

F1 2023 Will de Vries keep his drive?

AUTOSPORT

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18 MAY 2023

Can McLaren do an Aston?

What's gone wrong, why BIG changes have been made and what happens next

'I wasn't happy with the progress we were making'

ZAK BROWN

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Rossi on the podium at Brands!



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It's a long road ahead for McLaren in Formula 1

McLaren has flattered to deceive since the end of 2021. That season's MCL35M ended the team's winless streak and the new ground-effect regulations offered the chance of a Formula 1 reset, with many squads eyeing the change as an opportunity to get to the front.

But McLaren's form has headed in the wrong direction and it's Aston Martin, which finished two spots (and 104 points) behind the orange team in 2022, that has made the leap towards the leaders.

McLaren is still waiting for its new facilities to come online but, as Alex Kalinauckas shows in our investigation this week, that's not the only element the legendary squad has to sort if it is to ever add to its 12 drivers' titles and eight constructors' crowns (page 18).

The Woking operation's IndyCar branch is already fighting at the sharp end and scored a fine 2-3 in the Indianapolis GP encounter last weekend. But it was Chip Ganassi (and future McLaren?) driver Alex Palou who really starred, as David Malsher-Lopez reports on p32.

Another young talent stood out on Rally Portugal. Reigning champion Kalle Rovanpera had a relatively quiet start to his title defence but the Toyota driver's emphatic victory has both launched him to the top of the table and laid down a marker for his rivals (p26).

Ahead of the Indianapolis 500, our free 28-page Engineering supplement uncovers some set-up secrets and looks into the fascinating history of the current IndyCar design.



Kevin Turner

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Chief Editor

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NEXT WEEK
25 MAY

F1 report and Indy preview
All the action from the Emilia Romagna GP, plus we look ahead to the Indy 500

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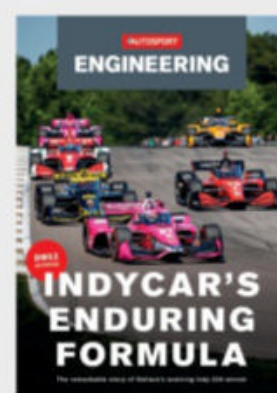
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The incredible life and evolution of IndyCar's Dallara DW12, the future of electric rallying and the story of the GT1 Mercedes CLK-GTR feature in our latest free Engineering supplement.

PIT + PADDOCK



SUTTON

De Vries faces critical test as speculation mounts on future

FORMULA 1

Nyck de Vries should get a little longer to acclimatise to Formula 1, with sources working to rebuff claims that Daniel Ricciardo will be parachuted in to replace the struggling AlphaTauri driver from as early as the Spanish Grand Prix next month.

Eight-time F1 race winner Ricciardo popped to the Red Bull junior team's Faenza factory last month for a seat fitting. This fuelled rumours that motorsport advisor Helmut Marko was ready to swing his axe

and replace under-fire full-time rookie de Vries, who has yet to score a point this season. Instead, Ricciardo's trip was more routine and came as part of his arrangement with Red Bull for 2023, where he serves as reserve driver for select races. With the Australian also down to fulfil that role for AlphaTauri, a seat fitting was a necessity.

Ricciardo is said to have rediscovered his passion for the top flight, after being jettisoned by McLaren come the end of 2022 a full 12 months ahead of his contract expiring. But for any return to the grid, the

ex-HRT, Toro Rosso and Renault driver seeks a frontrunning gig. That's why he was willing to sit out for a year rather than progress talks with Haas to replace Mick Schumacher for 2023. His first outing in the current Red Bull RB19 is set for the post-British GP tyre test. Until then, with Red Bull claiming that Ricciardo has rediscovered his missing form in its simulator, he would be an obvious contender at AlphaTauri if the Italian squad elected to make a change.

De Vries has had a difficult baptism with the team, with the 2019 FIA F2 champion getting himself involved in a fair share of incidents. He earned his F1 berth thanks to a starring cameo in the 2022 Italian GP where, replacing an appendicitis-stricken Alex Albon, the 2021 Formula E champion started eighth and bagged two points with ninth in the race. This put him firmly on the F1 radar and encouraged the Dutchman to sever ties with Mercedes so that he could pursue the AlphaTauri drive and a plausible route to becoming compatriot Max Verstappen's future team-mate at Red Bull.

De Vries's best 2023 finish so far of 14th arrived in Bahrain and Saudi Arabia. He then crashed out in Australia and Baku, and eventually classified 18th in Miami after tagging Lando Norris on the opening lap. For now, the team is keeping faith in de Vries, with outgoing team principal Franz Tost



ISHIHARA

Lawson has been making a strong impression in Japan



GRANT

saying in Azerbaijan that it would be wrong to expect a rookie not to endure some shunts.

“As I always say, there is a learning process and a crash period because, if the drivers don’t crash, they don’t know the limit,” said Tost. “This is a credit you must give them, otherwise it doesn’t work. And there was no driver not crashing. I remember with Sebastian [Vettel] in the first races, he came back on the first lap most often without the nose. That’s part of the game.”

