet	+12.1279s
13	Felix Rosenqvist (SWE)	Meyer Shank Racing / Dallara-Honda	+12.4651s
14	Kyffin Simpson (CYM)	Chip Ganassi Racing / Dallara-Honda	+13.5048s
15	Sting Ray Robb (USA)	AJ Foyt Enterprises / Dallara-Chevrolet	+14.0242s
16	Graham Rahal (USA)	Rahal Letterman Lanigan Racing / Dallara-Honda	-1 lap
17	Katherine Legge (GBR)	Dale Coyne Racing / Dallara-Honda	-1 lap
18	Will Power (AUS)	Team Penske / Dallara-Chevrolet	-9 laps
19	Pietro Fittipaldi (BRA)	Rahal Letterman Lanigan Racing / Dallara-Honda	228 laps-accident
20	Ed Carpenter (USA)	Ed Carpenter Racing / Dallara-Chevrolet	228 laps-accident
21	Linus Lundqvist (SWE)	Chip Ganassi Racing / Dallara-Honda	209 laps-lost power
22	Christian Lundgaard (DNK)	Rahal Letterman Lanigan Racing / Dallara-Honda	178 laps-accident
23	Alex Palou (ESP)	Chip Ganassi Racing / Dallara-Honda	175 laps-accident
24	Romain Grosjean (FRA)	Juncos Hollinger Racing / Dallara-Chevrolet	48 laps-accident
25	Jack Harvey (GBR)	Dale Coyne Racing / Dallara-Honda	28 laps-withdrew/neck pain
26	David Malukas (USA)	Meyer Shank Racing / Dallara-Honda	0 laps-accident
27	Agustin Canapino (ARG)	Juncos Hollinger Racing / Dallara-Chevrolet	0 laps-accident

Winner's average speed 128.098mph. **Fastest lap** Newgarden 18.0687s, 178.120mph.

QUALIFYING 1 Herta 187.655mph; 2 McLaughlin 187.526mph; 3 Palou 186.841mph; 4 Power 186.328mph; 5 Dixon 186.208mph; 6 O'Ward 186.074mph; 7 Rossi 186.039mph; 8 Ferrucci 185.405mph; 9 Armstrong 185.337mph; 10 Ericsson 185.271mph; 11 Rosenqvist 185.196mph; 12 Lundqvist 184.659mph; 13 VeeKay 184.336mph; 14 Malukas 184.151mph; 15 Siegel 183.749mph; 16 Canapino 183.632mph; 17 Fittipaldi 183.623mph; 18 Harvey 183.556mph; 19 Kirkwood 183.504mph; 20 Grosjean 183.453mph; 21 Rahal 184.810mph*; 22 Newgarden 182.763mph; 23 Lundgaard 181.521mph; 24 Robb 177.530mph; 25 Carpenter 176.838mph; 26 Legge 176.225mph; 27 Simpson 175.866mph*. * grid penalty.

RACE 2 (250 LAPS – 223.500 MILES) 1 Power 1h26m38.7472s; 2 Palou +0.3915s; 3 McLaughlin +2.3651s; 4 Dixon +2.5326s; 5 Herta +4.4363s; 6 O'Ward +4.6789s; 7 Newgarden +4.8592s; 8 Rahal +18.0556s; 9 VeeKay +18.7648s; 10 Grosjean +20.4808s; 11 Ferrucci +20.8311s; 12 Lundqvist +25.0235s; 13 Malukas +26.4773s; 14 Siegel +28.1296s; 15 Rossi 249 laps-out of fuel/accident; 16 Kirkwood 249 laps-accident; 17 Lundgaard -1 lap; 18 Simpson -1 lap; 19 Armstrong -1 lap; 20 Fittipaldi -1 lap; 21 Robb 248 laps-accident; 22 Carpenter 248 laps-accident; 23 Ericsson -2 laps; 24 Legge -2 laps; 25 Canapino 221 laps-mechanical; 26 Rosenqvist 184 laps-suspension; 27 Conor Daly 140 laps-mechanical; NS Harvey.

Winner's average speed 154.768mph. **Fastest lap** Newgarden 18.0190s, 178.611mph.

QUALIFYING 1 McLaughlin 188.248mph; 2 Palou 187.572mph; 3 Dixon 187.162mph; 4 Herta 186.980mph; 5 Rosenqvist 186.835mph; 6 Rossi 186.029mph; 7 O'Ward 185.857mph; 8 Rahal 185.690mph; 9 Malukas 185.595mph; 10 Canapino 185.212mph; 11 Siegel 185.014mph; 12 Kirkwood 184.797mph; 13 Lundqvist 184.665mph; 14 Newgarden 184.154mph; 15 VeeKay 184.136mph; 16 Grosjean 183.800mph; 17 Fittipaldi 183.561mph; 18 Lundgaard 182.268mph; 19 Ferrucci 181.408mph; 20 Robb 181.069mph; 21 Ericsson 181.029mph; 22 Power 179.302mph; 23 Simpson 178.972mph; 24 Legge 177.862mph; 25 Armstrong 173.682mph; 26 Carpenter 169.209mph; 27 Daly 183.331mph**.

** qualified by Harvey in 18th

CHAMPIONSHIP 1 Palou 379; 2 Power 344; 3 O'Ward 327; 4 Dixon 322; 5 McLaughlin 314; 6 Herta 300; 7 Kirkwood 274; 8 Rossi 265; 9 Newgarden 247; 10 Ferrucci 221.



Power won race two
from 22nd on grid





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Corvette pair turn IMSA into Sims-a

IMSA SPORTSCAR
MOSPORT PARK (CAN)
14 JULY
ROUND 7/11

The IMSA SportsCar Championship's top GTP class was absent from last Sunday's race at the classic Mosport Park venue, thereby providing an opportunity for some of the less heralded classes to enjoy the limelight. They did not disappoint.

The regular race distance of two hours and 40 minutes produced an enthralling contest in which Inter Europol by PR1 Mathiasen Motorsports pairing Tom Dillmann and Nick Boulle held off the similar LMP2 ORECA-Gibson 07 of Felipe Fraga and Gar Robinson to take the overall victory by just over half a second.

Appropriately in a race titled the Chevrolet Grand Prix, the Corvette Z06 GT3.R proved to be a dominant force in GTD Pro, with the factory supported Corvette Racing by Pratt Miller Motorsports team finally securing its first win of the season through the efforts of on-form Englishman Alexander Sims and Spain's five-time IMSA champion Antonio Garcia.

Barely two and a half years after his very first race, software developer/businessman PJ Hyett continued his remarkable rise to prominence by taking another pole position to add to his earlier credits at Sebring and Watkins Glen – two of the other most challenging tracks on the IMSA schedule. Hyett took off confidently



GALSTAD/MOTORSPORT IMAGES

into the lead in his crowd-favourite AO Racing Spike the Dragon ORECA, only to unfortunately slip down the order after being hit with a drive-through penalty for moving out of line at the rolling start.

Boulle, a jeweller and part-time racer from Dallas, Texas, instead took over the lead after first finding a way past the United Autosports USA car of Dan Goldburg. Boulle extended his advantage until handing over to accomplished former single-seater racer Dillmann. The Frenchman continued the excellent work, fending off late challenges from Scott Huffaker (TDS Racing), who ultimately lost second place with a trip across the grass at Turn 8 with less than 20 minutes remaining, and then Brazilian Fraga, whose hopes of adding another victory to his and Robinson's LMP3 success one year earlier came up just a little short.

In GTD Pro, the Corvettes of Sims/Garcia and Tommy Milner/Nick Catsburg never looked likely to cede a superiority they displayed from the opening free practice on Friday. Jack Hawksworth put forth a valiant effort in qualifying for the Vasser Sullivan Lexus team, the Briton briefly securing a

new lap record before Sims really got into his groove to ensure the pole position. Sims, who still holds the GTP race lap record from 2023, and team-mate Garcia then controlled the race as Hawksworth and Ben Barnicoat gradually slipped backwards before experiencing a rare engine failure.

They were challenged early by the Paul Miller Racing BMW of Madison Snow/Bryan Sellers before it received a penalty after making contact with a slower car, and later by both the steadily improving Multimatic Ford Mustang GT3 of Harry Tincknell/Mike Rockenfeller and the AO Racing Porsche of Seb Priaulx/Laurin Heinrich, which moved into third place during the final round of pitstops.

The Heart of Racing Aston Martin team snagged its first GTD victory of the season as Canadian Roman De Angelis romped to his second win in three years on home soil following a strong first stint from veteran Spencer Pumpelly. Winward Racing's Russell Ward and Philip Ellis extended their already prodigious championship lead by guiding their Mercedes to second.

JEREMY SHAW

Taponen gains after Tuscan challenge

**FORMULA REGIONAL EUROPEAN
MUGELLO (ITA)
13-14 JULY
ROUND 5/10**

For all of Rafael Camara’s early-season domination of the Formula Regional European Championship by Alpine, it’s now looking like a two-way battle between the Brazilian and fellow Ferrari protege Tuukka Taponen for the crown as the season enters its second half.

Finnish teenager Taponen planted his R-ace GP car on pole for Saturday’s race, while a last-lap effort hoisted Brando Badoer of Van Amersfoort Racing onto the front row by topping the other group, at the expense of Prema Racing starlet Camara. Badoer kept Taponen on his toes for much of the race, making some strenuous efforts to take the lead at half-distance, before the hard-charging Italian dropped a wheel into the gravel exiting the fast Arrabbiata double-right and fell back to a 3.9-second deficit at the finish.

Camara initially held fourth behind Pedro Clerot, but was deposed by Ivan



Domingues on the restart lap following a brief safety car. Domingues wasn’t finished yet, and with two laps remaining he surged past VAR team-mate Clerot for third. Camara stayed close, and only just failed to pass Clerot on the run to the finish line.

Poor track positioning in qualifying, which mired him in traffic, and a first-lap run wide at Arrabbiata looked to have done for James Wharton, but the Prema-run Australian stormed back to seventh behind Michael Belov, and he then took his maiden FRECA win on Sunday. Badoer claimed pole – and survived a hairy trip across the grass at the Savelli left-hander while trying to go quicker still – while Wharton topped the other group. Badoer lost out to both Wharton and Camara at the start, before

grabbing second place on lap two.

While Wharton led home Badoer, Camara fell into the clutches of Clerot and Taponen, who had started from the fourth row rather than the third due to a penalty for impeding in qualifying, but immediately burst into fifth. Taponen wrested fourth from Clerot with three laps to go and then tried to pass Camara too at San Donato, but got edged wide via minor contact, skimmed the grass and fell back to fifth. A post-race penalty for the incident dropped Camara to fifth, behind Clerot and Taponen.

The top six was completed by Zachary David, while Domingues sliced up to seventh from a lowly grid position after losing his front wing in a qualifying off.

Foster into front Roe for the title

**INDY NXT
IOWA SPEEDWAY (USA)
13 JULY
ROUND 8/12**

Louis Foster furthered his stranglehold on the Indy NXT championship after pulling off a late pass to win at Iowa Speedway.

The 20-year-old Briton started second alongside polesitting Andretti Global team-mate James Roe, and stalked the Irishman until surging past with an outside pass in Turn 1 with six laps to go and



coasting to victory, after a caution fell with two laps to go of the 0.894-mile oval.

“We discussed prior to the race that we were going to save tyres throughout the race,” Foster said. “I wasn’t challenging James on the starts, I was just letting him get a gap to save my tyres. And then towards the end there were enough laps to go that I knew if I killed my tyres it wasn’t a big deal. I just got around him on the outside and he lifted. He gave me really good racing room.”

Foster led an Andretti sweep of the podium, with Roe settling in second and pseudo team-mate Salvador de Alba Jr, in an Andretti Cape entry, charging from 10th to third to collect his maiden podium.

Tyre concerns after practice on Friday led to the race distance being reduced to 55 laps from 75, with a competition caution set after 15 laps, and the field running approximately 10 laps under caution before a single-file restart. Foster now holds a 77-point lead over Jacob Abel, who suffered a mid-race puncture and finished 15th.

JOEY BARNES

WEEKEND WINNERS

- IMSA SPORTSCAR
MOSPORT PARK (CAN)**
- LMP2** Tom Dillmann/Nick Boulle
Inter Europol by PR1 Mathiasen Motorsports (ORECA 07)
- GTD Pro** Antonio Garcia/Alexander Sims
Pratt Miller Motorsports
(Chevrolet Corvette Z06 GT3.R)
- GTD** Roman De Angelis/Spencer Pumpelly
Heart of Racing Team
(Aston Martin Vantage GT3 Evo)

- FORMULA REGIONAL EUROPEAN
MUGELLO (ITA)**
- Race 1** Tuukka Taponen
R-ace GP
- Race 2** James Wharton
Prema Racing

- INDY NXT
IOWA SPEEDWAY (USA)**
- Louis Foster – Andretti Global

- EUROCUP-3
ZANDVOORT (NLD)**
- Races 1 & 2** Javier Sagraera
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Blaney into hunt for second crown

NASCAR CUP
POCONO (USA)
14 JULY
ROUND 21/36

Ryan Blaney cemented his status as a strong contender for a second consecutive NASCAR Cup title with an impressive win last Sunday at Pocono Raceway. Kyle Larson beat Blaney off pitroad on lap 117 of 160, but Larson and three others were penalised for speeding in the pits, which handed the race lead over to Blaney. Despite his Team Penske Ford being close on fuel to make it to the finish, Blaney never relinquished his position. Three

cautions in the final 38 laps helped him save enough fuel, and he easily pulled away on each of the ensuring restarts. Denny Hamlin moved into second with seven laps to go in his Joe Gibbs Racing Toyota, but ran out of time and Blaney edged him by 1.312 seconds for his second win of the 2024 season. Blaney and his Penske team-mates Austin Cindric and Joey Logano have won four of the past seven Cup races and all three are locked into the playoffs. Alex Bowman was third ahead of William Byron and Logano. Chase Elliott tops the standings by three points from Larson, with five races before the playoffs begin.

JIM UTTER



WEEKEND WINNERS

NASCAR CUP
POCONO (USA)
Ryan Blaney
Team Penske (Ford Mustang)

EXTREME E
GLENMUCKLOCH (GBR)
Races 1 & 2 Kevin Hansen/Molly Taylor
(below) Veloce Racing



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Veloce has the velocity for Scottish double

EXTREME E
GLENMUCKLOCH (GBR)
13-14 JULY
ROUND 2/5

Veloce Racing duo Kevin Hansen and Molly Taylor claimed the Extreme E points lead with a double victory at the Hydro X Prix in Scotland. The pair won both of their qualifying heats to comfortably reach Saturday's Grand Final, where Taylor led the first leg while a feisty battle ensued behind. Laia Sanz (Sainz XE) prevailed in a squabble with the Andretti machine of Hansen's brother Timmy, who was involved in a collision with Mikaela Ahlin-Kottulinsky (Rosberg X Racing) that forced the reigning champion out with damage. After taking over from Sanz in the Switch Zone, Fraser McConnell fought valiantly in his pursuit of Kevin Hansen, who remained ahead. Catie Munnings maintained third in the second leg for Andretti to repeat her home event podium finish from last year.




Sunday's final followed a similar pattern, with Sanz running second behind the Veloce entry, this time piloted by Kevin Hansen for the first leg. Taylor held a nine-second lead following the driver change, before O'Connell went on a charge after taking over from Sanz to eradicate the deficit, but he could not find a way past before the finish. Munnings and Timmy Hansen were again third despite a time penalty, while RXR's woes continued when a puncture left Ahlin-Kottulinsky and Johan Kristoffersson in fourth. Legacy Motor Club pair Patrick O'Donovan and Gray Leadbetter came from behind to win the first Redemption Race ahead of SUN Minimeal duo Timo Scheider and Klara Andersson, who had

crashed heavily in the qualifying heats. Jensen Button's JBXE squad faded with mechanical woes, while McLaren line-up Mattias Ekstrom and Cristina Gutierrez were forced to retire. After denying Veloce a win in Sunday's opening qualifying heats, JBXE missed out on the final again when Amanda Sorensen rolled out of her second heat. The JBXE machine led the Redemption Race in the hands of Andreas Bakkerud before being passed by O'Donovan, who remained ahead into the Switch Zone. But Ekstrom hunted Leadbetter down in the second leg to seal the win for McLaren, while JBXE and SUN Minimeal ran into issues.

STEVE WHITFIELD

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- Develop, maintain, and validate mechanical & thermal tyre models used in the DiL, as well as offline simulation tools

Your Qualification

- Master's or Bachelor's Degree in STEM studies
- Minimum 2 years of professional experience in performance engineering or data analysis in a high-level motorsport series (Formula E, WEC, etc.)
- A solid background in the fundamentals of vehicle dynamics
- Knowledge of Matlab/Simulink and/or other programming languages such as Python, C#, C++
- Experience in tyre modelling (thermal and mechanical) is an advantage
- Methodical and analytical approach with an ability to propose creative and innovative solutions
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- Work with the other engineering and operational teams providing field support to ensure the telemetry systems meet the team's performance and reliability requirements, including assisting in the installing, commissioning, and operating the telemetry systems at racetracks and test events.

Specification Essential

- Educated to degree level or equivalent vocational and industry experience in electronics engineering (or suitable equivalent, such as mechatronics)
- Knowledge of systems engineering principles, including requirements analysis, system architecture, and system verification and validation, with experience in embedded systems development and support, especially full lifecycle
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- Maintenance and Repairs: Perform routine maintenance and repairs on wraps and stickers. Remove old vinyl and stickers and prepare surfaces for new applications.
- Collaboration: Work closely with the marketing team to ensure consistent branding. Communicate with team members and sponsors to understand design requirements.
- Quality Control: Inspect completed work to ensure high standards. Make adjustments and corrections as necessary.
- Equipment and Material Management: Maintain inventory of materials, tools, and equipment. Ensure workspace is organised and clean, adhering to health and safety guidelines.

Qualifications:

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- Proficiency with vinyl wrapping and sticker making tools and equipment.
- Strong graphic design skills and experience with design software.
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- Ability to work under pressure and meet tight deadlines.
- Excellent communication and teamwork skills.
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- Proactive social media community management, engaging with fans on all platforms.
- Community engagement, analytics and reporting of Williams Racing's Social Media Channels
- Work alongside the team's retained creators, including but not limited to; car launches, partner activations and events

Required Skills:

- Proven experience in the management of social media channels for large brands or sports teams, including community management experience.
- Understanding of key social media channels and creative best practices
- Ability to recognise and capitalise on social media trends
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Split race finishes are latest **CSCC** innovation

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Split finishes planned for Brands event

CSCC

The Classic Sports Car Club will introduce another innovative format at its Brands Hatch meeting next month when it runs races with split finishes for the first time.

Brands Britannia on 25-26 August, the Bank Holiday weekend, is scheduled to feature a pair of 20-minute races for the MG Trophy – which usually runs together with the club's Jaguar Championship – concurrently with 40-minute contests for the club's Modern Classics and Future Classics series. Each series will start at the same time but the MG Trophy cars will finish their race and leave the circuit midway through the

40-minute timetable slot.

The move is designed to make maximum use of the 1.2-mile Indy circuit's relatively small capacity compared to other circuits. It also assists with scheduling no qualifying sessions on Bank Holiday Monday when the festival-style event should draw a large crowd.