While de Vries is not under immediate pressure, sources have suggested that the team’s senior management, and especially Marko, want to see immediate progress. With a triple-header coming up on circuits de Vries knows after the recent bias towards street tracks, there should be a better opportunity to judge his potential. As such, his form at Imola, Monaco and Barcelona will be crucial to dictating his fate.

Aside from Ricciardo, Red Bull would also weigh up other youngsters on its junior roster. Liam Lawson, who has impressed in Super Formula this year after winning his maiden race in the Japanese category, is the prime candidate from the ranks. Red Bull could also opt for F2 regular Ayumu Iwasa who, despite a disappointing recent round in Baku, has two victories under his belt this term and lies third in the standings.

De Vries said himself that he was looking forward to this weekend’s Emilia Romagna GP because there should be a good performance step from the poor AT04. “We are bringing some kind of bigger update,” he said. “We’re kind of excited for that weekend, to see if we can make a step up.”

JONATHAN NOBLE & GIACOMO RAULI

P15 OPINION



GRANT

Alpine to expand brainpower amid CEO Rossi’s criticism

FORMULA 1

Alpine is poised to gain fresh investment that will help support an aerodynamic engineering recruitment drive and construct a new simulator to hopefully resurrect its Formula 1 fortunes. This plan, revealed by under-pressure team principal Otmar Szafnauer, comes hot on the heels of company CEO Laurent Rossi arranging a TV interview with French media so he could very publicly label his squad as “disappointing” and at times “amateurish”.

Ex-Racing Point boss Szafnauer is seeking to show management that he is leaving no stone unturned in a bid to ensure Alpine achieves the pre-season aim of fourth in the constructors’ standings while closing the gap to Red Bull, Ferrari and Mercedes. A new state-of-the-art simulator has very recently been signed off, and should be in play by 2025, while the team has also recruited a new head of simulation to

further rejuvenate its current 20-year-old set-up that was bought from McLaren in the 2010s.

“If you have perfect simulation tools or close to it, then you start the weekend pretty close to your local optimum for that race,” said Szafnauer. “We’ve hired people to help us with more accurate lap sims. If you can do all that work before you get to the track, you’re closer to where you’re going to end up.”

While Alpine has expanded since parent company Renault took over operations at Enstone again in 2016, the squad is still not at maximum staffing capacity. Szafnauer cited the example of 2023 surprise package Aston Martin, which poached staff from Mercedes and Red Bull to fast-track progress. Hoping to do similar, Alpine is now on the hunt for senior aerodynamicists.

“You want to shortcut the process,” said Szafnauer (left) about hiring from top teams. “Red Bull has an aerodynamic team of 50 people, it’s not one. But the guy who sits on top of the 50, he gets all the ideas. When you displace him, his brain is full of all those learnings... We’re at 38, we want to grow to 45. So, we have spots for seven or eight senior aerodynamicists here.”

While Renault remains fully committed to funding the F1 squad, there have been rumours in recent weeks that fresh investment could come from outside parties. Speculation that American automotive retailer AutoNation could become a shareholder increased over the Miami Grand Prix weekend after it announced a sponsorship deal with the team.

JONATHAN NOBLE



TRENITZ



U-turn on tyre warmer ban – but only for Le Mans

LE MANS 24 HOURS

The ban on tyre warmers in the World Endurance Championship has been lifted for next month's Le Mans 24 Hours. But the *volte-face* by series rulemakers the FIA and the Automobile Club de l'Ouest only applies to the centrepiece round.

The move announced late last week followed a spate of incidents at last month's Spa round of the WEC. They included Toyota driver Brendon Hartley's off at the top of Eau Rouge during qualifying, and Antonio Fuoco's accident on the old pits straight aboard one of the Ferrari Le Mans Hypercars (above). Both had left the pits on cold tyres just seconds before.

Criticism of the ban on pre-heating the Michelin and Goodyear rubber used across the WEC's three classes for this season inevitably followed these incidents. Among the most vocal was Ferrari sportscar racing boss Antonello Coletta, who insisted that it was "time to do some serious thinking on the matter because it has major ramifications for safety".

What was described as a "one-race exemption" for the centenary running of the French enduro on 10-11 June was announced by the ACO late last week. It was a short and sharp statement that talked about "ensuring that drivers of all experience levels will be able to compete in the safest possible environment regardless of track conditions and temperatures".

But it stressed that the reversal of the ban was only temporary. It will mean, read the the ACO's

communique, that "tyre manufacturers, teams and drivers will gain valuable time to develop better understanding of how to bring cold tyres up to temperature ahead of the remainder of the 2023 WEC season". It pointed out that the ban had been "in the works for the past two years" and that the move had been "developed in consultation with tyre manufacturers".

The topic remains a political hot potato given the insistence that the practice of pre-heating tyres, traditionally undertaken in diesel-powered ovens in sportscar racing, will return for the post-Le Mans resumption of the WEC at Monza in July. The move has been welcomed by teams and drivers, although most wanted to remain off the record given the stance of the rulemakers. One team principal described it as "a common sense move", one driver "as the correct thing to do".