"Brands Hatch is only a 34-car grid so, by doing that [split finishes], we can combine some races," explained CSCC director Hugo Holder. "It means we can run a 20-minute race within a 40-minute race. You can't do both – you can't do a [split] start and finish – but in that particular case we'll start them all together, but the MG Trophy will come off 20 minutes into it. That way, we can get

the two 40-minute races in."

The new format is the latest innovation from the CSCC, which last year chose to open its season at Silverstone in February and run a 24-hour event at Anglesey.

"We've never done a split finish before," said Holder. "We've done plenty of split starts but not a split finish, so that's a new one. You have to be [innovative], otherwise it doesn't work. It's difficult to make Brands work because you're restricted to only 34 cars."

The Brands Britannia event is also set to feature demonstration laps from a Group C Jaguar XJR-9 and a public grid walk before the Classic K race on Monday.

MARK PAULSON

O'Brien's promising F3 outing aboard Tecno

HISTORIC F3

Michael O'Brien demonstrated the potential of Nick Fennell's 1000cc Historic Formula 3 Tecno 69 by qualifying on pole for its championship debut at Brands Hatch last weekend, before a broken gear linkage forced retirement from Saturday's opener.

The short-wheelbase Italian machine – presented

in the striking yellow and red livery of the sister car Jean-Pierre Jaussaud used towards winning the 1970 French title – battled the Brabhams of Andrew Hibberd (BT18) and Jon Milicevic (BT21).

O'Brien forged ahead in Sunday's sequel, before spinning into the gravel at Stirling's on lap six of 13. Incidentally, his best lap of 1m36.454s equalled Samuel Harrison's record, set last



year en route to the HF3 title in O'Brien's father Mike's BT21.

The Tecno boasts an interesting US history from new, versatile veteran Bill Rutan having raced the car to

the 1969 SCCA Formula C championship, powered by a 1000cc Cosworth Ford SCA F2 engine instead of the F3 MAE.

MARCUS PYE

Chilton to race Dynamics-run Cortina

PRE-'66 TOURING CARS

Ex-Formula 1 and IndyCar racer Max Chilton is to join the grid for the Pre-'66 Touring Car Championship races at Croft next week in a Lotus Cortina. Chilton, who already has experience of racing a Cortina at Goodwood, intended to be part of a two-car line-up of the twin-cam Fords from Team Dynamics alongside the squad's boss Matt Neal. But Neal said that the team could only get one entry for the in-demand race from the series-organising



MOTORSPORT IMAGES

Classic Touring Car Racing Club, so Chilton will be Dynamics' only representative. Chilton will therefore race on the same bill as elder brother Tom, a veteran of the headlining British Touring Car Championship who raced for Dynamics back in 2008. "Max fancied doing it, and Tom's there with the touring cars," said Neal, who will flit between overseeing the

Cortina and his advisory role with BTCC team Restart Racing. "It's a brand-new car built by JRT [the all-conquering historic preparation powerhouse of Mike and Andrew Jordan], but there are some quick boys around with Cortinas. I don't know what would be the weapon of choice around there, but the Cortina won't be far away. "Max has had one run in it at

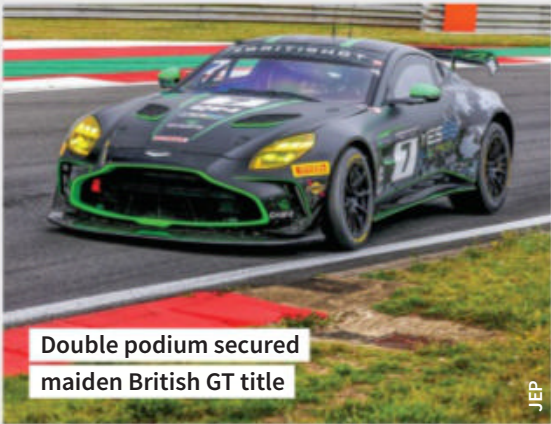
Goodwood so far, and he was pretty quick. Hopefully he won't disgrace himself!" The Cortina that Chilton will race is a sister car to the JRT-built version shared by Neal and fellow triple BTCC champion Gordon Shedden in the Jim Clark Trophy race at the Goodwood Members' Meeting last year (above) that celebrated the model's 60th birthday. **MARCUS SIMMONS**

GT4 teams' champ eyes step up

BRITISH GT

Forsetti Motorsport is eyeing a GT3 graduation after sealing the British GT4 teams' title during its debut season with two rounds still remaining. The Aston Martin squad secured a double podium at Snetterton last weekend with its driver pairings of Mikey Porter/Jamie Day and Marc Warren/Will Orton, leaving the team 121.5 points clear of Optimum Motorsport's single-car entry. Forsetti is also 165 points ahead of Century Motorsport – the nearest two-car entry – with a maximum score of 129 points available.

It has been an impressive debut campaign for Forsetti, which has scored nine podiums including victory at the Oulton Park season opener. Forsetti boss Joe Holloway said: "A massive credit to everyone that's worked for the team this year and contributed. We've had phenomenal drivers who have really delivered. I was confident that a two-car team should be at the forefront, but to do what we've done has been amazing." Now Holloway has set much greater goals for 2025. "It's about looking at which GT3 championships we can run and making sure that we can hit the ground



Double podium secured maiden British GT title

JEP

running," he added. "It will be unbelievably hard to replicate a season like this, but it's achievable. We're confident that we can operationally and efficiently run GT3, but it is a step up and it has to be with the right drivers and manufacturer." **ED HARDY**

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Zandvoort brace for Fairclough as British F4 makes overseas trip

BRITISH F4

Deagen Fairclough extended his lead at the top of the British Formula 4 standings with two victories, as a bizarre startline shunt sullied the series' first overseas appearance at Zandvoort last weekend.

Title rival Alex Ninovic kept the pressure on, taking a third win of the season in the reversed-grid contest, which was hastily rescheduled after a technical issue led to a seven-car incident. After the red lights went off, they came back on a fraction of a second later and, while some drivers slowed, those at the back closed in at speed, leading to contact on both sides of the grid.

Earlier, Hitech driver Fairclough had retained the race-one lead from pole ahead of fellow front-row qualifier Martin Molnar and the fast-starting Ella Lloyd

(JHR), who gained two places to run third, before sliding wide and falling down the order. Out front, Fairclough romped to a comfortable win over Ninovic (Rodin) and Molnar (Virtuosi).

Race two was rescheduled for Sunday after the original startline fiasco, and Ninovic took the lead from third, ahead of polesitter Abbi Pulling (Rodin) and Lloyd, who made another good start. Fairclough quickly put Lloyd under pressure and moved ahead to complete the podium.

Fairclough once again led from pole and pulled clear in race three, but an incident behind that involved several drivers led to a safety car and then red flags. When the race resumed, Fairclough retained the lead for his seventh win of the season ahead of team-mate Reza Seewooruthun, with Jack Sherwood storming from 18th to complete the podium for Rodin.

Smalley and Balfe target overall glory

BRITISH GT

Garage 59 pair Adam Smalley and Shaun Balfe clinched the British GT3 Silver-Am crown at Snetterton last weekend and now have ambitions of taking the outright title.

The McLaren 720S Evo duo claimed a sixth Silver-Am victory of the season in race two at Snetterton, with fourth in class at last weekend's opener their only failure to win of the year.

"To get that done so early, that's dominance," said Balfe. "We banked so many victories so early and I'm still working out how I feel – it feels quite good. If somebody said at the beginning of the year, 'Snetterton, job done', I'd have gone, 'What fairy land are you in?' Now it's about, 'Can we do the dream?'"

That "dream" is the overall British GT3 title. Balfe and Smalley sit just 21 points behind Rob and Ricky Collard,

after the Barwell Lamborghini father-son duo twice finished second at Snetterton.

"Let's go for the overall title now," said reigning Porsche Carrera Cup GB champion Smalley. "One title signed off, let's aim for the next one. Everyone says Snetterton is a Lamborghini track, so at Donington [next round], after how we performed last time, there's no reason why we can't challenge for the overall title."

ED HARDY

TONY MARTIN 1943-2024

Irish racing veteran Tony Martin died on Friday, aged 81. The first driver from the republic to race in Formula Ford 1600, in a Lotus 51, Martin graduated to F1 Atlantic in 1974 with the ex-Elf Coombs Jean-Pierre Jabouille/Francois Cevert F2 March 722-4, scoring a best finish of third at Mondello Park. He finished his career in Ireland's Clubmans series.

CLASSIC OUTING CUT SHORT

Cal Bennett's maiden Classic Formula Ford season took a blow at Brands Hatch when his Van Diemen RF80's crank snapped during Friday testing. After friend Jason Timms had collected a replacement from the family's Nemesis Racing workshop in Gloucestershire en route to the circuit, dad Jeremy Bennett rebuilt the engine overnight. Alas, a bent exhaust valve in qualifying rendered the work in vain but the promising teenager will be back, and reflected on "an expensive 10 laps".

HEWLETT TO RACE HONDA

Jake Hewlett, the 2022 Type R Trophy champion, is a late entry for this Saturday's Racing Hondas round at Oulton Park, which will take place on the full International circuit. The 31-year-old will race a Civic EP3 in Class B, with his addition boosting the grid size to 36 cars. Class A leaders Dan Brown and Liam Collins are the favourites for outright victories, while Ryan Cunningham leads the overall standings thanks to his greater points tally in Class C.

HARDING PLANS MORE MX-5

Three-time Mazda MX-5 Supercup runner-up Jack Harding is targeting a full-time return after scoring a trio of podiums on his second appearance of 2024 at Croft last weekend (below). Harding narrowly missed out on the title in 2018, 2019 and 2021 before switching to the Civic Cup, but returned at Oulton Park. After AK Motorsport gave Harding's ex-Josh Bromley car an overhaul, Harding now hopes to raise funds for a full engine rebuild.



Ingram wins Nicky Grist on his Yaris debut

RALLYING

Chris Ingram and Alex Kihurani gave the Toyota GR Yaris Rally2 its first UK rally win with a classy performance on the Nicky Grist Stages on Saturday.

It was Ingram's first rally in the second Yaris to be delivered to the Melvyn Evans Motorsport team, and he used the BTRDA Rally Series event as a shakedown ahead of taking the Yaris to the remaining three rounds of the British Rally Championship.

To date, Ingram has used a Volkswagen Polo GTI R5 for the opening half of the BRC, but he hopes the pace of the Yaris will enable him to bid for the crown, starting with next month's Grampian Rally in Scotland.

Despite minimal seat time before last weekend's Bulth Wells-based rally, Ingram took control from the start and fended off BRC rival Keith Cronin by 15 seconds after 45 miles on classic gravel special stages.



Nicky Grist Stages was used as a test for BRC

PAUL LAWRENCE

Before the rally, Ingram said: "We did a shakedown of about 20 miles and my initial reaction is that the traction and grip is at another level to what I've experienced. It's a well-sorted car on gravel."

Sure enough, car and crew performed faultlessly across the event to see off Cronin's Ford Fiesta Rally2, the Irishman using the event to get some more gravel seat time.

"To jump in and be on their pace on our

first rally in the car is very encouraging," said Ingram, whose team-mate Meirion Evans was third in another Yaris. "I'm sure we'll find some tweaks to get the Toyota more suited to my driving style before the next round of the BRC. There's a lot to come from both me and the car, and the aim is to unlock that potential in the next few rallies. Today was perfect preparation for the remainder of the BRC."

PAUL LAWRENCE

Keith Norris 1954-2024

OBITUARY

Keith Norris, who died last week aged 69, was an aficionado and stalwart of Formula 5000 racing, an omnipresent smiling face on grids and in paddocks from before the American V8-engined monsters gained historic status and new opportunities.

Civil servant Norris served the British government in Hong Kong and subsequently Germany, during which deployment he squeezed his burly frame into a roadgoing Lancia Stratos.

His contacts and sleuthing skills enabled him to track down many long-dormant obsolete racing cars.

Racing was in his blood, for his father and uncle built two potent Norris Specials – marrying Alvis engines with Frazer Nash chassis – in the 1930s.

But it is a 1974 F5000 Team VDS Chevron B28 with which Norris is synonymous. Acquired in 1981, he raced it from 1983-2005, initially in Formule Libre, then many Historic Sports Car Club events.

In a break from single-seaters,

Norris raced a 1960s Chevrolet Corvette Stingray, but subsequently appeared in one of the rare 1979 F4 Atlantic Chevron B49 wing cars and in 2021, going back to his roots with an ex-Mike Walker 1970 F5000 McLaren M10B.

A respected old-school owner-driver-racer, Norris's presence and knowledge will be missed in HSCC circles. The sport offers its condolences to his second wife Julia, children Ben, Jemma (by his first wife) and Ollie, and occasional racer brother Gordon.

MARCUS PYE



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Timms enjoyed 2019 Mille Miglia outing with son Jason



Jim Timms 1936-2024

OBITUARY

Jim Timms, who died last week aged 87, was one of west country motorsport's great characters, an ardent competitor whose sporting life on two wheels and four spanned towards 60 years.

A works rider for Cotton – the marque founded in his native Gloucestershire – from the mid 1960s, Timms earned many accolades in the scrambles arena, often racing alongside brother Bob.

The farmers started a transport company sideline that Jim built into a full-scale haulage business after Bob left. It was only after Bob bought a Lola for Monoposto racing in the late 1980s that Jim snapped up another, on impulse!

Driving the Formula Ford Lola T644E, Jim won Mono Kent championships in 1993 and 1997. When he couldn't do a Pembrey round, son Jason entered,

loved it and bought his own car. Indeed, the James Timms Transport truck was usually surrounded by Lolas, with Bob's son Jeremy racing one too.

Both 'lads' are now multiple champions, and frontrunners in 1000cc Historic F3, the category in which Jim's final race start came in a Brabham BT21B at last July's Oulton Park Gold Cup.

In the interim, he competed in Historic FJunior with a Cooper T59 and four times at the Monaco Grand Prix Historique, in 2014 with an F3 Ralt RT1 and subsequently an F1 Cooper T53. One of his great ambitions was to contest the Mille Miglia retrospective, which he achieved joyously in 2019 in his V8-powered Allard J2 with Jason riding shotgun.

To Jim's wife Joan, Jason and his sisters Deb and Bev, Autosport offers its condolences.

MARCUS PYE



CLARK KNOCKHILL DISPLAY

A special Jim Clark tribute is planned for next month's British Touring Car event at Knockhill. Up to six of Clark's racing saloons and road cars are due to be in attendance, with some being demonstrated, to celebrate 60 years since the two-time Formula 1 champion landed the BSCC title at the wheel of a Lotus Cortina (above).

LYONS HELPS BANKS RACE

New Zealander Dave Banks only got his Lola T332 into the opening Derek Bell Trophy race at Brands Hatch last weekend after UK racer Frank Lyons made a three-hour return dash to his workshop at Stansted. Banks suffered a failed rear upright in qualifying, but Lyons had a spare back at base and managed to get there and back in time for the upright to be replaced, enabling Banks to get on the grid. Lyons also competed in his similar Formula 5000. "They'd have done the same for us," said Lyons of the support given to the New Zealand visitors.

BARRETT'S GUARDS DEBUT

Another New Zealander, Tracey Barrett, enjoyed her Guards Trophy debut at Brands Hatch last weekend in the Lotus 23C replica she races at home. The Christchurch woman made the pilgrimage with the Kiwi Formula 5000 contingent, which will also be in action at the Oulton Park Gold Cup next weekend.

KIRKPATRICK TRIBUTE

The British Racing & Sports Car Club paddock paid tribute to the late Bill Kirkpatrick by gathering on the grid (below) for a minute's silence before racing commenced at Croft last weekend. The former Historic Grand Prix Cars Association and MG racer, father of Civic Cup frontrunner Sam Kirkpatrick, died shortly after last month's meeting at Oulton Park.



Shepherd rues challenging Croft event

TCR UK

TCR UK title contender Adam Shepherd has vowed to maintain his challenge despite numerous setbacks at last weekend's Croft meeting.

Shepherd's 19-point lead over reigning champion Carl Boardley has been transformed into a 38-point deficit, although he retains a two-point advantage after dropped scores.

A catalogue of misfortune included his van breaking

down en route, missing Friday testing, and an ECU/electrical fault preventing him qualifying. Although his team effected a fix while returning to Essex, Shepherd was prevented from starting the first race because he had not completed three laps of the circuit. "They were unsure of my competence," said an incredulous Shepherd, who finished on the podium at the track last year.

After completing the requisite mileage during

race two's start procedure, Shepherd started last, but a loose boost hose forced him to pit twice. He returned to set the fastest lap but was classified 11th, before rising to fourth in the finale.

"We don't seem to have much luck, but we're always fast and I think that's why we end up in trouble," reflected Shepherd. "We've had nine hours' sleep in three days, so it's been a massive effort by everyone to get where we are."

MARK PAULSON



Barwell pair lost out
on second win after
30s safety car sanction

Post-race penalty denies Mitchell/Martin double

SNETTERTON
BRITISH GT
13-14 JULY

Sandy Mitchell and Alex Martin were denied an incredible double win at Snetterton, as a post-race penalty cost them victory in British GT's second one-hour affair in Norfolk last weekend.

Martin lapped two GT4 contenders under safety car conditions late on, which resulted in a drive-through penalty that was converted into 30 seconds and dropped the Barwell duo to 10th. It meant Maximilian Gotz and Kevin Tse claimed a second victory of the season, the 2 Seas Mercedes drivers adding to their win at Spa.

"There was no performance advantage, there was no danger, nothing," said Martin.

"The marshalling posts that I was approaching did not have a [safety car] board out, it had a yellow, but I hadn't reached it yet and the rule on a yellow flag is you're allowed to overtake up until the board."

Barwell was the team to beat throughout the weekend as its Lamborghini Huracan GT3 EVO2s qualified 1-2 for the opener. Rob Collard had pipped Martin by 0.177s and stayed ahead at the rolling start.

There was change behind, though, as Richard Neary overtook Ian Loggie's similar Mercedes around the outside of the Wilson hairpin for third on the first tour. The 2 Seas driver fought back, yet Loggie failed to overcome Neary's valiant defence before losing fourth when Blackthorn's Giacomo Petrobelli went

down the inside at Williams. The Aston Martin Vantage driver gained another position during the mandatory pitstops, but it came after Blackthorn failed to meet its minimum pitstop time.

This resulted in a 1s stop/go penalty that promoted Team Abba – now with Sam Neary in the Mercedes – back up to third, just as there was a change for the lead at approximately the halfway stage. It happened as the #63 Barwell Lambo served a 5s compensation penalty for finishing third at Spa, allowing Mitchell – in for Martin – to move ahead of Ricky Collard (replacing dad, Rob) in the pitlane.

But a car problem meant Collard Jr struggled for pace and was unable to sustain any attack on his team-mate. Mitchell therefore pulled 2.2s clear after

MAIDEN BRITISH GT4 SUCCESS FOR ROBERTSON/RAMYEAD

Charlie Robertson and Ravi Ramyeed claimed their maiden British GT victory in a dramatic one-hour affair at Snetterton, before Jack Brown took his third GT4 win in Norfolk during race two.