The FIA put out a statement in the face of criticism of the new rule, director of circuit sport Marek Nawarecki claiming that it is a "much-needed step from a sustainability point of view and something that the FIA Endurance Commission agreed on as part of a long-term WEC tyre road map". He pointed out that other series do not allow tyre warmers, in a veiled reference to the IMSA SportsCar Championship.

As part of the exemption at Le Mans, the use of 100% sustainable fuel produced by TotalEnergies, the WEC's exclusive supplier of race fuel, will be mandated.

GARY WATKINS

Shanghai set for new licence

FORMULA 1

The Shanghai International Circuit can theoretically host the Chinese Grand Prix once again now that the FIA has restored its Grade 1 licence – the top status that permits venues to host Formula 1 races and testing. The track was home to the nation's GP from 2004 (below) but its previous three-year certification expired at the end of 2019. With COVID breaking out so soon after, inspectors working on behalf of the governing body couldn't travel to China to complete their checks and renew the licence.

That was until August 2022, when an assessment by the Federation of Automobile and Motorcycle Sports of China (CAMF) called for remedial and maintenance work to be completed. That left circuit bosses to arrange fixes for blemishes in the track surface, the partial repair of tyre walls, repainting the underground connecting tunnel, refreshing grandstand seats and upgrading the outfield areas.

With that development commissioned, Shanghai is now once again the sole venue in China capable of hosting F1. It had been listed on the 2023 F1 calendar for 16 April to make up a 24-round schedule. But as widely expected, with regions of the country still facing episodes of lockdown, it was cancelled to create the recent four-week gap between the Australian and Azerbaijan races.

Should an F1 round go ahead in 2024 as anticipated, an FIA inspector will return to the circuit to carry out the final examination a month before the event. Following a late 2021 contract extension, local organisers have a deal in place with F1 until 2025 but the GP has not taken place since 2019, with that edition the 1000th world championship race.

MATT KEW & FRANKIE MAO



Delage name returns to 24 Hours in LMP2

LE MANS 24 HOURS

The Delage name will return to the Le Mans 24 Hours next month after an absence of more than 70 years. The IDEC Sport LMP2 team's ORECA-Gibson 07 will bear allegiance to a revived marque that raced in the French enduro seven times between 1923 and 1950 in the centrepiece World Endurance Championship round.

European Le Mans Series regular IDEC has entered into a partnership with the group that announced the revival of Delage, winner of the 1914 Indianapolis 500, four years ago. For the moment that means that the team's ORECA to be driven by Paul-Loup Chatin, Paul Lafargue and Laurents Horr will carry the fledgling manufacturer's name and compete in French racing blue. Where the link-up could lead in the longer term isn't clear.

Delage already has a prototype of a car known as the D12 up and running, which it claims offers the experience of a "road-legal Formula 1". The V12-engined hybrid has a power output in excess of 1100bhp according to its makers, and ran up the hill at last year's Goodwood Festival of Speed. This car ran at Paul Ricard alongside the LMP2 for the launch photos of the IDEC/Delage tie-up.



The deal with IDEC is a "fantastic opportunity to continue rebuilding the brand's reputation internationally", according to Delage's Laurent Tapie, son of former French government minister Bernard. The group of investors he put together for the relaunch includes Patrice Lafargue, who is the boss of the IDEC Group that bills itself as a real estate operator and father of Paul.

IDEC sporting director Nicolas Minassian insisted that it is too early to assume that

IDEC is heading for the Hypercar ranks. "For the moment it's a partnership, but let's see where it leads," he said.

The team is known to have aspirations to move into the premier class of the World Endurance Championship. The Paul Ricard-based operation courted Lotus last year and unsuccessfully pitched an LMDh project to the Chinese-owned British sportscar maker.

GARY WATKINS

Cadillac plans to expand to second WEC racer

WEC

Cadillac is eyeing an expansion of its factory World Endurance Championship campaign with the V-Series.R LMDh for next season. It is not a done deal as yet, but the General Motors marque has revealed that it is working on a plan to increase the Ganassi-run Cadillac Racing team's full-season involvement from one to two full-season entries.

GM director of motorsport competition engineering Mark

Stielow described two entries as the "correct engineering way to do it". In terms of winning the Le Mans 24 Hours, he said that a "the proper way to do that is with a two-car WEC programme".

"Getting my leadership to agree to that is the next step, I'm hoping that we get the nod," he continued.

GM sportscar programme manager Laura Wontrop Klauser expanded on Stielow's remarks. "Two is always better than one and in terms of what we have on



the table and what is set, we are still working through all that," she said. "If we can figure a way to do that, we would be thrilled to expand the programme."

The V-Series.R completed its

first test miles in Europe last week. The European arm of the Ganassi team, which has moved into a base in Stuttgart, ran at the Algarve circuit for two days.