DTO's Ginetta G56 actually started on pole for race one, Aston Millar staying ahead of Forsetti's Mikey Porter at lights out, but the complexion of the race changed during the driver swap in the one-hour contest. While Forsetti dropped down after serving its five-second success penalty from Spa, DTO's Freddie Tomlinson, in for Millar, was suddenly behind the Paddock Mercedes, which had started 13th.

But this was after reigning champion Matt Cowley left his pitbox too early due to "a mathematical error", meaning the Paddock entry he shared with Ed McDermott received a 31s stop/go penalty, handing DTO the lead back.

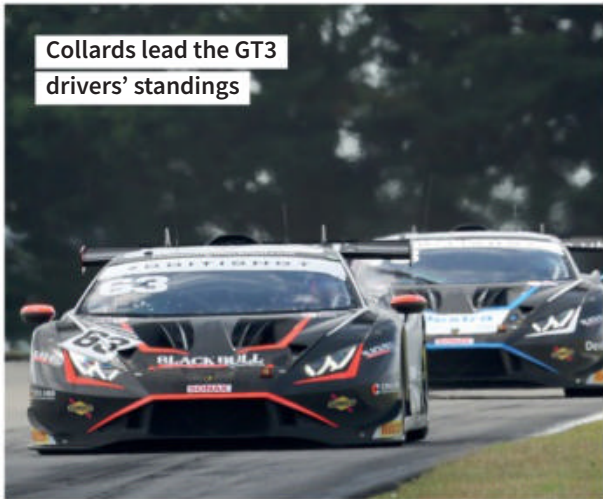
Its potential win was under threat, though, because Century's BMW was rapid, as Ramyeed's strong stint from 11th, combined with good strategy, meant Robertson took over in third. He first passed Team Parker's Seb Morris at Coram with five minutes remaining, before overtaking Tomlinson along the start/finish straight just as the final lap began to eventually win by 2.191s.

"The win has been a long time coming," said Robertson. "We're really good on tyres, so I just

trusted it would be there at the end and the last five minutes they came alive."

Things turned sour for Century in race two, however, as the car suffered an early retirement when Robertson hit the side of Tomlinson's Ginetta at the final corner on the opening lap. Further ahead, Optimum's Zac Meakin led from pole but the erstwhile championship-leading McLaren, which finished eighth in race one, dropped to third during the driver change because it had to spend an extra 14s in the pitstop as Brown took over.

Brown recovered by first overtaking Forsetti's Marc Warren at the final corner, before Kavi Jundu stopped his overheating Toyota in the last sector, resulting in a safety car with 17 minutes left.



Collards lead the GT3 drivers' standings

just five minutes of running.

"We had an issue with the throttle paddle," said Collard Jr. "So the car was bucking quite hard and caused it to eat the tyres and also we were trying to balance the car but couldn't balance it."

Mitchell continuously extended his lead and crossed the line 6.4s ahead in what he called a "pretty textbook race from Barwell". The Nearys finished a further 6.8s behind the Collards for their second podium of the season, while Phil Keen/Loggie and Sacha Kakad/Hugo Cook (J&S Audi R8) completed the top five.

The #78 Lamborghini was once again the car to beat in race two, as Mitchell claimed a last-gasp pole after beating Keen by just 0.081s with his final run in qualifying.

At lights out, Mitchell was quick to defend the inside of Riches, allowing him to stay ahead while Gotz remained in third. Neither 2 Seas car could handle Mitchell's pace, though, as he gained 3.3s after two laps despite the struggles of the other Huracan, which started down in seventh.

Although Collard Jr gained a position at the start, frustration soon hit as he was given a 5s penalty for squeezing Neary Jr off at Turn 3 when he attempted to claim sixth around the outside.

Back at the front, Mitchell led by 10.1s after 25 minutes and had the chance to



Gotz and Tse were handed race-two win

retain the lead once the car had served its 10s compensation penalty for victory in race one. But the Barwell pair found themselves in second after the driver change, as 2 Seas quickly released Loggie into the path of Martin, forcing him to slam on his brakes. However, Loggie served a drive-through penalty for the unsafe release one lap later, so Martin regained the lead, with second-placed Tse 4s behind.

The field was then grouped together with 17 minutes remaining when a safety car was called due to the stoppage of the GT4 Toyota in the final sector and green-flag running resumed for only six minutes.

Martin crossed the line first, with Tse and RAM Racing's John Ferguson – alongside BMW works driver and series debutant, Max Hesse – completing the top three, yet a cloud hung over the result. Approximately 90 minutes later, Barwell lost its victory while RAM Racing was disqualified from both outings because of "a post-race incident involving team representatives and race control".

It left 2 Seas the winner of race two with the #63 Lamborghini in second, as Collard Sr drove an incredible final stint, gaining three positions after the restart as the father-son duo now lead the championship by five points in a Barwell 1-2.

ED HARDY

RACE RESULTS

GT3

Race 1 (33 laps) 1 Alex Martin/Sandy Mitchell (Lamborghini Huracan EVO2); 2 Rob Collard/Ricky Collard (Lamborghini) +6.387s; 3 Richard Neary/Sam Neary (Mercedes-AMG); 4 Ian Loggie/Phil Keen (Mercedes); 5 Hugo Cook/Sacha Kakad (Audi R8 LMS Evo2); 6 Matt Topham/Josh Rowledge (Aston Martin Vantage). **Fastest lap** Mitchell 1m47.452s (99.46mph). **Pole** Rob Collard. **Starters** 14.

Race 2 (30 laps) 1 Maximilian Gotz/Kevin Tse (Mercedes); 2 Collard/Collard +6.854s; 3 Tom Gamble/Mark Radcliffe (McLaren 720S Evo); 4 Adam Smalley/Shawn Balfe (McLaren); 5 Jonny Adam/Giacomo Petrobelli (Aston Martin); 6 Callum Macleod/Mike Price (Mercedes). **FL** Mitchell 1m47.447s (99.47mph). **P** Mitchell. **S** 14.

Points 1 Collard/Collard 126.5; 2 Martin/Mitchell 121.5; 3 Balfe/Smalley 105.5; 4 Loggie/Keen 88.5; 5 Radcliffe/Gamble 85; 6 Tse/Gotz 75.

GT4

Race 1 (31 laps) 1 Ravi Ramyeed/Charlie Robertson (BMW M4, below); 2 Aston Millar/Freddie Tomlinson (Ginetta G56 Evo) +2.191s; 3 Charles Dawson/Seb Morris (Mercedes-AMG); 4 Mikey Porter/Jamie Day (Aston Martin Vantage); 5 Marc Warren/Will Orton (Aston Martin); 6 Will Moore/Matt Nicoll-Jones (Ford Mustang). **FL** Robertson 1m57.426s (91.01mph). **P** Millar. **S** 18.

Race 2 (28 laps) 1 Zac Meakin/Jack Brown (McLaren Artura); 2 Day/Porter +4.715s; 3 Orton/Warren; 4 Morris/Dawson; 5 Erik Evans/Marco Signoretti (Ford); 6 Gordie Mutch/Ian Duggan (Lotus Emira). **FL** Morris 1m57.190s (91.20mph). **P** Meakin. **S** 18.

Points 1 Brown/Meakin 131; 2 Porter/Day 128.5; 3 Warren/Orton 124; 4 Dawson/Morris 103; 5 Evans/Signoretti 56; 6 Ian Gough/Tom Wrigley (BMW) 52.5.



For full results visit: [tsl-timing.com](https://www.tsl-timing.com)

Green flag running restarted with five and a half minutes remaining, where Brown instantly overtook Steller Motorsport's Tim Docker at Riches before cruising to victory.

It was a Forsetti 2-3 behind, though, as contact with Ricky Collard's lapping Lamborghini caused a front-left puncture on Docker's Audi. This gave Forsetti the GT4 teams' title (see News), with its #7 Aston Martin finishing second after Porter overtook Warren with three minutes left.

Brown and Meakin now lead the drivers' championship by 2.5 points from Porter/Day, with Warren/William Orton a further 4.5 points behind with it all to play for at the final two events.

ED HARDY



Poleman Meakin (left) won race two alongside Brown



F1 Esports star Blakeley (far right) won as team-mate Burgoyne (68) took points lead

Blakeley and Palmowski share GB4 wins, Burgoyne in top spot

**SNETTERTON
BRSCC
13-14 JULY**

Elite Motorsport's Alisha Palmowski reignited her GB4 Championship title chances with two wins at Snetterton last weekend, while Harry Burgoyne claimed the points lead.

Palmowski produced two identical times for pole in qualifying but was beaten off the line in the opener by Formula 1 Esports star Lucas Blakeley, who cruised to an emotional maiden victory in his first start since last season's finale, while Palmowski took a comfortable second ahead of Burgoyne and Fortec's Linus Granfors.

Burgoyne moved ahead in the sequel as Palmowski and Blakeley were slow away from the front row. After trying for several laps to take the lead, Palmowski pounced into Agostini in the closing stages to clinch her first triumph since the Oulton Park season-opener, with Burgoyne holding off KMR Sport team-mate Blakeley behind.

The reversed-grid race had a highly dramatic ending, with Jack Taylor leading until a late safety car period before he collided with team-mate

Granfors during a final-lap restart – a clash that caused further chaos behind. Having taken the restart in fifth and seventh respectively, Blakeley and Palmowski avoided the melee to remarkably finish first and second, but Blakeley was later handed a 10-second penalty for a formation-lap infringement, with Palmowski therefore taking a last-to-first win. It moves her to within 16 points of Burgoyne, who replaced Granfors at the top of the standings despite limping home in fourth without his front wing.

Chase Fernandez closed in on Ethan Jeff-Hall after edging the championship leader to victory in all three Ginetta Junior contests. Alfie Slater led from pole in race one, but a sideways moment allowed his R Racing team-mates Fernandez and Jeff-Hall to move ahead. Henry Joslyn spun at Murrays after an optimistic lunge on Slater, and the Preptech racer rejoined into the path of another car, causing a caution period. A late error from Slater allowed Elite's Charlie Hart to snatch third, as Fernandez scored his second win of the campaign.

Having lost out to Joslyn at the start of race two, Fernandez soon reclaimed first and remained ahead until the finish, while Jeff-Hall climbed from fifth to second. Joslyn was third, while Slater prevailed in a scrap with team-mate Marcus Saeter and Hart for fourth. Fernandez briefly fell behind Jeff-Hall in race three following an early stoppage before fighting back and completing his hat-trick, and Saeter overtook Joslyn for third.

Mckenzie Douglass continued his Ginetta GT Championship domination

WEEKEND WINNERS

GB4

Race 1 Lucas Blakeley

Races 2 & 3 Alisha Palmowski

GINETTA JUNIOR

Races 1, 2 & 3 Chase Fernandez

GINETTA GT CHAMPIONSHIP

Races 1, 2 & 3 Mckenzie Douglass (below)

GINETTA GT ACADEMY

Races 1 & 2 Thomas Balfe

Race 3 Mike Taylor

SNETTERTON SALOONS

Race 1 Niall Bradley (BMW M3)

Race 2 Bryan Bransom (BMW M3)



For full results visit: tsl-timing.com



Fernandez came out on top in Ginetta Junior

with three more wins. He led home Luke Garlick in race one, while Nick White benefited from a 15s track-limits penalty for Conner Garlick to complete the podium. White briefly challenged Douglass at the start of race two but had to settle for second and Matt Shaw edged the Garlick brothers to third. Douglass again battled White at the start of race three before triumphing, while Luke Garlick later passed White.

Thomas Balfe took his first two Ginetta GT Academy victories ahead of James Nicholas before being denied by a mechanical issue in the finale, which was won by Mike Taylor ahead of chief rivals Harry Gamble and Nicholas.

STEVE WHITFIELD

Kucharczyk back on top after trip to Zandvoort

ZANDVOORT
GB3
13-14 JULY

The GB3 championship lead changed hands again at Zandvoort last weekend, Tymek Kucharczyk moving back to the top as the fight intensified in mixed conditions on the Dutch coast.

JHR Developments' John Bennett improved his own aspirations by taking a double pole in a wet qualifying session and converted the first of those into race-one victory, despite tricky conditions as rain fell early on but only in isolated areas.

Bennett survived the conditions to take his second win of the year, with 1.1 seconds in hand over fellow title contender, Hitech's Kucharczyk. James Hedley earned the final spot on the podium, 0.3s ahead of then-championship leader Louis Sharp. Kucharczyk's team-mate, and another title contender, Will Macintyre was fifth, while Elite's Hugo Schwarze claimed sixth.

However, like in Hungary last month, race two turned the title battle on its head. On the first attempt, the race was immediately red flagged after a multi-car shunt seconds after the lights went out. The drama eliminated Macintyre, Schwarze, VRD Racing by Arden's Noah Ping, plus Hitech's Gerrard Xie.

Kucharczyk had made a terrific getaway to take the lead from the front row and duly repeated the feat at the second start, passing polesitter Bennett on the run to Tarzan, while Sharp followed through into second, with eyes on minimising any championship damage.

But that was scuppered on the second lap when Sharp was nudged into the barriers at the banked Turn 3 by Bennett, who damaged his front wing and was penalised with a race three grid penalty for his



indiscretion. Not only that, but the resulting pitstop after the safety car period dropped him to the back.

With his three title rivals in strife, Kucharczyk made the most of his fortune by taking a clear victory, 7.5s ahead of Hedley in a reduced nine-lap event, and therefore reclaiming the championship lead he lost at the Hungaroring. Elite's McKenzie Cresswell took third to boost his own title hopes. Fortec's Colin Queen surged up the order to finish fourth ahead of the ever-improving Patrick Heuzenroeder, with VRD Racing by Arden's Nikita Johnson taking sixth.

Johnson triumphed in the final race as, having started second on the partially reversed-grid, he passed polesitter Josh Irfan before Heuzenroeder got the better of them both to lead at Turn 1. Johnson immediately repassed the Australian, though, and scampered clear by 4s across the opening eight laps, only to lose his advantage when the safety car was deployed to collect a stranded car.

After the restart, Johnson rebuilt his lead and finished 1.6s ahead of Cresswell to become GB3's youngest race winner,

having turned 16 years old in May, with Heuzenroeder completing the podium in third, his first top three of the year.

Schwarze built on his race one result to take fourth ahead of Macintyre, with Ping prevailing in a thrilling battle with title fighters Sharp and Kucharczyk. Sharp took seventh while the Pole had to settle for ninth after a scrappy encounter.

Kucharczyk now holds a 20-point lead over Rodin Motorsport driver Sharp and is 22 ahead of Macintyre heading to Silverstone in two weeks' time, with nine races remaining on the 2024 calendar.

RICHARD RANDLE

RACE RESULTS

GB3

Race 1 (11 laps) 1 John Bennett; 2 Tymek Kucharczyk +1.138s; 3 James Hedley; 4 Louis Sharp; 5 Will Macintyre; 6 Hugo Schwarze.
Fastest lap Bennett 1m33.149s (102.28mph).
Pole Bennett. **Starters** 20.
Race 2 (9 laps) 1 Kucharczyk; 2 Hedley +7.474s; 3 McKenzie Cresswell; 4 Colin Queen; 5 Patrick Heuzenroeder; 6 Nikita Johnson. **FL** Kucharczyk 1m31.584s (104.03mph). **P** Bennett. **S** 20.
Race 3 (16 laps) 1 Johnson; 2 Cresswell +1.644s; 3 Heuzenroeder; 4 Schwarze; 5 Macintyre; 6 Noah Ping. **FL** Johnson 1m32.623s (102.86mph). **P** Josh Irfan. **S** 20.
Points 1 Kucharczyk 285 (below); 2 Sharp 265; 3 Macintyre 263; 4 Bennett 255; 5 Cresswell 219; 6 Jarrod Waberski 170.



For full results visit: gb-3.net





Kiwi visitor Ross was rewarded with Derek Bell Trophy victory as the 11-strong F5000 entry (inset) starred

Formula 5000 rules down memory lane

BRANDS HATCH HSCC 13-14 JULY

Memories of European Formula 5000 champions Peter Gethin, Frank Gardner, Gijs van Lennep, Teddy Pilette and Bob Evans – plus Brian Redman, Jody Scheckter and Graham McRae – flooded back as the thunder and fury of American V8 engines imbued the Historic Sports Car Club's Brands Hatch Superprix with flavours of the action that thrilled crowds from 1969-75. Gethin was king of Brands, winning seven rounds, but his 1973 Race of Champions triumph in a Chevron B24

shell-shocked runner-up Denny Hulme (McLaren M23) and the F1 establishment.

The 29-strong Derek Bell Trophy pack last weekend featured 11 F5000s, three from New Zealand, but Saturday's race script was almost as unbelievable as the hallowed RoC's. The F2 Marches of runaway leaders Alex Kapadia (ex-Alex Ribeiro 762) and Mark Charteris (ex-Brian Henton 782) slowed to a crawl exiting Druids on lap seven, wailing engines silenced by electrical gremlins.

Unlike in the thin opening F2 exclusives – both won by Kapadia – Charteris defibrillated his Hart 420R, while F5000 wrestlers Christian Pittard (ex-Gethin

Chevron B28), Kiwis Steve Ross (McRae GM1) and Glenn Richards (ex-Eppie Wietzes Lola T400), Neil Glover (ex-Gethin/Pilette/Bruce Allison Chevron B37), Mark Dwyer (ex-Scheckter Trojan T101) and Paul Campfield (ex-Skeeter McKitterick Chevron B24) were hounded down by David Banks's Lola T332.

When Charteris's engine reverted to limp mode, Henry Chart (FAtlantic Modus M1) charged past and took the chequer, only for Mark to be reprieved when Glover's excursion into the gravel after Hawthorn triggered a red flag and rolled the result back a lap. Fifty years after Gethin won in the Team VDS car, Pittard completed the podium, earning F5000 gold from Ross.

Following a poignant pitlane cacklefest in memory of Historic F5000 stalwart Keith Norris, Sunday's sequel was stopped with American debutant Gary Lapidus's Lola T400 in the Cooper Straight barrier. Chart had boldly dived the Modus inside Ross's ex-Sarich brothers McRae to seize the lead at Graham Hill Bend, but went back to second for the restart.

Chart's cornering bravado focused Ross, who won the drag races between them for a memorable victory, with Dwyer third. Martin Wood (March 73B) repelled Glover for fourth, ahead of Banks and Matthew Wurr (McLaren M10B) after Richards and Campfield went off climbing onto the Grand Prix loop, stopping the race.



Hibberd (l) and Milicevic enjoyed Historic F3 scrap



Campagne twice tasted
Super 60s champagne



Early finish helped Hyetts
to Guards Trophy glory



Jackson topped three of
the four FF1600 thrillers

Scintillating slipstreamers at Formula Ford's July 1967 birthplace meant the winning margins across all four races combined to just 0.24 seconds! Innovative thinking and much cajoling by Palliser racer Chris Sharples doubled recent Historic numbers to match the SDC-enhanced Classic grids and awarding the Ray Allen Trophy for the older set, celebrating the global phenomenon's first winner, made it more special.

Cam Jackson won thrice in his Winkelmann, opening with a 0.041s victory over fellow returnee Benn Tilley (Merlyn) and Benn Simms (Jomo) in Saturday's Historic gripper. Points leader Simms was ahead of Jackson and Jordan Harrison (Lola T540) when the Classic stanza was stopped with Philip Senior's Royale RP24 in the wall after Stirling's, but countback put the Winkelmann ahead by 0.132s.

Sunday's Classic race embroiled the same trio, Simms finishing abreast of Jackson, albeit 0.029s short. A cracked front wishbone meant Simms missed the Historic decider in which, after much lead swapping, Tilley broke Jackson's monopoly, drafting up and timing his lunge to perfection for a 0.038s victory. From 24th, having gone off on Saturday, points leader Spencer Shinner (Merlyn) jostled to third, with Ross Drybrough's sister car and Cormac Flanagan (Alexis) in tow.

Michael O'Brien put Nick Fennell's Tecno

on pole for Saturday's 1000cc Historic F3 opener, engaging drivers of 10 nationalities, but a broken gear linkage forced retirement after battling with Brabham aces Jon Milicevic and Andrew Hibberd. The latter swept round Milicevic at Paddock to win by 0.378s with Mark Linstone's BT21 in the Clearways gravel bringing out reds. Drybrough (Merlyn) and Italian Enrico Spaggiari in John Miles' Lotus 41X, a 1968 Brands winner, led the pursuit. Hibberd repeated on Sunday in his ex-Chris Irwin BT18, winning the King Hussein Trophy – last presented to Peter Gethin (BT18) at Ingliston in July 1966 – on aggregate from Milicevic. Leading GB's 'A' team to Nations Cup victory completed Hibberd's joy.

The entertaining Dutch Super 60s mini-enduros showcased an eclectic mix, from Frank Weidema's Mini Marcos to Rob Rappange's sonorous Porsche 904 and much Americana. Michiel Campagne's awesome Chevrolet Corvette Grand Sport shaded Briton Jamie Boot's TVR Griffith on both days, with Andy Newall bringing Rhea Sautter's Jaguar E-type back to third, overhauling Belgian Super Vee racer of the 1970s Luc de Cock's Lotus Elan.

Kentish sportscars starred in the Guards 1960s' and Griffiths Haig Trophy 1950s' contests, but won neither. Neil Fowler led the younger pack in Mark Dwyer's Harrietsham-built Lenham but, once Ben Tusting replaced dad Rob in their similar

WEEKEND WINNERS

DEREK BELL TROPHY

Race 1 Mark Charteris (March-Hart 782-23)

Race 2 Steve Ross (McRae-Chevrolet GM1-009)

HISTORIC F2

Races 1 & 2 Alex Kapadia
(March-BMW 762-2, below)

RAY ALLEN TROPHY

HISTORIC FORMULA FORD

Race 1 Cam Jackson (Winkelmann WDF2)

Race 2 Benn Tilley (Merlyn Mk20)

CLASSIC FORMULA FORD

Races 1 & 2 Cam Jackson (Winkelmann WDF2)

KING HUSSEIN TROPHY HISTORIC F3

Races 1 & 2 Andrew Hibberd (Brabham BT18)

SUPER 60s

Races 1 & 2 Michiel Campagne
(Chevrolet Corvette Grand Sport)

GUARDS TROPHY

Ross & Charlie Hyett (Chevron-FVC B16)

GRIFFITHS HAIG TROPHY

Oliver Llewellyn (Allard-Cadillac J2)

TOURING CAR ALLCOMERS

Darren Fielding (BMW E30 M3)



For full results visit: tsl-timing.com

car, another victory looked likely. Tusting Jr was closing on Charlie Hyett's Chevron-FVC B16 when the race was flagged 11 minutes early with Mark Colman's B8 in the barrier on Pilgrims Drop. Fowler/Dwyer were third from Dans Pickett and Eagling (B16-BMW) and Pre-'63 winners Fennell/O'Brien in Nick's ex-Robin Widdows Lotus 23B.

A trio of Bromley-based Eric Broadley's Lola-Climax Mk1s graced the oldtimers' grid but, while poleman Juerg Tobler's 1100cc example was trumped by Oliver Llewellyn's 6.6-litre Allard-Cadillac J2 come racetime, the Swiss traded second spiritedly with Malcolm Harrison's Cooper-Bristol T25.

Three raucous Amspeed-run BMW E30 M3s comprised half the Touring Car starters, and Steve Jones's joined late once its alternator belt was replaced. Despite a fright on oil, Darren Fielding dominated, pursuer Mark Smith pitting with a misfire. Shane Brereton's TWR Rover SD1 finished second but ceded it to Toby Partridge's clone of Steve Soper's 1992 Spa 24 Hours-winning M3, for missing the pit window.

MARCUS PYE

Spins and win for Edmundson in Civic Cup

CROFT
BRSCC
13-14 JULY

Reigning Civic Cup champion Max Edmundson spun, won, and spun again in last weekend's pair of dramatic wet races at Croft.

Edmundson bettered new Area Motorsport team-mate Harvey Caton by 0.4 seconds in qualifying as the squad secured a second consecutive top-six lockout. While the rest traded places, the local driver was nearly 3s clear after just one racing lap. But Edmundson then discovered to his cost that the chicane was still too wet to take flat, and rejoined in seventh.

Incredibly, Edmundson was fourth by the end of the lap, before picking off Liam McGill and Lewis Kent – twice, after a mistake exiting the hairpin. He then hunted down former TCR ace Josh Files and charged around him at Clervaux before the race was stopped when Alex Kite smote the barriers exiting Barcroft. “I knew I had the pace on the brakes but I kept making mistakes – I was so angry to bin myself out of the lead,” admitted Edmundson. “But, luckily, I brought it back.”

Sunday's reversed-grid race was even wetter. Edmundson was one of several, including leader Will Redford, caught out in treacherous conditions before a halt was called. Front-row starter Alistair Camp won – but only on countback after Kent had got a run and passed him before the stoppage.

Mazda MX-5 Supercup champion Aidan Hills also defied the odds to win. The wrong set-up in wet conditions consigned Hills to 12th on the grid while title rival Patrick Fletcher stormed to pole position. But, in Saturday's race on a drying track, their roles reversed. Returnee Jack Harding built a 3s advantage as Fletcher slipped



back, unable to wear through the lacquer on his brand-new tyres.

Meanwhile, Hills charged to fifth within two laps, then rounded Fletcher at Tower and dived inside Tom Griffiths at Barcroft. Hills demoted Joe Wiggin – who was later turned around at the hairpin – before half-distance and then reeled in Harding, who was more cautious as rain returned. Hills squeezed ahead exiting Hawthorn on the final tour. “As soon as we got through the first lap I was like, ‘I’ve got so much grip, a win is on,’” said Hills. “I was just hoping that no one was going to fight me too hard because I saw Jack getting away.”

Fletcher rebounded in style to win race two from pole and then climb from sixth on the partially reversed grid to take the finale with a series of impressive passes. Harding, meanwhile, completed a hat-trick of second places.

Jenson O'Neill-Going was another to advance from a disappointing grid slot, climbing from fifth to first within two

corners of the Fiesta Junior opener.

Thankful that his dad – Jamsport boss Jamie Going – had suggested a last-minute set-up switch, O'Neill-Going withstood Jacob Hodgkiss's challenge on a drying track. Third was Tommy Harfield, who passed O'Neill-Going after a late safety car for his maiden victory in race two, in which Hodgkiss suffered race-ending contact at the hairpin. Harfield added another later on, each time followed by Finn Leslie.

Alastair Kellett set the Fiesta ST240 pace, claiming pole by a massive 1.4s then dominating Saturday's contest. But he was denied a double by Simon Horrobin, who squeezed past at Tower on the penultimate lap after a safety car closed the field.

Bradley Burns was untouchable in the Audi TT Cup, where a one-by-one grid format helped avoid significant dramas despite treacherous conditions. Carl Swift, in a reshelled car, and Matt Luff completed Saturday's podium before Luff reversed the positions via an impressive outside pass at Clervaux in Sunday's sequel. Paul Luti's best showing to date took him past Will Stacey to fourth in the opener before Stacey hit back in race two.

With MX-5 Mk1 points leader Thomas Langford absent (work commitments), and Anglesey dominator Jack Noller off the podium, Adam Sparrow and Luke Pullen took advantage. Sparrow hounded Pullen before passing late on to win the opener, but then found himself gripless en route to eighth in the sequel, which Pullen won. A track-limits penalty denied William Chadwick a maiden victory after a valiant defence in the finale, dropping him to third behind Sparrow and Pullen.

MARK PAULSON



Harfield scored his maiden
Fiesta Junior victories

Tricky conditions led to mixed results for reigning champion Edmundson



WEEKEND WINNERS

CIVIC CUP

Race 1 Max Edmundson (EP3)

Race 2 Alistair Camp (FN2)

MAZDA MX-5 SUPERCUP

Race 1 Aidan Hills

Races 2 & 3 Patrick Fletcher

FIESTA JUNIORS

Race 1 Jenson O'Neill-Going (Mk6 ST)

Races 2 & 3 Tommy Harfield (Mk7 Zetec S)

FIESTA ST240s

Race 1 Alastair Kellett

Race 2 Simon Horrobin

AUDI TT CUP RACING

Races 1 & 2 Bradley Burns (below)

MAZDA MX-5 CHAMPIONSHIP

Races 1 & 3 Adam Sparrow

Race 2 Luke Pullen

TCR UK

Races 1 & 3 Callum Newsham (Hyundai i30 N TCR)

Race 2 Carl Boardley (Cupra Leon Competicion TCR)

MAZDA MX-5 CLUBMAN

Races 1 & 2 Jonathan Greensmith



For full results visit: tsl-timing.com

THE FATHER AND SON TACKLING TCR UK

Dubai-based Steve and Sam Laidlaw became the first father-and-son pairing to race in TCR UK, and celebrated by each breaking into the top five at Croft.

After racing together in the CityCar Cup in 2021 and Clio Cup Middle East last winter, the pair planned to spend this year in Audi TT Cup Racing – a TCR UK support series. But, when Laidlaw Sr sampled the headline category at Snetterton in May, it was the start of a new direction.

“I was going to do Snetterton just as a one-off, but I absolutely loved it,” he admitted. “I’d never driven anything like it in my life and, while it’s a big learning curve, it’s definitely something that I wanted to do. But the idea was that we got to race together, father and son – so we figured out a few things.”

Laidlaw snapped up Luke Sargeant’s Cupra Leon Competicion to run alongside title contender Adam Shepherd at Area Motorsport. That in turn freed up his Hyundai i30 N for son Sam.

“Adam and his dad have been friends of our family for a long time,” explained Laidlaw Sr, “and the idea was to go in a Cupra because Adam could give us directly correlated help and some data. It’s a really good car. And that meant Sam had a TCR car to go in the garage.”

Despite only a day’s dry running in their new steeds, the pair were fifth and sixth fastest in the damp qualifying session topped by Callum Newsham (Hyundai), dad bettering lad only in the closing moments. “The type of car this is compared to the TT is crazy,” enthused Laidlaw Jr. “The brakes are incredible, and the grip round corners is just incredible as well – when the tyres come in, of course.”

Clutch trouble delayed the younger Laidlaw at the start of the wet first



Sam (left) and Steve Laidlaw raced alongside each other

race, while the change of car forced his father to start from the back, but the pair made steady progress to finish fifth and seventh. Sam improved to fifth in the second stanza but joined the finale two laps down, delayed by an oil-pressure alarm, while his dad was punted out of race two and managed sixth later on despite more contact.

Out front, Newsham chased down the faster-starting Brad Hutchison (Cupra) to score his second win of the season. He beat the Yorkshireman to victory in race three too, revelling in wet conditions that suited the i30’s handling. In between times, a wrong call on tyre pressures blunted Newsham’s edge and left him third behind Carl Boardley (Cupra) and Hutchison in the reversed-grid race.

The trio had climbed from rows four and five, Boardley reaching third within a lap. He then dispatched Laidlaw Sr and bumped past Brad Thurston (Honda Civic Type R FK7) after both ran deep into Sunny. Boardley’s win sandwiched two third places and he cuts the gap to points leader Shepherd, whose tough weekend (see News) yielded no better than fourth.

MARK PAULSON



Newsham leads Boardley. Both won in TCR UK

FINISHING STRAIGHT

Putting the Festival of Speed to the family test



The Goodwood Festival of Speed is an annual thrill for the senses, the ultimate coming together of motorsport disciplines for the hardcore fans, with machinery, drivers and riders from modern times and the pages of history charging up the iconic hill.

While this makes for a wonderful experience for adults or groups including older children, is the Festival something you should take on with younger children in tow? In this instance, a three-year-old and a one-year-old.

We start with the practicalities for those considering making the trip in 2025. Heading to the event on Thursday, the usual incredible levels of traffic were largely avoided by travelling early and allowing the children to sleep in the car en route. Tip number one.

Next up, food. While there are many vendors around the site, it would be wise to take food with you (tip two!), unless you're

willing to really fork out for the many things on offer on-site. A bacon roll – hardly stuffed to breaking point, with only two rashers – and a single sausage in a bun for breakfast came to £17.

Next, toilets and water points. In this instance, trust the map in the programme and not those dotted around the site, which proved to be inaccurate for a number of facilities. Baby changing is lacking, but there's no shortage of secluded corners around the site to do what needs to be done.

Obviously, the main attraction of the Festival of Speed is the hillclimb itself, but this is where the biggest problem arises when visiting with small children. For while the haybale barriers may be low enough for adults to comfortably see over, this is not the case for children, so a roving grandstand pass would certainly be recommended – unless you're willing, as was the case here, to balance a child on your shoulders, then pay for it in the following days.

It should be noted that there are a few general-admission stands – one at either end of the hill and one on the rally stage – which have signs indicating that adults should allow small children space at the front so they can see. However, the experience here was a negative one, with amateur photographers more desperate to get their shot than cede ground to a child.

Sadly, this meant that viewing of the hill was limited to runs that we were most keen on seeing, with many interesting pieces of machinery therefore passing us by.

The paddocks, we're pleased to report,

were a wholly different experience, with team representatives keen to impart their love of motorsport to the younger generations. Flags, hats and stickers were readily handed out, but it was the Iron Dames who went a step further, allowing my elder child to sit in their Lamborghini Huracan GT3 EVO2 – the car that “only girls are allowed to drive”. A personal note of thanks goes out for that one!

With the Future Lab aimed at a slightly older demographic, the Thakeham Family Area was last on the menu. Another tip: those with children of any age should head here as soon as they arrive, because they'll give your child an additional wristband with their name, your name and a contact number in case you get split up.

Within this area there are activities for younger children, with rides on cars and diggers – and, most importantly, an ice cream van. There are also covered trailers for hire, meaning you don't need to worry about bringing a buggy. But beyond this, there wasn't enough for the younger audience, leading to the three-year-old stating: “I had fun, but it was a bit boring.”

A final tip – if you're traveling with a pushchair, buy a programme and pay attention to when the crossings are open. Lugging a fully loaded buggy across the bridge isn't something that can be described as fun!

Overall, a good experience, but this is one for those aged five-plus as a minimum. Check back in a couple of years and we may re-evaluate that situation!

SAM HALL



Trying Iron Dames' Lamborghini for size

WHAT'S ON

INTERNATIONAL
MOTORSPORT

Hungarian Grand Prix
F1 World Championship
Round 13/24
Hungaroring, Hungary
21 July
TV Live Sky Sports F1,
Sun 1355
TV Highlights
Channel 4, Sun 1830,
Sky Sports F1, 2100

London E-Prix
Formula E
Round 10/10
London, UK
20-21 July
TV Live TNT Sports 2,
Sat 1600, Quest, 1645,
TNT Sports 2, Sun 1600,
Quest, 1645

Formula 2
Round 9/14
Hungaroring, Hungary
20-21 July
TV Live Sky Sports F1,
Sat 1310, Sun 0900

Formula 3
Round 8/10
Hungaroring, Hungary
20-21 July
TV Live Sky Sports F1,
Sat 0845, Sun 0720

IndyCar
Round 11/15
Toronto, Canada
21 July
TV Live Sky Sports F1,
Sun 1800

GT World Challenge
Sprint Cup
Round 3/5

Hockenheim, Germany
20-21 July

Porsche Supercup
Round 5/8
Hungaroring, Hungary
21 July
TV Live Sky Sports F1,
Sun 1100

NASCAR Cup
Round 22/36
Indianapolis, USA
21 July
TV Live Premier 2, Sun 1900

Formula Regional
European by Alpine
Round 6/10
Paul Ricard, France
20-21 July
TV Livestream YouTube

TCR World Tour
Round 4/7
Interlagos, Brazil
21 July

Australian Supercars
Round 7/12
Sydney Motorsport Park,
Australia
20-21 July
TV Live TNT Sports 3, Sat
1030, TNT Sports 1, Sun 0700

Super Formula
Round 4/7
Fuji, Japan
21 July
TV Livestream
Motorsport.tv, Sun 0645

Rally Latvia
World Rally Championship
Round 8/13
Liepaja, Latvia
18-21 July



youtube.com/AUTOSPORTdotcom



Guenther Steiner exclusive interview

Episode six of the *James Allen on F1* podcast features an exclusive interview with former Haas F1 team principal Guenther Steiner, with F1 TV's Will Buxton and Autosport's Ben Hunt also stopping for a chat. Topics for discussion include the importance of personality in modern F1, what Steiner misses about being a team boss, whether F1 has become a 'show', and what advice he'd give to Andretti as it struggles to break into F1 as a new team.



TV Live TNT Sports 1,
Thu 1800, Fri 0715, 1000,
1145, 1430, TNT Sports 3,
Sat 0615, TNT Sports 1,
1415, 1500, 1700, TNT
Sports 3, 1815, Sun, 0800,
0945, TNT Sports 2, 1200
TV Highlights TNT Sports 2,
Sat 0400, 2200, TNT Sports 1,
Sun 1945

UK MOTORSPORT

Oulton Park CTA
20 July
Racing Hondas

Anglesey CSCC
20-21 July
BMW Championship/Open
Series, Classic K/Jaguar

Challenge, MG Trophy/
Jaguar Championship,
Magnificent Sevens,
Midget & Sprite Challenge,
Modern Classics/Future
Classics, Morgan Challenge,
New Millennium/Turbo Tin
Tops, Swinging Sixties,
Tin Tops/Puma Cup

Snetterton BRSCC
20-21 July

BMW Compact Cup, C1
Endurance, CityCar Cup,
Clubsport Trophy, Fun
Cup, Modified Fords,
Super Saloons & Tin Tops/
Intermarque Silhouettes

Cadwell Park 750MC
20-21 July

5Club MX-5, 750 Formula,
Alfa Romeo, Classic Stock
Hatch, F1000, Formula
Vee, Historic 750 Formula,
Locost, Mighty Minis, MR2,
Roadsports, Sport Specials

Donington Park MSVR
20-21 July
Ferrari Challenge UK

British Hillclimb
Championship
Round 8/14
Val des Terres, Guernsey
20 July

British Rallycross
Round 3/6
Lydden Hill
20-21 July





FROM THE ARCHIVE

Three months before making his Formula 1 debut in the 1970 Monaco Grand Prix driving a privateer March 701, rising star Ronnie Peterson was enlisted by Porsche as “their big

publicity man”, in the words of Autosport’s correspondent, to drive a 911L in February’s Swedish Rally. Things didn’t get off the best of starts when his original co-driver Torsten Palm (runner-up to Peterson in the

previous year’s Swedish Formula 3 Championship) had to be rushed to hospital to have a gallstone extracted and was replaced at the last minute by Sven-Olaf Svedberg. Peterson and Svedberg, still with Palm’s

name prominent on the side and roof of their Porsche, were running in 22nd place when a transmission failure forced them to join the event’s long list of retirements – just 31 cars made the finish from 121 starters.