GARY WATKINS

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BTCC 2024 CALENDAR

RD	VENUE	DATE
1	Donington Park National	27-28 April
2	Brands Hatch Indy	11-12 May
3	Snetterton	25-26 May
4	Thruxton	8-9 June
5	Oulton Park	22-23 June
6	Croft	27-28 July
7	Knockhill	10-11 August
8	Donington Park GP	24-25 August
9	Silverstone	21-22 September
10	Brands Hatch GP	5-6 October

BTCC's 2024 schedule: 'if it ain't broke, don't fix it'

BTCC

Put it to British Touring Car Championship supremo Alan Gow that his series has a schedule that the teams and drivers all like, that works really well for the fans, and that there's no reason to change anything, and he retorts: "Well, you've just put the words into my mouth." And the trigger for that is the series' unveiling of its 2024 calendar, which has exactly the same tracks in precisely the same order as in 2023.

What the BTCC has done is to get its itinerary confirmed earlier than it believes it ever has, owing to the necessity to lock in dates with broadcaster ITV amid a summer of sport that includes the Paris Olympics and the Euro 2024 football tournament. "I'm

really proud of the fact that we've got the dates out so early," said Gow, "and you'd hope that this helps the rest of British motorsport to sort their calendars."

Between the Donington National opener and the Brands GP finale, is there any prospect of any mixing it up?

"We race on all the circuits with the infrastructure to take us," pointed out Gow. "Every year our fans ask, 'Let's have a street race'. If only it were so easy.

"Silverstone is the only outlier if you like. I spoke to them about going onto the International Circuit [which was on the 2020 schedule before COVID caused major disruption] for 2024 but it just wasn't available. Silverstone is such a 'complex complex' because they've got so many

multiple uses – if you use the International Circuit, that knocks out a whole lot of other things they've got going on. It may happen in the future, I don't know.

"But the National Circuit is always popular with the fans because the cars come round quickly and the racing's good. We wouldn't stick with it if it didn't produce good racing."

What can't be ruled out for the future is an event abroad tacked onto the end of the season, but not as a replacement for any of the existing 10 UK events. "Taking the BTCC overseas is not sitting high on the list of priorities," said Gow. "An end-of-season overseas race is something I'll look at doing one day if the right opportunity comes up. It's been on the radar for two years."

MARCUS SIMMONS

Smith on the 'Pau-dium' as Coronel leads points



TCR EUROPE

British tin-top up-and-comer Isaac Smith scored a podium finish in TCR Europe at last weekend's Pau Grand Prix as Dutch veteran Tom Coronel moved clear at the top of the points table.

Smith qualified fourth, one spot ahead of Volcano Motorsport Audi team-mate Lewis Brown, on the French street circuit. He then moved up to third

when driveshaft failure sidelined poleman Viktor Andersson's Lynk & Co. Late in the race, Smith survived contact from local hero Eric Cayrolle to finish third behind lanky Serbian race winner Dusan Borkovic (Hyundai) and Kobe Pauwels (Audi). Brown dropped to eighth after running wide at the Virage de la Gare.

Coronel's disastrous qualifying session at least netted him reversed-grid

pole, and he used that to lead the second race all the way in his Audi. Borkovic, meanwhile, charged from eighth on the grid to finish on Coronel's tail, with John Filippi third in his Audi.

More contact with Cayrolle sidelined Smith, while Brown was sixth.

The Pau GP itself was run for French F4 after the late pullout of Euroformula Open, and was won by 17-year-old Enzo Peugeot.



Pourchaire pips Doohan in test

FORMULA 2

Formula 2 championship leader Theo Pourchaire emerged quickest from three days of official testing at Barcelona last week as the teams gear up for the European bulk of their season, but not before Jack Doohan served notice that his early-season troubles could be consigned to the history books.

While most of the runners used the second afternoon for qualifying simulations on the soft-compound Pirellis, Pourchaire (above) and ART Grand Prix saved a set of rubber for the final morning. The Frenchman had been third fastest at the end of play on Thursday, but on Friday he sliced 0.375 seconds off Doohan's best from the previous afternoon. Like Pourchaire, the Australian and Virtuosi Racing had also gone out on a limb on when they used the softs, and Doohan's Wednesday afternoon time stood as the test's quickest before Pourchaire's Friday effort eclipsed it by 0.234s.

"We focused on the qualifying pace this morning, which was important because we did only some small qualifying runs yesterday evening to try some different

set-ups on the car," said Sauber F1 protege Pourchaire on the final day. "This morning was good, it was a cool lap and we're just trying a few things."

Alpine Academy racer Doohan (bottom left), quickest on each of the first two days, concentrated on race runs on Friday. "I'm not trying to get my hopes up too much as it's only testing and unfortunately, this performance hasn't come on a race weekend, but it's steps in the right direction," said the driver who lies 13th in the points after four rounds. "We're getting there slowly but surely. I'm slowly getting the feeling back and feeling more comfortable. We're trying to really eliminate these underlying issues that are causing us to not be where we should be."

ART's F2 rookie, reigning F3 champion Victor Martins, was fourth fastest, sandwiched in between Prema Racing pair Frederik Vesti and Ollie Bearman, whose time came on the first day of the test.