MCKLEIN

SUTTON/MOTORSPORT IMAGES

KEVIN TURNER



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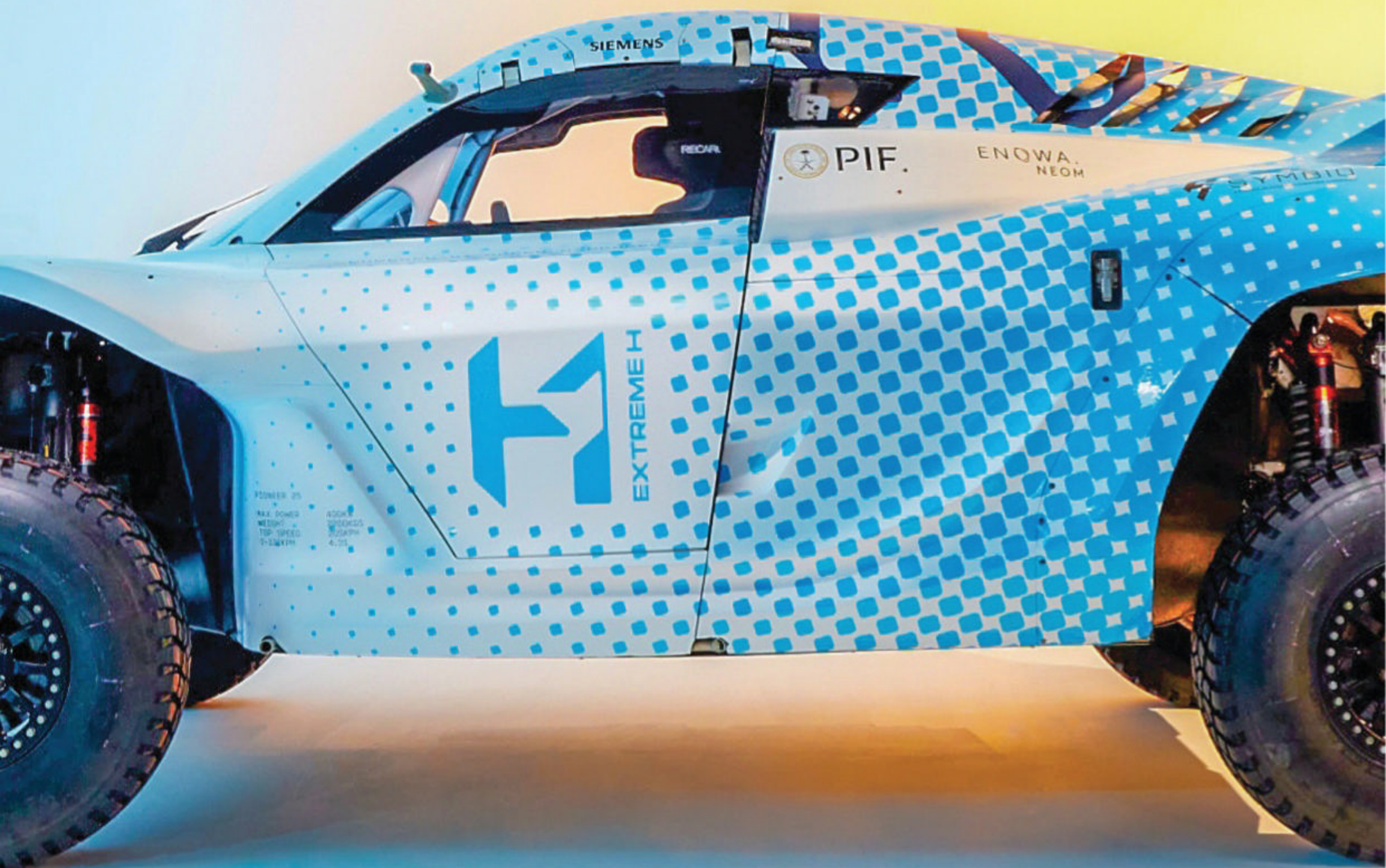
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FROM ONE EXTREME TO ANOTHER



How Extreme H is laying the ground for a hydrogen future



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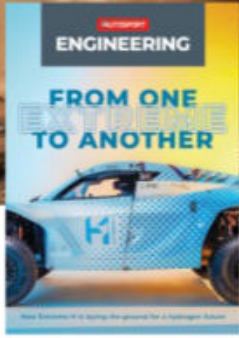
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Extreme H will replace the current Extreme E series when it arrives in 2025



COVER IMAGE
Matt Ben Stone/
Extreme-E

THE NEXT CHAPTER FOR HYDROGEN IN MOTORSPORT LOOMS INTO VIEW

Extrême H may have skipped a couple of letters in its transition from Extreme E, but it's clear that no shortcuts have been taken in its move away from electric power to hydrogen for next year. Now with a first public demonstration of the Pioneer 25 challenger under its belt, undertaken by Hedda Hosas at last weekend's Hydro X Prix in Scotland, the inaugural all-hydrogen racing series is inching closer towards the milestone of its maiden event.

That Alejandro Agag, whose feet as the co-founder of Formula E were firmly in the electric camp, has thrown his lot in with hydrogen is a major confidence vote in its credentials as a scalable sustainable energy source and the potential he clearly sees in it to attract like-minded commercial partners. As Marcus Simmons discovers in the cover

feature (p10), Agag's latest newcomer to the motorsport landscape has every intention of living up to its car's name. In the meantime, his original creation is going strong and inching ever-closer to its new Gen4 era commencing in the 2026-27 season. Several heavy-hitters have already committed to racing it, but how the Gen4 car will look is still in development. In his regular column, Lucas di Grassi argues that the championship he has called home since 2014 should follow Formula 1's example by embracing active aero (p7). Ford has taken a different approach to developing electric machines than most, and its eye-catching SuperVan 4.2 now has a new playmate in the form of the F-150 Lightning SuperTruck. Discover how the machine that whirled to the fastest time at the recent Pikes Peak hillclimb was developed on p16.

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STALEY/EXTREME-E



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NASCAR REVEALS EV PROTOTYPE

Demonstrator vehicle has tested, but might never race as organising body reaffirms commitment to internal combustion engines

NASCAR has launched an all-electric stock car in partnership with electrification and automation expert ABB, but admits that the concept car may never race. Based on the Next Gen chassis used in its Cup Series, the all-wheel-drive prototype made its public debut at the recent Chicago street race event. It features three STARD UHP 6-Phase motors (one front, two rear), while energy comes via a 78kWh liquid-cooled battery. The powertrain can produce 1000kW at peak power. The body is a generic CUV style, made of flax fibre composite.

Famous for its pushrod V8 engines, NASCAR is committed to internal combustion in its racing series and says that this car will remain a

demonstrator, with no plans to run any races. John Probst, NASCAR's senior vice-president and chief racing development officer, said: "The whole purpose of [the Next Gen] car for us was to create a flexible platform from which we could develop and adapt into the future. That car went toe-to-toe with the best endurance racers in the world when we took it over [as Garage 56] to Le Mans. But what's next for us? If you look out across the landscape, one thing that's for certain is that change is accelerating all around us. From a NASCAR perspective, we want to be in the driver's seat, when it comes to where our future is going."

NASCAR instigated the project in conjunction

with its three OEMs – Chevrolet, Ford and Toyota – who all contributed to the concept's direction. "As we look at electrification, the cycle times in motorsports are really quick," GM's Eric Warren said. "You can start looking at things like thermal recharging rates." Ford counterpart Pat DiMarco pointed to the Blue Oval's recent victory in the Pikes Peak Hillclimb (page 16), stating: "We've embraced getting the word out there and, hopefully with this, we can educate the NASCAR fan base on EVs." Toyota's Tyler Gibbs added: "For us, it's about developing these technologies in racing that we then can bring to the consumers in the marketplace."

CHARLES BRADLEY



NASCAR

AUDI, BP REVEAL PARTNERSHIP TO DEVELOP FUELS FOR FORMULA 1 ENTRY

Audi has secured a technical partnership with oil and energy giant BP for its upcoming Formula 1 project, which will supply the 100% sustainable fuel set out in the 2026 regulations. The British petrochemicals giant will also supply its range of lubricants and greases to the team through its Castrol brand.

BP has supplied fuel to Audi throughout the development process of its new V6 turbo hybrid powertrain since 2022, and will also produce e-fluids - which includes oils and liquids for thermal management purposes

- for the car's hybrid components. BP is currently partnered with Alpine since linking up with the Enstone team in 2017.

The fuel BP produces for Audi will need to be composed of proven sustainable sources, as the FIA aims to ensure that the new sustainable fuels offer a significant reduction in greenhouse gas emissions.

Adam Baker, CEO of Audi Formula Racing – the company which oversees the engine development – said: "The combustion process is highly complex and can only be



BP will develop sustainable fuels for Audi's F1 effort

AUDI AG

optimised by developing the engine in combination with the fuel properties.

"It is impressive how many different fuel variants we have

developed to date as we prepare for our 2026 race season. I am convinced that we are perfectly positioned with BP and Castrol."

JAKE BOXALL-LEGGE

DTM fans will get to see the new FG Series in action next year

FG SERIES



NEW FG SERIES LAYS OUT KEY SUPPLIERS, PARTNERS

The new electric racing championship co-founded by ex-Formula 1 racer Nick Heidfeld and former Mahindra Racing boss Dilbagh Gill has announced Schaeffler as a supplier of motors and inverters for its 2025 launch season. Called FG Series, it aims to offer affordable racing with its FG-Twin car able to be raced in four- and rear-wheel-drive configurations across two separate championships. FG1, using the full potential to run the front and rear axle at 350kW of peak power, and the entry-level FG2 are geared to suit drivers of different experience levels.

Several announcements have followed since the car, designed by Daniel Simon (who created the livery for HRT's Formula 1 car in 2011), broke cover last month. These include the appointment of Schaeffler, which partnered with Audi on its first Formula E powertrains, following its merger with fellow German technology giant Vitesco.

"Having Schaeffler on board is exciting because with our combined experience we know we will have a very strong technical package," said Gill.

It was also revealed that FG Series races will be held on the DTM's support bill next year.

RS200 RETURNS WITH APPROVAL FROM FORD

Ford's RS200 will return to production after the Blue Oval granted a licensing agreement for a 'remastered' version that will be manufactured by Boreham Motorworks. The division of the DRVN Automotive Group, named after the Essex headquarters of Ford Motorsport and which counts storied Ford team Alan Mann Racing among its brands, will build entirely new examples of the mid-engined four-wheel-drive machine that was conceived for the World Rally Championship's revered Group B era.

The RS200's 1986 debut came too late to make an impression before the WRC abruptly canned Group B, but enjoyed success in the European Rallycross Championship's Division 2, with all-action Martin Schanche claiming the 1991 title after three consecutive runner-up finishes.

Boreham Motorworks also creates continuation models, including the MK1 Escort that will be revealed later this year, in limited numbers.

Schanche, pictured in 1989, continued RS200's legacy



McKLEIN

Ycom designed the KCMG-built F4 chassis used in first two editions of Motorsport Games



FIA/MOTORSPORT GAMES

YCOM REVEALS NEW MAJORITY SHAREHOLDER

Leading Italian design and manufacturing house Ycom has announced investment from TEC Racing, which has become a majority shareholder following a similar investment in Tatuus last year. Ycom, which recently developed the Maserati GT2 racer, will remain under the control of Nicola Scimeca. Hailing the development as "a monumental leap forward" for the company he co-founded in 2008, Scimeca added: "This evolution will enable us to better serve our existing customers while equipping us for new markets."

The Equity Club's TEC Racing offshoot purchased a controlling stake in Tatuus, the prominent Formula 4 constructor that also supplies cars to the Formula Regional European Championship, its Oceania offshoot previously known as the Toyota Racing Series and GB3, in May last year. Tatuus already owned engine manufacturer Autotecnica Motori and equipment supplier Breda Racing. TEC Racing boss Roberto Ferraresi said Ycom's addition to its portfolio of investments "represents a key step" in its aim to build an Italian leading motorsport platform.

IN BRIEF

Merc chairman Kallenius (left) wants progress



MERCEDES-AMG

BATTERY COST REDUCTION

Mercedes has announced a target of reducing battery costs by more than 30% in the coming years. Its chairman of the board, Ola Kallenius, made the comments at the opening of a new eCampus at the heart of its Stuttgart HQ, which the manufacturer describes as a competence centre for developing chemical compositions and optimised production processes.

ADESS LMP3 REVEALED

ADESS became the latest constructor to reveal its new LMP3 car for the category's 2025 rules revamp earlier this month, after Ligier took the wraps off its JSP325 at Le Mans in June. The company run by Stephane Chosse hopes its AD25 will generate more interest than the outgoing 03 EVO, which has struggled to break the market monopoly of Ligier and Duqueine in the European Le Mans Series and Le Mans Cup.

FS SUSTAINABLE FUEL

Motorsport UK has issued a grant for Formula Student participants using internal combustion engines to run on sustainable fuel from Coryton. Held at Silverstone, this year's event was due to begin yesterday (Wednesday) and concludes on Saturday. Motorsport UK Technical Director Ian Smith said the governing body wanted young engineers "to consider how emerging technology can be included in designs, without compromising overall performance".

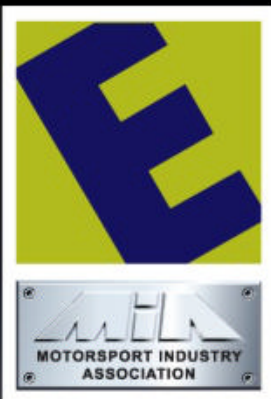
RML IN RESTRUCTURE

RML Group has appointed former Lotus finance director Paul Dickinson as its new COO and announced a restructuring of its engineering teams. The Wellingborough company, which celebrates its 40th anniversary in 2024, will now be split into four new divisions: Power, Engineering, Motorsport and Bespoke.

RML is a key supplier to the BTCC of subframes and steering systems



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DRIVING CHANGE LUCAS DI GRASSI

WHY F1'S ACTIVE AERO MOVE SHOULD INSPIRE FORMULA E

Moveable aerodynamics will be adopted by Formula 1 as part of a rules shakeup from 2026, and it has upsides that Formula E would be wise to take note of



F1 is set for dramatic changes in 2026 with active front and rear wings

The tide of changes coming to Formula 1 for 2026 has been met with a mixed reception with concerns over car weight, lack of corner downforce and straightline speeds that one driver has called “crazy”. But what caught my eye was the plan to introduce active aerodynamics, involving moveable front and rear wings, which unlike the outgoing DRS will be activated at certain points of the circuit regardless of position or gap to the car ahead.

But it isn't a like-for-like DRS replacement; the active aero's primary function will be for improved efficiency from low drag in the straights and high downforce in the corners to ultimately save fuel, instead of as an overtaking assist. As everyone will switch from the so-called high downforce Z-mode for cornering to the low-drag X-mode on the straights at the same points, there can be no advantages from tactical deployment.

The big differentiator will be how effectively the wings work in the different configurations. For that reason, I question why it should be driver-controlled, even if it does turn out to be as simple to operate as DRS is now, with a button to activate before reverting under braking. If efficiency is the aim, why not automate

the system using sensors? In any case, it's a positive development that would be good for Formula E to adopt. And not like F1 has with a little wing going up and down.

We've already seen Formula E's exciting plans for the Gen3 Evo, coming next year with four-wheel drive, and know that Gen4's chassis tender calls for two different aerodynamic specifications in the form of interchangeable high and low-downforce bodykits. I believe the championship should seriously consider taking a full step, not a half step, and use the opportunity of a clean sheet design to introduce a massive moveable aerodynamic surface that creates

each other and it was hurting overtaking opportunities. It was easier than addressing what was arguably an equal contributing problem of track design; most circuits have corners that allow for a single optimum racing line that discourages the varied approaches you get from somewhere like Zandvoort's banked Turn 3, necessitating DRS as an overtaking tool.

But the use case for DRS in Formula E has never come up because we have low downforce and the powertrain is the biggest performance differentiator. The recent Shanghai E-Prix, on a track with lots of fast corners, was the first time we

“FE should skip the two-bodywork solution for fully moveable, programmable active aero”

the maximum amount of downforce in a corner and the lowest amount of drag for the straights. These are the ingredients for the optimal racing car and would also extend the battery life to make a win-win for all concerned.

One of the reasons F1 embraced DRS back in 2011 was because cars were losing downforce in corners when following

found it hard to follow behind another car. This isn't often a problem in Formula E because we have high drag, which is why you see the peloton races – being behind somebody is very beneficial on the energy.

As the cars gain downforce, a move towards DRS might appear to make sense. But Formula E doesn't need aerodynamic gimmicks to create overtakes, especially because from next year we'll have four-wheel drive in attack mode. This will allow for overtaking while accelerating, not only at top speed, totally changing the game.

Therefore, Formula E should skip the two-bodywork solution for fully moveable, programmable active aero that switches between different levels of downforce during the race such that, if the driver wishes, the front and rear wings could move independently. I would not be concerned about managing it, as we are adjusting things in the car all the time already, but I favour it being automatic because it's the most efficient way of doing it. After all, isn't that what this is about? ■



Shanghai was a notable case of Formula E cars struggling while following, which active aero in the future may assist



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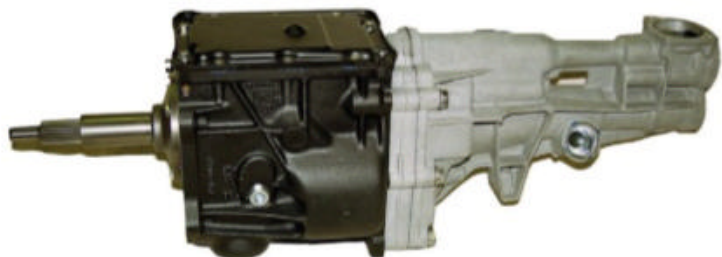
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ENGINEER'S VIEW PADDY LOWE

PUSHING THE BOUNDARIES OF SYNTHETIC FUEL

He made his name winning championships in Formula 1, and now the Zero Petroleum founder has a new mission that he hopes will one day transform motorsport



Partnership with Sauber is geared at raising awareness

When I left Formula 1 in 2019, I still had plenty of interest in doing more things. It felt like the right time so together with Nilay Shah, professor of engineering at Imperial College, we converted Zero into a real idea that has grown into a thriving company of 53 employees so far.

Although I'm happy to see racing series increasingly adopting sustainable fuels, I truly believe we're pioneering the end game with synthetic fuels. It's a tremendously exciting project and a testament to that is we've managed to attract some young engineers from leading F1 teams to join our adventure of moving from fossil fuels to synthetic fuels.

The essential point of a synthetic fuel is that you're reversing the process of combustion by using fully renewable energy. We're taking carbon dioxide and water from the air, then reconstituting those into a hydrocarbon, which would be like a normal fuel. We build hydrocarbons from scratch. Water is oxidised hydrogen and carbon dioxide is oxidised carbon. By reconstituting it, we strip the oxygens and make a hydrocarbon; there is literally no limit on how much you can make.

Currently we're making fuel at our plant

in Bicester at what we call an engineering scale; that means quantities for testing, evaluation and certification. It's not a commercially viable scale in terms of selling fuel for people to use in regular mobility. The next scale will be commercial. Current price points are four times that of normal fuel, but I predict within 10 years we'll be down at fossil fuel costs and beyond that even cheaper.

The performance of Zero fuel is better when compared to fossil fuels. Our fuel is known as 100% drop in, a complete replica of fossil fuel from the necessary chemistry. But what it doesn't have is the unnecessary

dense material than gasoline, so a blended fuel results in less power and mileage-per-litre than you used to have with 100% gasoline. We won't need to blend with ethanol because it's a renewable fuel that is 100% fossil free, which bioethanol isn't.

We're moving now to commercial production, which will scale from small to medium to large over the next years. We haven't got to that stage of performance analysis on a particular vehicle, but that will come in the next phase. The closest we've got to that is in aviation. We secured the Guinness World Record in 2021 for the first aircraft powered by synthetic fuel with

“Motorsport is a very attractive destination, and we want to see synthetic fuel used there”

chemistry; things like sulphur and other contaminants that exist in fossil fuels. It's a very pure fuel and burns more cleanly.

Motor fuel across the UK and Europe is blended with ethanol in an attempt to improve sustainability. This is bioethanol grown from crops. The power from the fuel is less, because ethanol is less energy-

a plane flown by an RAF test pilot. We are focused on all three fuels – gasoline, jet fuel and diesel, and something unique about our technology is we can make all three.

Motorsport is a very attractive destination, and we want to see synthetic fuel used there in two to three years. We've partnered with Stake F1 Team Kick Sauber to raise awareness of the industry and advance the progress of synthetic fuels in motorsport; there's no better platform than F1 to communicate globally. We're already talking to stakeholders about fuels and contributions for those fuels for 2026. F1 is where we hope to land, most likely in a partnership, as we don't pretend to have the scale and funding of a large multinational. We'll take one step at a time.

I'm not a great supporter of part-solutions. The way to win in F1 is pursuing absolute maximums and not providing a series of stopgaps that get lashed together. I prefer 100% solutions, which is why we've developed technologies that are absolute in their delivery of fossil-free performance. ■

David Brabham drove a McLaren M19 in an F1 demo at the British GP using Zero Petroleum



TAKING HYDRO



TO THE EXTREME

COGENT

PIC: MATT BEN STONE/EXTREME-E



New, single-seat Pioneer 25 machine is at forefront of renewable energy tech – and hydrogen myth-busting

EXTREME

For next season, the electric Extreme E series disappears and is replaced by the hydrogen-powered Extreme H. This is how the machinery has evolved

BY MARCUS SIMMONS

This is all very *Star Trek*, isn't it? Formula E established a path for electric motorsport on city streets, before sister series Extreme E took the scenic route off road a few years later. And now comes Extreme H, trying to do the same for hydrogen. For alternative-power-motorsport svengali Alejandro Agag, it continues the mantra "to boldly go where no one has gone before".

The Spaniard, perhaps not fully up to speed on late 1960s American sci-fi TV series, prefers to view himself not as Captain Kirk, but as a reverse-engineered Marty McFly. "I don't know if you have seen movies about people that travel in time, like *Back to the Future*," he offers. "When you travel back in time, you have to be very careful not to touch or change anything, because even if you touch something very small it can have huge consequences for the future. Imagine that today is one such moment, but looking forward. With this championship that we are launching, we could be having a butterfly effect for the future of huge proportions."


There's no doubt that 'hydrogen' is the current racing buzzword – as anyone who follows the World Endurance Championship will attest. And Extreme H is boldly (that word again) striking out as the first to venture down this avenue, beginning with the 2025 season opener in April. It's doing so with plenty of involvement from other worldwide series.

"We decided to pull together something that we called the Hydrogen Hub," reveals Extreme H technical director Mark Grain. "It's a forum where we've invited other forms

of motorsport – representatives from different championships, OEMs and so on, and of course the FIA, and representatives from our competing teams. The idea is that we're right in the vanguard of hydrogen racing and we'd like to share our experiences, and hopefully in the future shortcut any of the processes and give them a helping hand down the road."

Presumably that would include people from the Le Mans 24 Hours and WEC-organising Automobile Club de l'Ouest. "Yes," responds Grain. "They're invited along, as are representatives of IMSA, NASCAR, Formula 1. We've had OEMs in the shape of Toyota, Hyundai, BMW. That's the level of interest that we're talking about. Extensive interest across all these different championships and OEMs."

Grain is a converted single-seater purist, despite the background of a father who built rally cars. He started off at Bowman Racing in the halcyon late 1980s/early 1990s era of Formula 3 before moving to Formula 1, mostly



Electric motorsport pioneer Agag reckons Extreme H could potentially have huge impact

Testing mileage adds up to three seasons of Extreme E



“We’re right in the vanguard of hydrogen racing and we’d like to share our experiences, and hopefully give a helping hand down the road”

at McLaren – which is where he came across this quirky new thing called Extreme E.

“When I was still at McLaren, Zak [Brown, McLaren CEO] asked me to pull the team together, set it up and go racing,” he explains. “I didn’t know what to expect. When I was there in the paddock, there were a lot more familiar faces than I anticipated – from Prodrive and other teams. I was impressed with the feel of the paddock, the camaraderie between the teams, and the relationship with the championship and so on, that really appealed to me.”

To the extent that, in 2022, he crossed over to the championship itself. One of his first tasks? To oversee the birth of Extreme H and the Pioneer 25 machine, which is built by Formula E and Extreme E constructor Spark Racing Technology and replaces the XE Odyssey 21.

Extreme H had been announced in February 2022, although it wouldn’t become clear for some time whether this would be in addition to XE or whether it would replace it. Images of the car were released later that year, at which point it was still very much a concept rather than living in the real world. Naturally, the experiences from Extreme E, which launched with its first

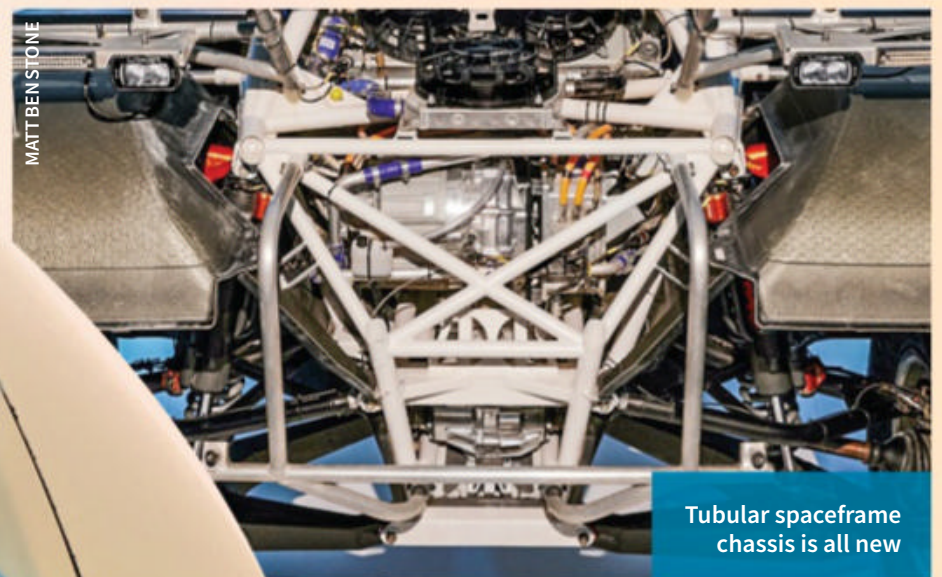
round in April 2021, mean that the new Pioneer 25 is very much from the same family tree as the Odyssey 21.

“You’ve got carryover *principles*,” stresses Grain. “We’ve got a tubular spaceframe chassis, but that’s all a new design, so it’s not the same shape, although the bodywork styling is reminiscent of an XE car. It’s a single seat, centrally mounted [as opposed to XE].

“We accommodated the conversations we had with the FIA, and we’re defining all these new rulesets for a hydrogen racing car. The design of the chassis; what it has to withstand. The suspension elements, by and large they’re all new. They’re the same construction, but the design detail has changed.

“One of the few elements that does carry straight over is the motors and invertors, and the gearbox and transmission. That’s a good saving, and they didn’t need to be revised. Then you’ve got the hydrogen fuel cell, which is an all-new element, and the battery pack from Fortescue [previously known as WAE] – the technology’s the same but the packaging is different, so we’ve gone from a cube-shaped battery to a flatter and more rectangular battery that sits low down in the car. It’s kind of everything’s changed, but it hasn’t at the same time, if that makes sense!”

But why the move to hydrogen? Agag, whose Extreme E series kicked off in 2021 in oil-exporting powerhouse Saudi Arabia, offers an eyebrow-raising statement when he claims “the world is different to five years ago. When we launched Extreme E, climate was at the top of worries. Today I feel that climate has gone to second or third place when there are wars, problems with the economy and so on.” He qualifies this by adding that “AI will multiply the demand for energy. Hydrogen can be the enabler ▶



Tubular spaceframe chassis is all new

ALL PHOTOGRAPHY: EXTREME-E

Ex-McLaren man Grain has overseen birth of Extreme H



of renewable energy all around the world.”

Regarding the practicalities of motorsport and its future, Grain says of the move to hydrogen fuel cell technology: “We felt that it was going to be a significant player in the automotive industry and mobility in the future. We could already see it in buses and trucks and so on. We know, and we’ve had contact with, aircraft companies that are actively investigating hydrogen options.

“We had demonstrated to the world that an EV could go to all these tough environments, race really hard wheel to wheel, roll over, all of that stuff that we did in Extreme E, and that EVs weren’t just for the trip to the supermarket or whatever, that they could withstand these incredibly demanding situations. So we wanted to do the same with hydrogen.”

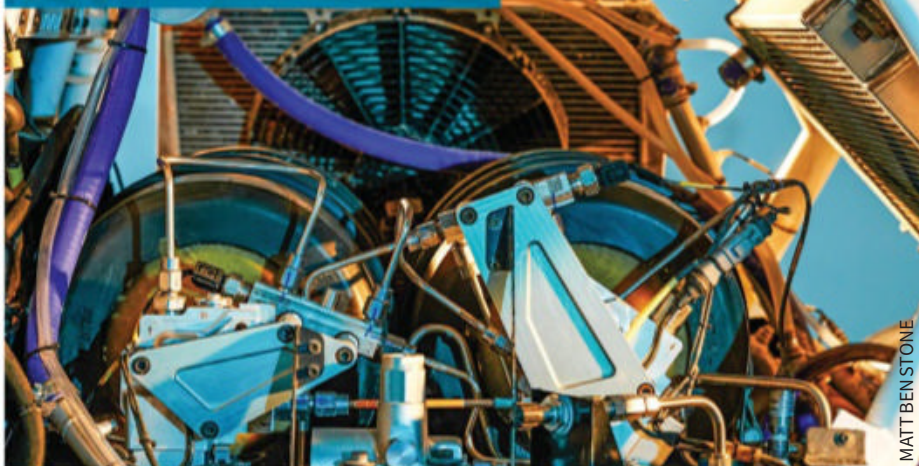
The shakedown and validation test for the Pioneer 25 took place last December at the La Ferte Gaucher asphalt test track, to the east of Paris and around 80 kilometres from Spark’s factory. It’s the same circuit where the Formula E Spark took its baby steps more than a decade ago, and honours for the first Extreme H run were handed to Dakar Rally veteran and two-time Le Mans 24 Hours starter Christian Lavieille.

“That went well,” recalls Grain. “Then Christmas break and we were up and running in the third week of January at a track to the north-west of Paris. And now we were onto using all the locations and tracks that are used by the World Rally Championship teams and Dakar teams.

“What we’ve done since is we’ve been out every month. From January through to June we’ve done eight tests at locations always in France – one north of Lyon, also down in the south-west at Chateau de Lastours, plus two more. We have covered just under 1800km [1100 miles] of testing. That equates to three seasons of XE racing, so we’re obviously very pleased with that total and how the progress in testing’s been going.”

While Lavieille remains part of the test driver team, others to take the wheel have been versatile French maestro Romain Dumas and Norwegian Hedda Hosas, who was a regular in Extreme E in

Structure above and below Pioneer 25’s hydrogen tanks is much more robust



Safety has been key in development; lowered centre of gravity means there’s less chance of rolling over



2022 and 2023 but finds herself out of a regular seat this season. The participation of Hosas is crucial in a series that mandates mixed-gender driving crews.

“We’ve been dividing all those responsibilities up depending on driver availability and the programme,” explains Grain. “You don’t need me to tell you how important it would be to make sure we’ve got a female test driver, and we’re not tuning a car just for males. Steering load, braking forces, all that sort of stuff are completely transferable between a male and a female driver. But it’s not only that. Hedda comes with a lot of XE experience, certainly more than Christian and Romain, so she’s been able to give us good back-to-back feedback between the E car and the H car.”

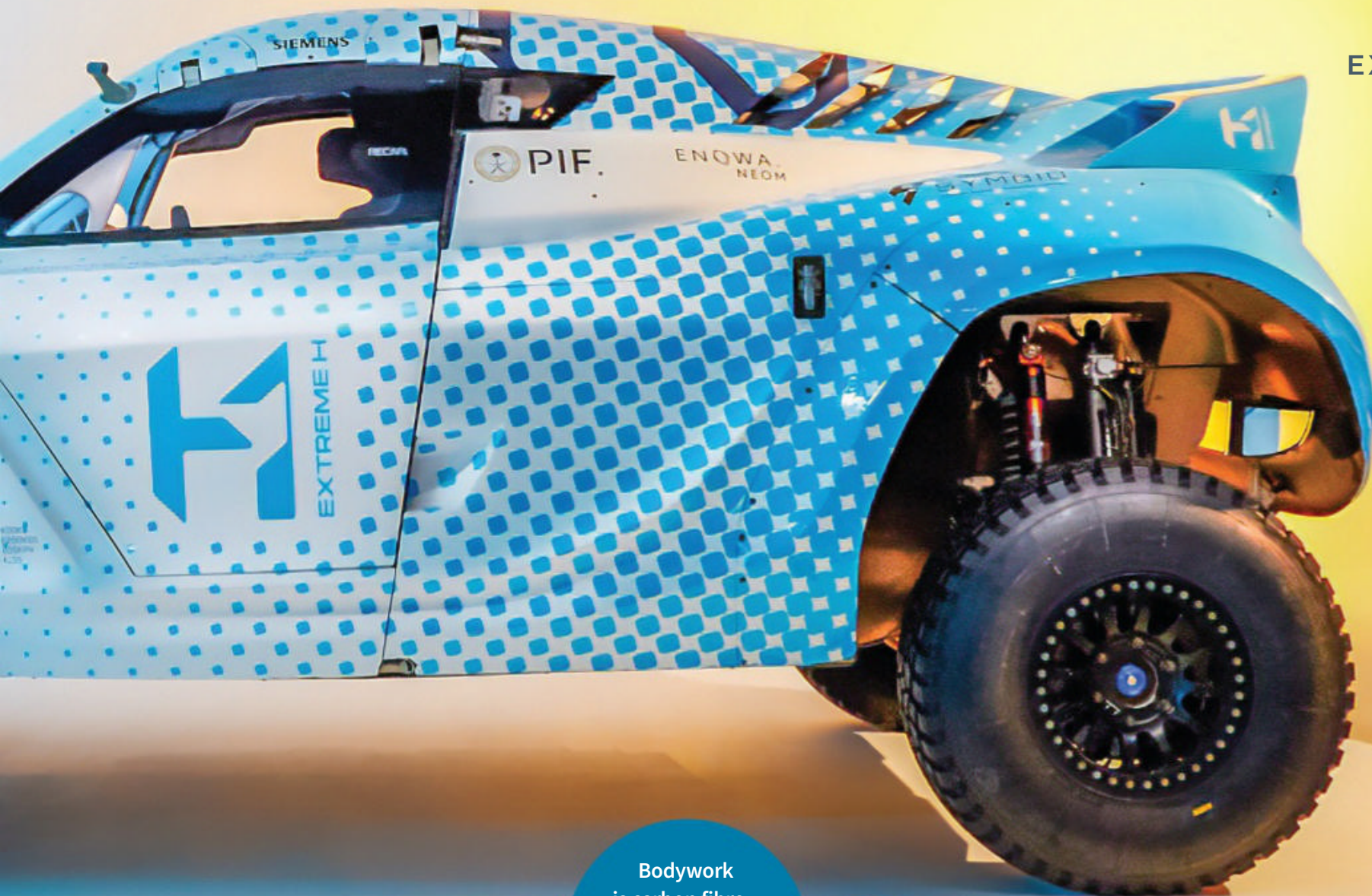
While in the case of Hosas in particular, it would be hoped that her early grounding in the Extreme H car would be a conduit back into a regular seat, it’s as fair as the series could make it in the sense that no existing teams and drivers get an advantage.

“The whole programme is operated by Spark,” points out Grain. “We have conducted the tests privately with good sound logic. We have got an all-new type of car, and we’ve had no need to go public until now. We’ve just been running our own programme quietly.”

Apart from the single seat, another notable feature of the Pioneer 25 is its centre of gravity lowered from the Odyssey 21 – less chance of rolling over – while modular carbon-fibre bodywork replaces the green flax used on the XE machine. In the latter case, too much damage from the rugged racing that features in the series meant that its recycling couldn’t keep pace with demand.

And then there’s the critical question of the safety of hydrogen. It’s one that instantly springs to mind in the layman, but Grain is quick to counter the fears. “We’ve been working closely with the FIA on this to define the all-new crash-test regulations,” he says. “We had the battery pressure test last month that we passed, and we’ve got our final crash tests at UTAC in August using chassis 2. They’ve required a lot of collaboration back and forth with the FIA.

“If you saw an XE and an XH chassis side by side, you’d notice a much more robust roof detail, which is right above the hydrogen tanks. So instead of just tubes, there’s metal fillets and infills. The same applies underneath the car and the composite impact structures left and right. Also, there’s a frame that will sit above the hydrogen tanks, and we’ve been working with the FIA on velocities and so on, system pressures.



Bodywork is carbon fibre – green flax used in Extreme E suffered in series' rough and tumble

"It's been a collaborative process, and that's one of the exciting things about this – it's an all-new championship, there aren't any other hydrogen cars out there racing at the moment, so this has been a journey of discovering and thought process for the FIA, as it has been for us. That applies not only to the car, but to how we operate the championship – everything that you associate with a modern racing championship, car recovery and so on. All those processes have been thoroughly reviewed and revised."

The production run for the Pioneer 25 begins next month, with the aim of teams taking delivery of their new weaponry in late October or early November. You can expect plenty of the current participants to be on the grid when the action begins in 2025; among those who attended the launch last month on the St Helena ship, which acts as the series' transport, were Legacy Motor Club chief and NASCAR legend Jimmie Johnson, Acciona Sainz boss and all-round motorsport hero Carlos Sainz Sr, and SUN Minimeal driver/principal and two-time DTM king Timo Scheider.