TOP 10 TIMES

POS	DRIVER (TEAM)	TIME
1	Theo Pourchaire (ART)	1m23.943s
2	Jack Doohan (Virtuosi)	1m24.177s
3	Frederik Vesti (Prema)	1m24.466s
4	Victor Martins (ART)	1m24.595s
5	Ollie Bearman (Prema)	1m24.624s
6	Jehan Daruvala (MP)	1m24.722s
7	Ayumu Iwasa (DAMS)	1m24.762s
8	Enzo Fittipaldi (Rodin Carlin)	1m24.810s
9	Arthur Leclerc (DAMS)	1m24.851s
10	Dennis Hauger (MP)	1m24.880s



IN THE HEADLINES

MARDENBOROUGH RETURNS

Japanese-based Welshman Jann Mardenborough is to break a two-year racing layoff by competing in next week's Fuji 24 Hours. Mardenborough, whose rise to racing fame is the subject of a forthcoming film named *Gran Turismo*, will line up in a Helm Motorsports Nissan GT-R NISMO GT3 with brothers Yuya and Reiji Hiraki.

HYUNDAI LOOKS LONG TERM

Hyundai is looking long term for its replacement for the late Craig Breen in the World Rally Championship, and has stated that Dani Sordo, second on last weekend's Rally Portugal, will not contest all the remaining rallies in 2023. The Spaniard was sharing the marque's third car with Breen until the Irishman's fatal testing crash. "We are looking into it but it is too early to make a particular announcement," said team boss Cyril Abiteboul. "The only thing I can say is that we are not just looking into this year, we are looking at where we want to be next year and the year after that." Abiteboul hinted that a younger driver could be the most likely option, but that Kris Meeke is also in the frame.

OLIPHANT IN A LYNK & CO

British Touring Car Championship race winner Tom Oliphant switched cars for his second TCR Australia event last weekend at Phillip Island. Oliphant started the season in an Alfa Romeo Giulietta but debuted a Lynk & Co 03 on the Victorian circuit. He qualified sixth and took a best finish of eighth from the three races.

NEW HUNGARIAN CIRCUIT

A new circuit in Hungary was opened this week. Giancarlo Fisichella drove the first laps of Balaton Park, which crams 16 corners into its 2.557-mile anti-clockwise layout. It has been built with over €200million investment to FIA Grade 1 specification, although an initial application for a Grade 2 licence has been made in order to host international race events.

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BRIT SOWERY GETS INDYCAR TEST CHANCE

INDYCAR

US-based Brit Toby Sowery is to get his first run-out in an IndyCar at Sebring next month.

The 26-year-old is to test with Rahal Letterman Lanigan Racing at the Florida airfield circuit as he seeks to establish a foothold at the peak of US open-wheel racing in 2024. Sowery impressed in his rookie Indy Lights season in 2019 by taking third in the standings with one race win, but has struggled for finance to pick up a regular ride since then. He is subbing for five races this season in Lights, renamed Indy NXT, at HMD Motorsports in place of Josh Pierson, who has date clashes in the World Endurance Championship. Sowery picked up a third place at Barber Motorsports Park in his only race so far in 2023.

“After the frustrations of 2020 and 2021, I focused on building a strong team and a more strategic approach to reaching IndyCar,” said Sowery. “This test is a massive moment for my career, and I am more hungry than ever to deliver the results I know I am capable of and show what I can offer on the IndyCar stage.”

“Bobby Rahal [team boss] came to meet me in the UK earlier this year; his passion for the sport is infectious. I also visited the new facility before the start of the season and was hugely impressed by the dedication and commitment to reaching their ultimate goal.”

“After a year-and-a-half hiatus, he’s had a great podium finish at Barber and showed his potential,” added Rahal. “We’re looking forward to having him with us at the test.”



NURBURGRING 24 HOURS Audi Sport has revealed what it describes as “an exciting reinterpretation of unforgettable liveries” for four of its R8 LMS GT3 Evo II racers for this weekend’s Nurburgring 24 Hours. We’ll forgive the marque for hailing it as “the world’s biggest endurance race” (Le Mans, anyone?), and pick out the mid-1990s Super Touring paintjob, to be sported by the Phoenix-run car of Mike Rockenfeller, Timo Scheider and Martin Tomczyk.

Rossi lining up BMW WEC effort



LE MANS 24 HOURS

Valentino Rossi insists that he is on course to make his Le Mans 24 Hours debut in 2024. The bike racing legend is billing his participation in the Road to Le Mans support event this year as a precursor to racing in the new LMGT3 class 12 months later.

The seven-time MotoGP world champion will contest the two 55-minute races on the full Circuit de la Sarthe this year for the WRT team with which he is again contesting the GT World Challenge Europe. He described the outing aboard an M4 GT3 as “a great chance because it uses the same circuit”.

“I will try to prepare for the circuit on the simulator; I am very curious,” said Rossi, who scored his first podium in the GTWCE at Brands Hatch last weekend. “I cannot wait [for the races and] also to stay there for the 24 Hours week. Le Mans is the most famous race in the world and

for sure it is a target. I think we will try to do it next year in a GT car.”