"Motorsport has to be involved in hydrogen, and for sure we will follow," asserts Sainz. "From a driver's point of view the car is going to be better. We faced problems at the beginning of XE; I think it was a continuous learning process together with Spark. It's a super challenge for everybody."

Sainz's staff and his rivals will, says Grain, be able to get a handle on the challenges of hydrogen in the near future: "We are going to run sessions at Spark for the engineers and technicians so that before they get their race cars, they'll get a good education on the car, and that's backed up by operation manuals."

"We've got a relationship with GeoPura, who are owned by Siemens – they've got extensive hydrogen experience, and so we've got a team based in Detroit who are doing more work on



supersonic CFD that ties into the FIA work, and it demonstrates how if anything untoward happens, like you rupture a high pressure line on a hydrogen car, that it actually just dissipates. Hydrogen is so light; it doesn't hang around to catch fire. It just goes."

Grain refers to the Hindenburg airship disaster of 1937, which perhaps has done more than anything to raise scepticism of hydrogen: "Actually the fire was caused by the material of the balloon, not the hydrogen. We want to dispel all of those myths that surround hydrogen. It's an incredibly safe form of energy. We want to show the world that you can race these cars in these locations, and just have great motorsport using this technology that hopefully then starts to get mainstream interest."

Agag pays tribute to his late friend Gil de Ferran, with whom he launched Extreme E. "His spirit, his leadership, his ideas, his vision are very much with us," he declares. And that is backed up by Scheider, whose other Extreme E hat is, of course, as the track designer. "When I think back five years ago, there was one point Alejandro said, 'It should be extreme, that's the target,'" reflects the German. "And now five years later with this history I've had as a track designer and driver, and now as a team principal and driver, I'm super-proud to be part of this journey. There's a bright future coming up for all of us. It's clear that this championship is reducing the carbon footprint big time, and that's why we all have such a big interest in the future of XH."

Does this work on the Pioneer 25 make those involved feel like, erm, pioneers? "It does," reckons Grain. "We're right at the front of it. It's not without its challenges but it is rewarding, I have to say. I spent some time in IndyCar – it was great racing, but you've got that 12-year-old car over there. Doing something new is always more exciting, I would say." ■



FORD F-150 LIGHTNING SUPERTRUCK

UNDER THE SKIN OF PIKES PEAK'S PACESETTER

Ford's latest electric demonstrator defied its size to be the niftiest machine up the hillclimb last month. Sriram Pakkam is your guide

BY JAMES NEWBOLD

When Romain Dumas whistled to the top of the fabled 12.42-mile Pikes Peak course in 8m53.553s, it was another milestone achieved for Ford's EV demonstrator programme. Despite a sensor glitch in his imposing Ford F-150 Lightning SuperTruck's battery management system that required a power cycle and cost 26s, it was enough for the fastest time overall.

To the Blue Oval's Formula 1 & High-Performance EV Manager, Sriram Pakkam, it was validation of the project's existence. With "no artificial ruleset that you're designing to", engineers have freedom to push the limits of physics. "For all of the engineers on this," says Pakkam, "it's been a great template for playing around and doing things they'd never do."

AERO AND STYLING

Ford "pushed the boundary so much over SuperVan 4.2", comments Pakkam, pointing to an almost 30% increase in downforce on the Lightning SuperTruck. Its intricate triple-element front wing, enormous rear wing, detail work on headlight ducts and cooling louvres are the result of copious hours – "in the hundreds for sure", Pakkam remarks – of CFD that Ford claims adds up to producing 6000lb of downforce at 150mph. "It was from October to March basically running CFD on all our choices, constantly," he adds.

Lessons learned from developing the SuperVan played into this, particularly into packaging decisions for the battery and motors that resulted in "a better aero floor and a much bigger diffuser in there". Pakkam's desire to "keep development time as long as possible" and push back the start of testing was in part dictated by a lack of venues with comparable conditions to Pikes Peak. Once testing had begun at proving grounds in Austria and Hungary, final tweaks were "not anything huge".

TYRES AND BRAKES

Bespoke tyres from Pirelli were developed for the Pikes Peak run. A starting point of GT3 rubber used by the new Mustang in GT World Challenge Europe needed finetuning to accept significantly more aerodynamic performance and mass. "For everybody involved, it's fairly unique," Pakkam says. Stopping is achieved by carbon ceramic brakes from Alcon.

WEIGHT

Keeping the weight down was not only a significant challenge, but also a key consideration in design decisions. Weight implications of chasing performance proved a "constant trade-off" for Pakkam and his team. He explains: "It's fairly easy to get more aero and power because it's an attribute that is controlled by a couple of experts. Weight is trickier, that's the distributed attribute literally everyone is responsible for."

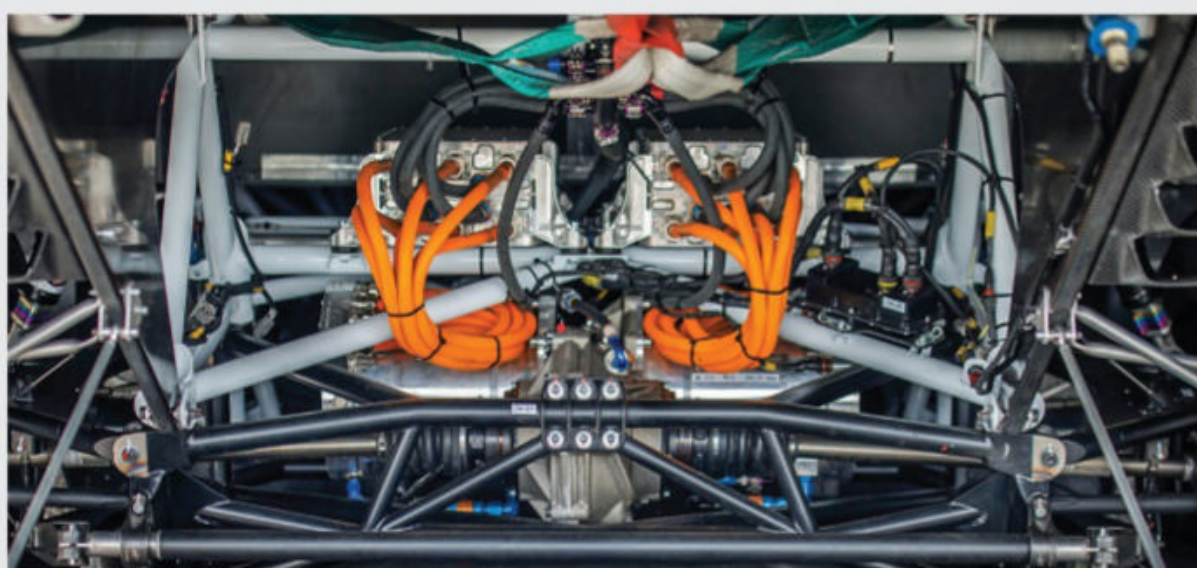
To Pakkam, weight at Pikes Peak is "the most sensitive parameter you can make a change on to get lap time". Unlike hiking power, downforce and energy density, he says the benefit of reducing weight "never tails off". Ford shaved "around 100kg out" compared to SuperVan 4.2, which tackled Pikes Peak last year, but Pakkam admits "on a big vehicle, it's still a smaller percentage of what we'd have liked".





CHASSIS

Rather than being based on a production F-150 chassis, the Lightning SuperTruck is of tube-frame construction. The need to fit a strong safety cage was an important consideration in that decision, but not the only one. Pakkam points to previous demonstrators utilising a production vehicle, but says the aims of such programmes are different: “There you’re stressing your production parts and drivelines and studying what happens to them. With this, we’re trying different things, focusing a lot on aero and how you maximise your energy usage.”



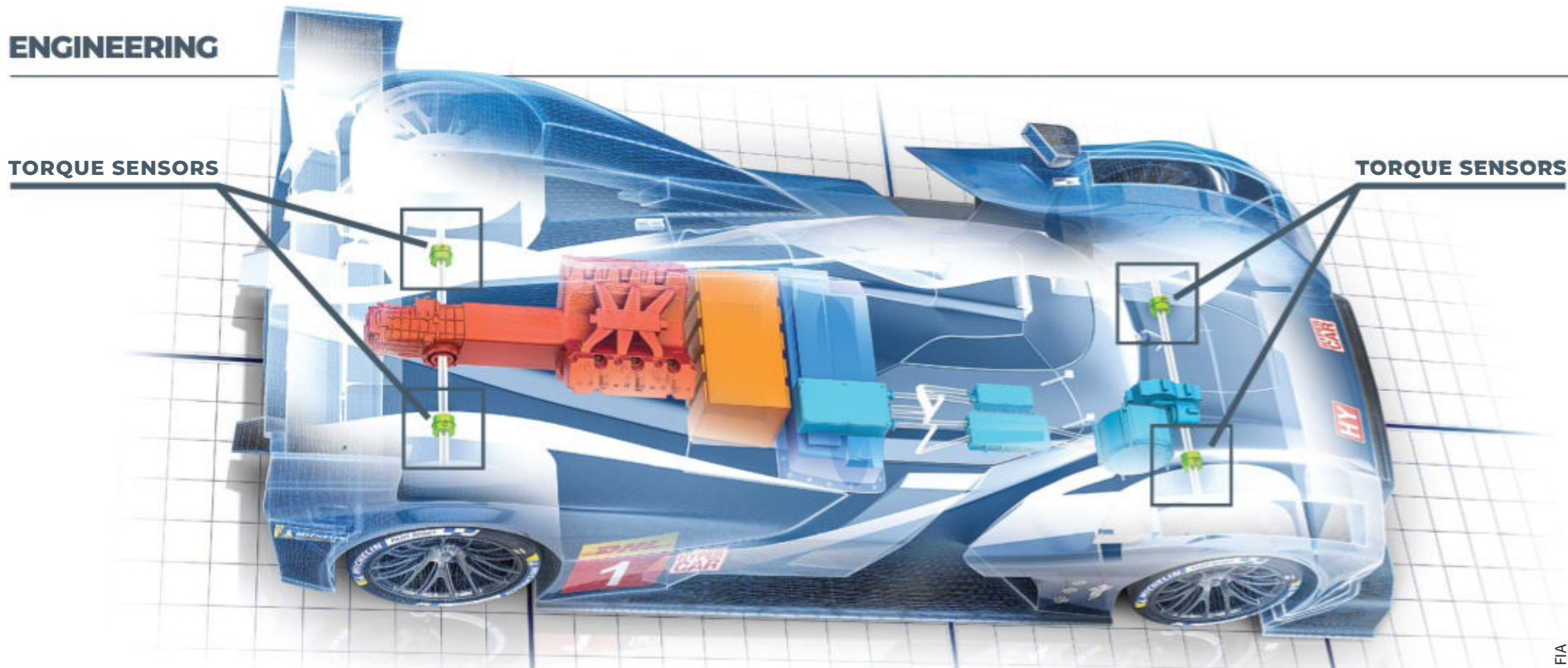
POWERTRAIN

As with SuperVan 4.2, Ford went knocking on STARD’s door when devising the powertrain for its Lightning SuperTruck. The Austrian company headed up by former World Rally Championship driver Manfred Stohl contributed its “race-ready” drivetrain that packs a 1600bhp punch.

One motor is mounted at the front, the other two at the rear. Power distribution and torque balance is easily adjustable from the steering wheel. A fourth motor, as SuperVan 4.2 had when breaking the Bathurst electric lap record earlier this year, was deemed unnecessary for Pikes Peak, with the extra weight and battery drain this would entail – potentially resulting in less punch out of slow corners for a potentially higher top speed it would rarely reach. “You’d be at a little more than 2000bhp, but that’s a whole lot of horsepower more than simulations say you need,” says Pakkam.

TORQUE SENSORS

TORQUE SENSORS



FIA

COMMON SENSOR

A tool for monitoring performance and controlling costs
has had an unseen but ultimately positive impact

BY JAMES NEWBOLD



Quibbles over Balance of Performance and accusations of sandbagging have been a near-constant feature of GT racing in recent times. Openly discussing the BoP isn't permitted under the World Endurance Championship's sporting regulations, but that's not the only reason for grumbles being notably reduced this year as LMGT3 replaced GTE Am.

MagCanica is the FIA's current supplier of torque meter sensors, which have been utilised since the outset of the Hypercar class in 2021 and have now migrated into the GT realm. Measuring torque from the driveshaft, they allow for live monitoring of power outputs so any spikes beyond what is allocated in the BoP are visible to the FIA and co-legislator Automobile Club de l'Ouest in real time. This is enforced by penalties, as seen with Toyota's #8 car at Spa in May.

Previously, efforts to achieve parity involved working with engine maps on the dyno, but the difficulty of covering all possible atmospheric conditions meant it was "more or less impossible to be very accurate", according to the FIA's chief technical and safety officer Xavier Mestelan Pinon. With the torque sensors, by contrast, he maintains it's "the best way to have the right accuracy".

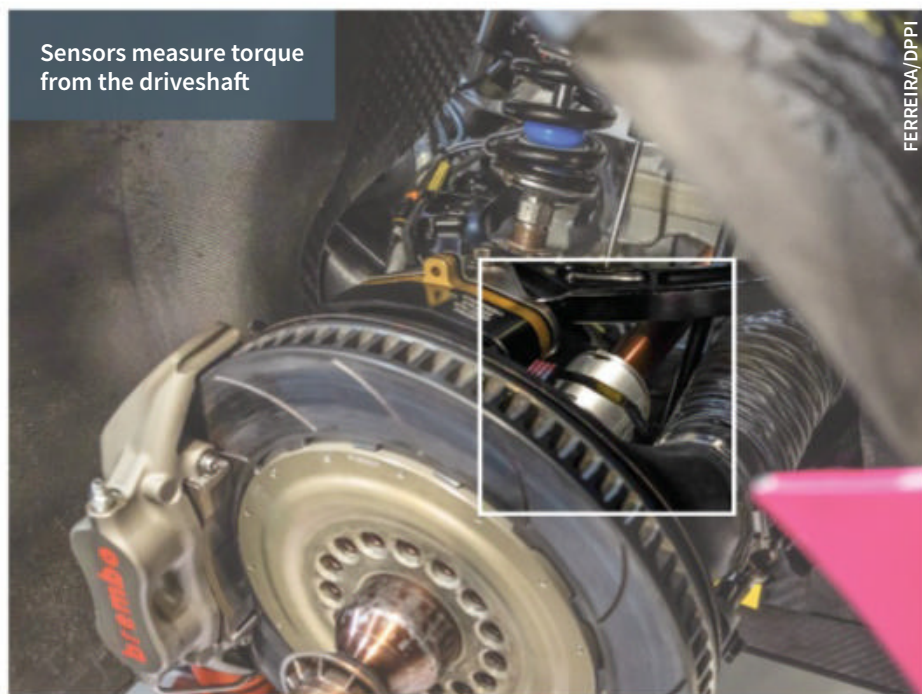
By the same token, it eradicates any gains that can be made from sandbagging. Manufacturers can have no recourse to ask for BoP tweaks when the FIA can see exactly what power figures they are achieving.

"The crucial thing is to ensure you're on your power target all the time, without going over and getting a penalty and without being under and being slow," says Aston Martin Racing head of performance Gus Beteli. "To be always on top of it and get the best performance without getting a penalty, is challenging. The FIA will look at that data and see if you're reaching the power or not. If you're not reaching the power [limit], you're slower."

Efforts to get the sensors fully calibrated haven't been the work of a moment. A process Beteli describes as "not easy" has been taxing even for manufacturers that can draw on prior expertise from Hypercar.

As well as leaning on sister GM brand Cadillac's LMDh programme, Corvette already had experience of torque sensors from its C8.R GTE car, permitted to race in modified form against

Sensors measure torque from the driveshaft



GT3 cars in the IMSA SportsCar Championship's GTD Pro class with them installed. Ben Johnson, technical director of the Pratt Miller organisation that builds the Corvette Z06 GT3.R, says it was "still a learning curve, they're very sensitive to the car that they're on, how it takes the kerbs, how the engine reacts".

But with more mileage, the slope has levelled out. For Johnson, efforts to "push it as far as you can, then bring it back to where you're confident it's going to be legal" have been finetuned to the point that, by Le Mans, Corvette was "confident to race from Test Day onwards". Now a degree of maturity has been reached, manufacturers recognise that the greater accuracy and transparency resulting from torque sensors represents a step forward.

"It's been a lot better than what it used to be in the past," Beteli says. "Credit to the FIA and ACO, they're doing a very good job with how they're managing the performance and the data. We have meetings after every race to discuss."

Mestelan Pinon describes torque sensors as "a very important tool" for not only upholding the BoP but also by controlling power output, disincentivising expenditure on new developments

Sensors uphold BoP, but controlling power output also helps keep a lid on costs

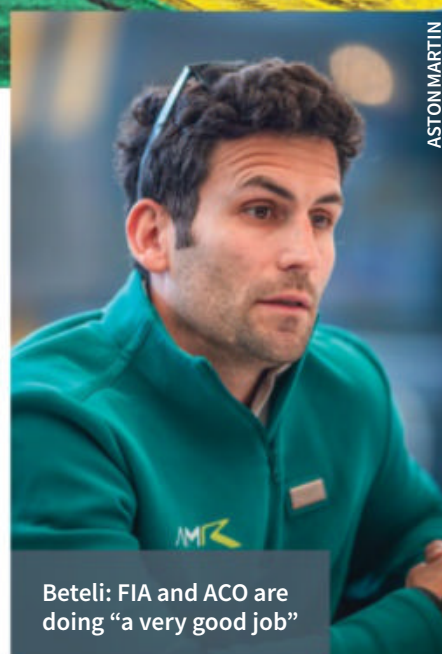
“The fans and all the stakeholders get the benefit of much closer racing”

to keep costs controlled. “Clearly in WEC, it’s to avoid [manufacturers deciding] to develop a crazy technology regarding the internal combustion engine,” he says.

This purpose is served not only in the WEC, Mestelan Pinon points out: “We are working with Formula E, Formula 1 of course, in the very near future in cross country also” for Ultimate group entrants in the World Rally-Raid Championship. Adoption into the World Rally Championship from 2027 is also “on the table”. However, he acknowledges that torque sensors are too expensive to be considered for grassroots series and reckons “honestly we don’t need that” outside professional championships.

Beteli agrees: “It’s an expensive piece of technology, not only buying the sensor and the driveshaft and all the development that goes into it. But as the technology evolves if you can get the price down so it’s accessible for everyone, it would be a benefit for sure.”

While cost remains a barrier to wider use, as Mestelan Pinon admits “it’s not something which is really cheap”, steps have been made on reliability. Software developed since the 2023 Algarve WEC round, when a sensor failure on the #7 Toyota forced it into a pitstop for repairs, would result in a different outcome from a



Beteli: FIA and ACO are doing “a very good job”



Tech better kept “in the back office”, says Mestelan Pinon

repeat scenario. “In each situation we have something to manage it to be sure that we don’t ask a car to stop,” says Mestelan Pinon.