A test later this year aboard BMW’s new M Hybrid V8 with WRT, which will mount the German manufacturer’s factory campaign in the World Endurance Championship’s Hypercar class, remains on the cards. Rossi outlined aspirations to race the car, but said it would “depend very much on my performance and my speed”.

Rossi wouldn’t be drawn on whether an LMGT3 assault on Le Mans next year would be part of a full WEC campaign, though there’s a strong chance he will be able to make the move with WRT. Team boss Vincent Vosse has confirmed an interest in being the marque’s representative in the new GT class. “Of course, it is something we are looking at; it’s on the agenda” he said. “But it is not done yet; we cannot say it is something definite.”

GARY WATKINS

P36 BRANDS GT ACTION

F1 EMILIA ROMAGNA GRAND PRIX PREVIEW



Imola

Length 3.050 miles

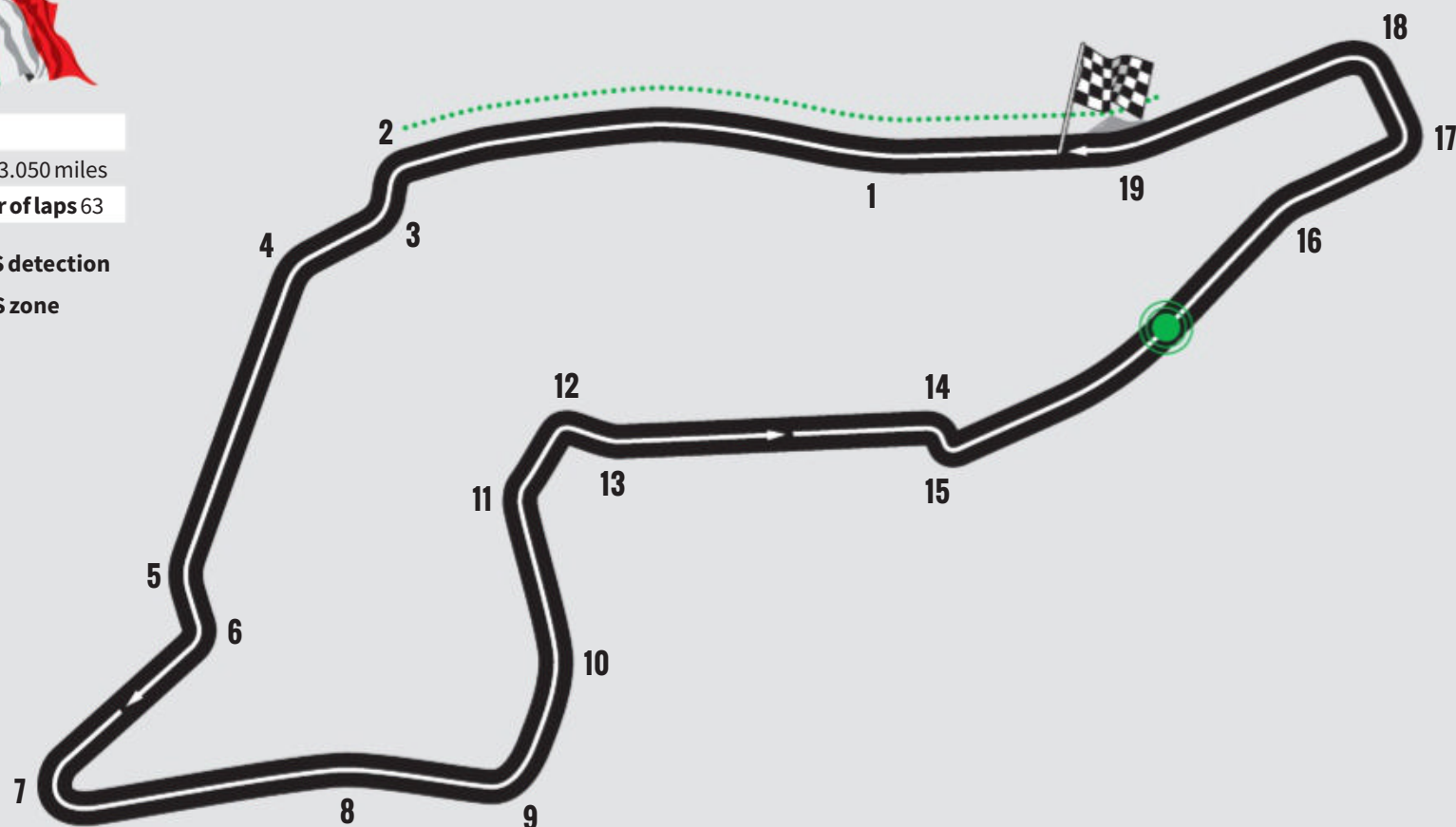
Number of laps 63



DRS detection



DRS zone



UK START TIMES

Friday 19 May

FP1 1230 FP2 1600

Saturday 20 May

FP3 1130

QUALIFYING 1500

Sunday 21 May

RACE 1400

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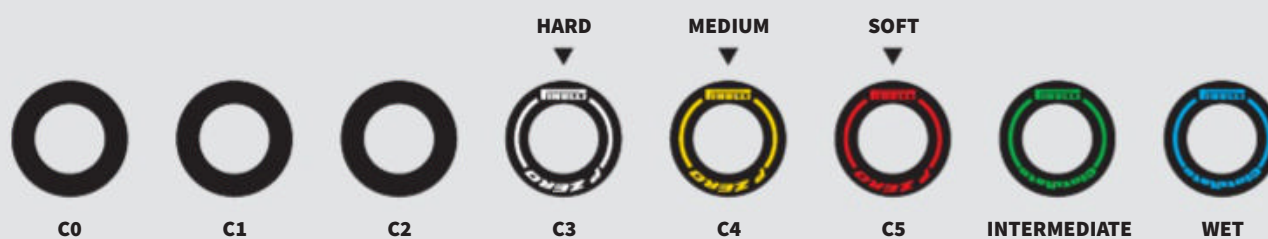
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TYRE ALLOCATION



CHAMPIONSHIP POSITIONS

Drivers

1	Verstappen	119
2	Perez	105
3	Alonso	75
4	Hamilton	56
5	Sainz	44

Constructors

1	Red Bull	224
2	Aston Martin	102
3	Mercedes	96
4	Ferrari	78
5	McLaren	14



IMOLA STATS

Previous winners

2022	Max Verstappen	Red Bull
2021	Max Verstappen	Red Bull
2020	Lewis Hamilton	Mercedes
2006	Michael Schumacher	Ferrari
2005	Fernando Alonso	Renault
2004	Michael Schumacher	Ferrari
2003	Michael Schumacher	Ferrari
2002	Michael Schumacher	Ferrari
2001	Ralf Schumacher	Williams
2000	Michael Schumacher	Ferrari

2022 POLE POSITION

Max Verstappen

1m27.999s

POLE LAP RECORD

Valtteri Bottas

1m13.609s (2020)

RACE LAP RECORD

Lewis Hamilton

1m15.484s (2020)



Laps led

Michael Schumacher	317
Ayrton Senna	237
Alain Prost	141
Max Verstappen	124
Nigel Mansell	113
David Coulthard	100
Nelson Piquet	99
Damon Hill	96
Ralf Schumacher	77
Mika Hakkinen	64



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A lesson from 2013

The introduction of a tougher slick tyre construction from the British GP has echoes of a change by Pirelli a decade ago. Will it have a similar effect on the story of the season?

ALEX KALINAUCKAS

Red Bull's world champion retiring from the front of the British Grand Prix and Sergio Perez exiting with a puncture. That would be quite the surprise at Silverstone in seven weeks' time.

But that's what happened in 2013, albeit when Perez was in his sole season at McLaren, Max Verstappen was still karting and the Red Bull champion was Sebastian Vettel. And it's worth recalling here, because a significant moment in the 2023 season has just arrived for the biggest player in that sunny event of nearly a decade ago: Pirelli.

Before Perez's spectacular exit, three other drivers had already suffered dramatic punctures. Race director Charlie Whiting came close to red-flagging proceedings. This was Pirelli's nightmare, one it had been fearing so much that it had already asked the FIA to switch back to the tougher tyre constructions it had been running in 2012. It only got approval to do so after those Silverstone scenes.

Last week, Pirelli revealed that it will introduce a tougher new construction of slick tyre from the 2023 British GP. It opted to act after gathering information suggesting the teams were making such rapid progress in updating their ground-effect machines with higher downforce levels – even around the floor changes required to eliminate porpoising – that they'd already reached what had been predicted for the end of 2023. It wanted to do so before the high-speed tracks that test F1 tyres so much, such as Silverstone, were reached.

“In theory it should play into the hands of teams struggling more with tyre wear, such as Ferrari”

The Miami pole lap going down almost two seconds in a year was cited as the best example of what is happening, but Pirelli also had in-race load data to support its hypothesis. Unlike what surely now must be said of the problems with the early 2013 rubber, there isn't a safety concern on the current tyres. Indeed, F1 has long since moved on from the high-degradation races of the years early in Pirelli's tenure, now in its 13th season. But tyre management is still the ultimate difference between success and failure. Red Bull's RB19 is aerodynamically mighty to lead the field even when Charles Leclerc hasn't thrown away Ferrari's chance to get among Verstappen and Perez in qualifying. But it then treats its tyres so gently while its rivals chomp through theirs over a race stint, its stable platform reducing the sliding that sends harmful temperature spikes through them.

What Pirelli has announced raises questions about whether that

situation will continue from Silverstone onwards. And, other than challenges in managing team-mate harmony, getting things wrong on tyres is the only current visible Red Bull weakness. Its only defeats since it lightened the RB18 – other than the 2022 British GP, which Verstappen was on course to dominate before picking up damage from debris – have occurred when Red Bull got its sums wrong on the tyres. Austria and Brazil went to Leclerc and George Russell respectively as a result last year.

In 2013, Pirelli's change back to its older, stronger constructions led to a period of Red Bull dominance not witnessed again until last year. Vettel, already the master of those Adrian Newey-penned designs, could just press on faster, for longer. That is surely the same expectation for all F1 teams with the altered rubber coming for Silverstone. Pirelli has here acted before concerns over tyre safety even became a question. But while Red Bull will have to adapt alongside its rivals and this opens it up to possible tyre-related vulnerability, it's unlikely to be the game-changer of 2013.