For the time being, its impact is largely hidden from view, and Mestelan Pinon recognises that a large majority of fans simply want to see a fight between drivers. “A lot of them don’t care” how it is achieved, he says, which fits a desire for technology “to be in the back office and not on the front office”. But in years to come, the embrace of torque sensors could be regarded as an important development working for the good of a discipline that shows no signs of ceasing its upward trajectory.

“It may operate behind the scenes,” says Johnson, “but the fans and all the stakeholders then get the benefit of much closer racing, which is good for the sport and everybody involved.” ■

REYNARD'S INDYCAR REVOLUTION

The successful arrival into Indycars 30 years ago of a British constructor had ripple effects that were felt for years to come, as it proved a disruptive force in US open-wheel racing

BY JAMES NEWBOLD

IndyCar's duopoly had been briefly upended in 1992 by Galmer winning the Indianapolis 500 with Al Unser Jr and Galles Racing. But following a decision by Rick Galles to cancel the Galmer programme, the old order was restored in 1993. If you wanted to win, you had to have a Lola or a Penske chassis.

Yet that all changed with Reynard's arrival in 1994. Six podiums was a modest return from its maiden year, but three of those were wins – including the debut victory that had become the constructor's calling card. The upstart's instant impact had longer-term significance too.

The 1994 season elevated Jacques Villeneuve into a driver who could be considered future world champion potential, returned Michael Andretti to the force of nature he'd been prior to a difficult foray into Formula 1, and set Chip Ganassi Racing on the path to becoming the powerhouse it remains today. Not a bad outcome for a company that just a few years prior had been on the brink of ruin.

"I had to sell just about everything I had at the time," company founder Adrian Reynard recalls of the painful aftermath of plans to enter F1 collapsing in 1991.



Top dogs: Lola of Nigel Mansell leads Penske of Emerson Fittipaldi in 1993

"And I had to rebuild the company. We had to go back to basics."

With his company winning all but one title since its arrival on the Formula 3000 scene in 1988, Reynard had set his sights on motorsport's pinnacle and got as far as conducting wind tunnel tests at Imperial College London with a model devised by a design team led by Rory Byrne and Pat Symonds. Everything was in place, including smart new premises at Enstone (later sold to Benetton), aside from a

credible engine partner: "I didn't have enough money, so I had to abandon it."

This was the prompt for the company to belatedly pursue Indycars, a plan managing director Rick Gorne had long since backed. After a deal to buy March in 1989 that would have involved taking over its Indycar contracts with Porsche and Alfa Romeo "went quite ▶



Normal service resumed by Andretti after F1 blip

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Reynard provided the tool for Villeneuve to prove his title-winning potential

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Second place in Indy 500
put down a marker for
Villeneuve and Reynard

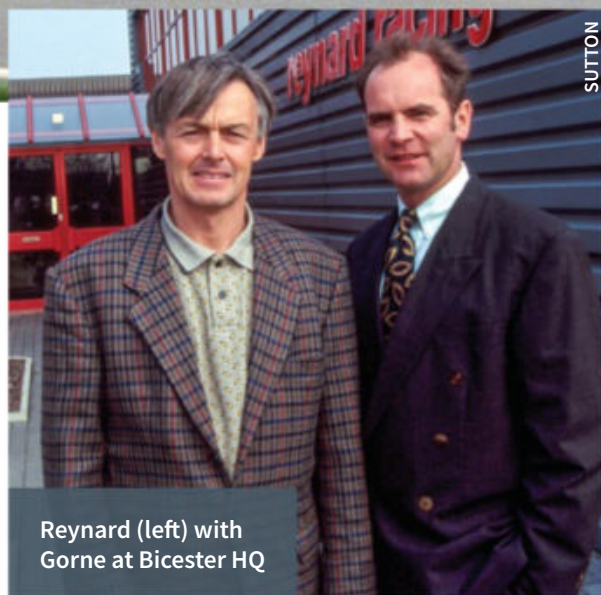


a long way down the road, but fell at one of the final hurdles,” Gorne says the F1 project’s collapse “was my chance to say to Adrian, ‘Let’s just focus on the Indycar, do what we know and try and benefit from that.’”

Reynard had engaged Carl Haas as its US agent for Formula Fords and Atlantics (these cars even bore an H designation), but the Newman/Haas co-owner wasn’t keen to relinquish his status as Lola’s Indycar importer. Adrian Reynard met with several Indycar team owners while engineering Russell Spence’s Formula Atlantic in 1992, but met an apathetic reception. “Nobody was interested,” he says. “This was a little manufacturer, thousands of miles away, not established. We didn’t have any credibility.”

That was until he and Gorne sat down with Ganassi. “We connected with Chip, and the rest is history,” says Gorne, who describes him as “the perfect partner for us – he thought the way we did”.

It seems difficult to countenance a time when Ganassi wasn’t an Indycar



Reynard (left) with
Gorne at Bicester HQ

“If you were going to beat Newman/Haas and Penske, you had to do something different”

benchmark. He’d become a co-owner at Patrick Racing in 1989 when Emerson Fittipaldi became champion in a customer Penske chassis, then took over the assets and formed his own squad for 1990. Seven podiums followed in the next four years with Eddie Cheever and Arie Luyendyk, but it had yet to win with a Lola.

“His mindset was that he needed to do something different if he was going to take the next step,” says Jimmy Vasser, Ganassi’s first Indycar champion in 1996, and who also raced a Hayhoe Reynard in 1994. “If you were going to beat Newman/Haas and Penske, you had to do something different and that’s why Chip really ponied up for the Reynard.”

Ganassi became a partner in the newly established Reynard North America operation and all the cars were sold in year one. It helped that Reynard no longer had Formula 3 to worry about, after Dallara gatecrashed the market in 1993.

“It was never in the plan that as soon as we did Indycar we would drop F3, but that’s how it panned out,”

Gorne says. “We could have made F3 a continued success, but we would have overstretched ourselves.”

Malcolm Oastler, who had led the design for Reynard’s initial winning exploits in F3000, was entrusted with the project that had as its starting point the unraced Galmer G93 for which Reynard had bought the design. His work was virtually complete by the time Lola’s chief designer Bruce Ashmore arrived, an important sign to teams that Reynard had current expertise from a leading figure.

“He was our insurance,” says Gorne. “Bruce knew the systems and everything regarding uprights, gearboxes, loads, all the intricate technical detail that you needed to know. It was a short-cut.”

Another sign that Reynard was onto something was the identity of the lead driver in Ganassi’s team – his car a quasi-factory entry run by Ashmore that tested all the new parts before they went to customers – while F1 convert Mauricio Gugelmin in the second car was run from separate premises. Andretti, the 1991 Indycar champion, was still a big draw despite his dispiriting 1993 with McLaren. Gorne credits Ganassi with his signing, ▶

Wins eluded Ganassi with Lola –
this is Luyendyk at Indy in 1993



which he says “endorsed what we were doing and got the whole thing established”.

As was the case when it entered F3000, the squads that first committed to Reynard comprised not regular winners, newcomers or fading forces. Jim Hall’s team, fielding a single car for Teo Fabi run by Oastler, hadn’t won since the 1991 season-opener. Forsythe/Green Racing was a hit in Atlantics with Villeneuve, but Jerry Forsythe’s last Indycar involvement had been in 1985 – though partner Barry Green was a linchpin of the Kraco team that subsequently merged with Galles.

Meanwhile, 1990 title-winning squad Galles had scaled back from running three Lolas to a single Reynard, its third different chassis in as many years. The team’s lone driver, Adrian Fernandez, says the team “was going through internal turmoil”. The Mexican impressed by qualifying fourth for the opening round, but found the year “a little bit of a struggle” despite Reynard’s customer service far exceeding anything he’d experienced before. “Lola had too many clients,” he says.

“Here was more like a VIP treatment. And they were very hands-on in trying to help us.”

Vasser’s Hayhoe team had run a year-old Lola in 1993 and didn’t view throwing his lot in with Reynard as a risk, despite its lack of US racing pedigree. This leap of faith was rewarded with three top-five finishes from the opening four races, although results tailed off after placing fourth at Indianapolis.

“If you were going to go Lola, you were never going to have the works stuff because Carl Haas was the importer and [Newman/Haas] always seemed to have different Lola pieces,” he recalls. “The feeling was you’re never going to get what they get.”

As well as being keenly honed to be aerodynamically efficient, the 94I was user-friendly and well-received. It surely helped that Ganassi sent some of his most experienced mechanics to help with



Andretti celebrates victory in Toronto

DRIVING THE 94I

Although all its wins came on road and street courses in 1994, this presents a slightly misleading picture of where Reynard’s first Indycar was strongest. Perhaps unexpectedly, given the constructor’s background, the chassis proved stronger on ovals. A pervading understeer trait was helpful on the faster circuits, if not stop-start tracks.

Galles driver Adrian Fernandez confirms: “The car was very strong on all the ovals, it had a very good downforce, it behaved well. The street courses, it was for us struggling the most and I remember the understeer the car had, but it was very strong on ovals.”

Fellow Reynard racer Jimmy Vasser agrees that “we were very uncompetitive on the road courses” in 1994. That said, the Hayhoe Racing man felt the Reynard was “just easier to drive” than Lolas he’d sampled. Fernandez concurs that, compared to the 1993 Lola, “it was a better car,

just in terms of feel and downforce, and not so pitch-sensitive”.

It helped too that Reynard teams were willing to collaborate with support from factory engineers, “because we were all learning as we went along”. Vasser recalls: “We all got to Long Beach and it was just horrendous understeer. In that era, the wing angles were set from what the wind tunnel [said], it was something you didn’t really play with. But they would come around and say, ‘Look, Mauricio Gugelmin has put all this wing in’ and this other person is doing this. So there was some sharing going on and we were all kind of one team together, finding our way on these new tracks that the car had never been on.”

“Reynard was fantastic if there was a problem,” confirms Gugelmin’s Chip Ganassi Racing crew chief Grant Weaver. “They would get the solution and get it to the teams. Their customer focus was very good.”

Gugelmin's crew chief recalls very open relationship between factory and team



“That thing was so well-sorted. They designed it so that it was easy to work on”

building up the very first chassis and make suggestions. Gugelmin's crew chief Grant Weaver recalls “a very open relationship between the race team and the factory on building the cars”. And upon delivery, he discovered “it didn't take a whole lot to make it go fast” either.

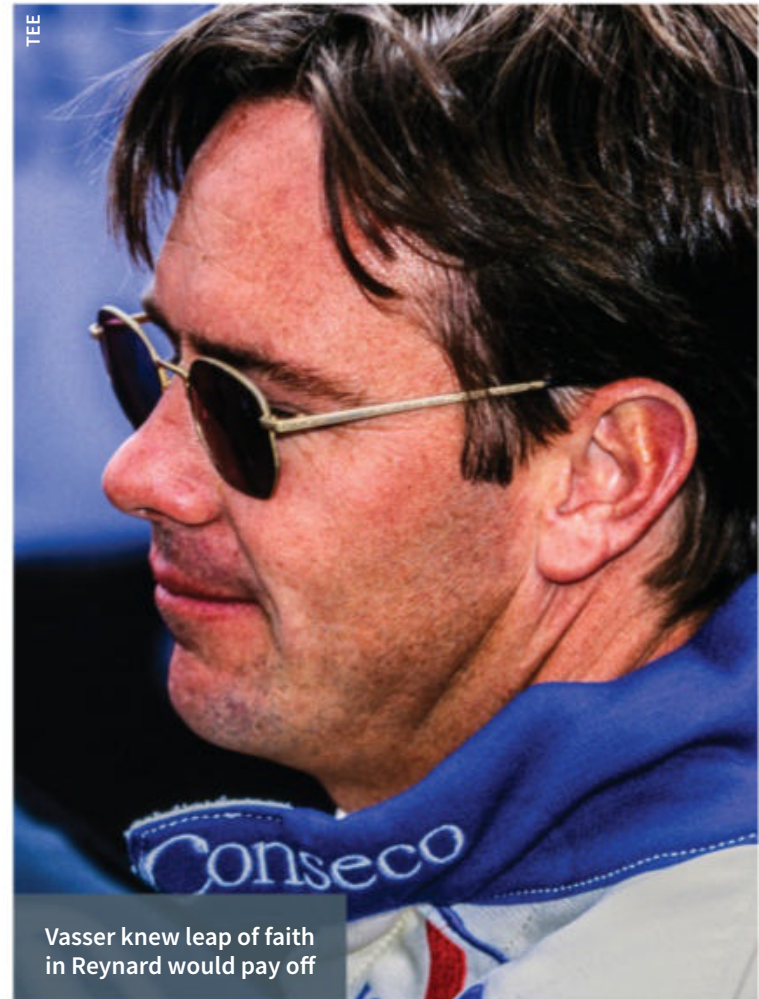
“That thing was so well-sorted already that there were minimal issues,” adds Weaver, a Ganassi mainstay until 2019. “It was easy to turn wrenches on, they designed it so that it was easy to work on. Adrian and his boys did a very nice job. There were some things during the year that towards the next model would make things a little easier, but there weren't any showstoppers that said, ‘Hey, you've got to fix this now.’”

Heading into the maiden race at Surfers Paradise, Reynard exuded quiet confidence that his group could emulate first time successes in FF1600, F3 and

F3000. “We thought everything was in place,” he says. And Gorne agrees there was never any concern that the US market would prove a tough nut to crack: “We had a very vibrant, young design group headed up by Malcolm and we all believed that we would achieve. Failure wasn't in our vocabulary.”

All the same, Gorne maintains that he didn't expect to win on the tricky street track. “We were relaxed about it; if it happened, it happened,” he says. But Reynard admits he couldn't help himself on the grid and approached Andretti to remind him of what was at stake: “I said, ‘Michael, you do know that Reynard has this sort of tradition’, and he said, ‘Yeah, yeah, yeah, go away.’ And he brushed me away with his hand!”

Andretti's victory by 1.2 seconds over Team Penske's Fittipaldi was a seismic moment, but it wasn't his last. He also



Vasser knew leap of faith in Reynard would pay off

conquered the streets of Toronto, ending the year fourth in points, while top rookie Villeneuve recorded his first win at Road America – where for the first time three Reynards finished in the top five. He'd earlier signalled his prowess with an impressive second place at the Indianapolis 500, where Penske and Unser won with the famous ‘Beast’ engine.

“It was the come-out year for Jacques,” says Gorne. “He'd won races at other levels, in Japan and in Atlantic, but he'd never won a championship. This elevated him and the Reynard product.”

In 1995 the die was cast. Sticking with Green following the Australian's split with Forsythe, Villeneuve won the Indy 500 on his way to F1 with Williams. It began a run of Reynard titles that continued into 2001, when Penske successfully defended the crown it had reclaimed only after ditching cars of its own construction. Along the way was a stretch of four in a row for Ganassi, reaping the rewards not only from an early commitment to Reynard, but in going against the grain by partnering with Honda and Firestone – which became the dominant package from 1996-99. Its winning juggernaut has barely halted since.

Reynard believes that the company's arrival “changed the rules” for how to win in Indycars. It certainly upended the status quo, and the ramifications are still being felt today.

“They were a great group,” summarises Vasser, who enjoyed the bulk of his success in Reynards. “They did amazing things pretty much out of not a grandiose situation; just a lot of brilliant minds and hard racers.” ■

Fernandez rates highly the 941's performance on ovals





HOW TO BE AN ACE ENGINEER

Craig Porley reflects on his journey to becoming a leading race engineer in the BTCC

BY MARCUS SIMMONS



One of the British Touring Car Championship's best-known driver-engineer double acts might not have happened if it hadn't been for a seemingly random Facebook friend request. "I got one from Shaun Hollamby," recounts Craig Porley, the brains behind Jake Hill's BTCC points-topping form with West Surrey Racing. "I didn't know him really, but the rumours were, 'Hmm, they're going to AmD', so I'd better accept that."

'They' were the FK2-model Honda Civic Type Rs that Porley had been engineering at Eurotech. That team was pulling out of the BTCC, the cars and equipment were indeed heading to Hollamby's AmD squad, and the ball had started rolling...

Porley ran Rory Butcher to the 2019 Independents' title, before Hill shuffled over to take both car and techie for 2020. The rest is history, and together they have worked together at the Motorbase Ford Focus squad in 2021 before getting their hands on the BMW 330e M Sport for 2022.

This was in addition to Porley's 'day' job at the Red Bull Formula 1 team, meaning it's been a busy time for a guy who began his career on university placement at Rollcentre Racing. "Being a tiny team, for them it was cheap labour essentially!" he laughs. It was a pretty cool placement to work at the Sebring 12 Hours and, after graduating in 2005, Porley went back to Rollcentre as a composites technician.

During his next job, in A1GP, he met Team GBR's Albert Lau: "He was a race engineer at West Surrey in the BTCC,

and that's how I got involved with them for 2008 as a data engineer. My first year was with Stephen Jelley, my second with Colin Turkington, and that was his first championship – that was a lovely place to be involved in, seeing all the prep that goes into it, building up to it."

After a stint in the FIA GT1 World Championship as data engineer with the JRM Nissan squad, Porley went to work for gearbox specialist Xtrac, "and that allowed me to do the race engineering on the side". He did that via a return to WSR in the BTCC, running Tom Onslow-Cole in 2012. While the tin-top work was going well, he was getting itchy feet at Xtrac.

"I did three and a half to four years at Xtrac in R&D," Porley recalls. "I loved it but there's a limit to what you can learn from transmissions. I looked around and that's where Red Bull came up – I had two friends working there who I'd worked with at Rollcentre, they put in a good word for me, and I got a job there as an engineer."

In F1 you're a small cog in the process, especially when factory-based as Porley was. But, he admits, "when

Max Verstappen won his first world championship, it meant the absolute world. I was surprised at how emotional it was because the reality is we were detached from it, back at the workshop. One thing Red Bull does very, very well is to include the factory staff in that celebration. You're made to feel a part of it. But the flipside is nothing can compare to when you're doing it at the track."

In February 2023, Porley departed Red Bull and says he's now "more full-time than before" at WSR, while lecturing at London South Bank University. "I sort of semi took the position of Mark Ellis," Porley says of another Red Bull luminary who engineered Alain Menu to two BTCC titles in the Super Touring days. Small world... "It's really nice being there, trying to bridge those gaps between the obvious mistakes young students are going to make," he enthuses. "It's not a case of telling them how to do it – it's explaining why not to do it that way and giving them a range of different options that they can pick themselves and hopefully come up with the right solution." ■

Porley has worked with Hill since 2020 in the BTCC

JEP

University placement at Rollcentre led to Porley's first job in motorsport



SUTTON/MOTORSPORT IMAGES

TOP TIPS FROM CRAIG PORLEY

- People say aero's king, but without tyres there wouldn't be any aero. Braking, cornering and traction all goes through that, so learning to read a tyre and interpret the data is key.

- Keep it simple. We're trying to

go in circles as fast as possible, don't over-complicate things.

- Never stop learning. You might regret starting at a new team if they're not doing things as you would, but often there will be something they're doing better.



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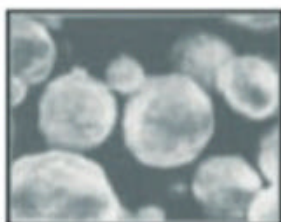
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