Pirelli is set to stay in the headlines at this weekend's Imola race. Pre-event concerns regarding torrential rain in the Emilia Romagna region mean that there are even worries about the race going ahead, but, assuming it does, and the forecasts are right, the new tyre blanket-less full wets should see some action.

If qualifying is dry, an experiment will take place where drivers use hard tyres in Q1, mediums in Q2 and softs in Q3. This could well be interesting in its own right, because drivers often struggle for the confidence to push as required straight away on a new compound, which is why big gains often came late in Q3 when the requirement to start races on rubber from Q2 meant the frontrunners were often switching back from the mediums. Therefore, a premium on early Q3 pace and mistake-free first runs becomes even more important, which is something that caught Verstappen out in Miami.

But Pirelli also hopes this system – a trial driven primarily by sustainability requirements, the manufacturer shipping only 11 sets of slick tyres per car and not 13 as usual for this round – will lead to more race strategy variation. This is because its compound choices for Imola 2023 are a step softer than they were last year, so, with fewer tyres being used in qualifying, teams might be tempted away from safe one-stoppers come Sunday with extra fresh hards and mediums available. Rain could change all of that anyway.

But the coming slicks construction change is a more notable moment overall for the story of the season because of what happened 10 years ago. In theory it should play into the hands of those teams struggling more with tyre wear, such as Ferrari. But there's also a feeling that Red Bull is holding some performance back anyway and that this could simply allow the team to use more of it. Anyone pinning hopes on this dramatically altering 2023's tale should instead remain realistic. 🍷

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It's too early to write off de Vries

The AlphaTauri driver's troubled start to his first full F1 season is not reason enough to put his position under threat. He deserves to be cut some slack

JAKE BOXALL-LEGGE

Nyck de Vries's start to life with AlphaTauri has certainly been less than felicitous. After setting a high benchmark in 2022 during his Monza cameo for Williams in place of Alex Albon, when he scored ninth, the opening quintet of races in 2023 have been scoreless for the Dutchman. The usual rookie growing pains combined with uncompetitive machinery escalated somewhat in the gruelling Baku-Miami double-header.

A Q1 crash and a further shunt during the race in Baku compounded de Vries's early misery in 2023. Miami proved to be another missed opportunity, despite qualifying strongly; de Vries broke into Q2 to start ahead of team-mate Yuki Tsunoda, but a first-corner lock-up on race day caused contact with Lando Norris and scuppered his chances of a breakthrough point.

The Frieslander urgently needs something to turn the tide, especially amid the rumours that his seat may be under threat. But any decision to cut de Vries loose this early would not be the right one at this point.

De Vries is capable of much more. He's self-aware enough to recognise that and, despite the volatile reputation of Helmut Marko's approach to driver management, the *grandes fromages* at Red Bull and AlphaTauri are experienced enough to recognise that they must first give de Vries a chance to dig himself out of a hole. After all, this is a driver who comes into F1 on a full-time basis after spending the past few seasons driving vastly different machinery. Practice runs and race cameos in 2022 will have helped de Vries acclimatise to a certain point, but jumping into a fleet of Mercedes-powered cars with different systems would have offered limited experience for the Honda-powered AlphaTauri AT04.

The transition from Formula E to F1 is also a path seldom trodden, particularly since the format and the driving styles are completely different. Consider the struggles that Antonio Giovinazzi had in adapting to Formula E, where the amiable Italian spent much of the first half of the 2022 season explaining how difficult the championship was. Making the reverse move is just as difficult to pull off, and de Vries's F1 chance arrived as a surprise, following his heroic turn at Monza last year. De Vries never stopped dreaming that it would happen but was level-headed enough to realise that the odds were dwindling, and his intent was to link up with the Maserati MSG squad in Formula E (formerly Venturi) to partner Edoardo Mortara.

If his Formula E results weren't enough for others to believe that de Vries was worthy of snapping up his AlphaTauri drive, then surely his Formula 2 results were. Many choose to employ the relatively weak 2019 field, whom de Vries beat to the F2 title, as a stick to beat him with – but they're looking at the wrong year. The 2018 campaign was arguably the more impressive season, in which

he was part of a four-man band for race wins with Norris, Albon and eventual title winner George Russell. A championship surge arguably arrived too late for de Vries, as the Prema squad struggled to get on top of a troublesome new car, but he was strong in the second half of the year.

In de Vries's arsenal is an ability to battle hard and to control races with scintillating pace. But amid the transition and the difficulties of the AlphaTauri machinery, he hasn't been able to show those traits. Instead, it has only brought out his less-desirable qualities, among those being a penchant to misjudge passing moves or relying too much on bravado to overcome gaps in performance. If those can be ironed out, then de Vries can start to repay the faith in him shown by Marko and Franz Tost.

“In de Vries's arsenal is an ability to battle hard and to control races with scintillating pace”

Off track, he is already proving his worth. After experiencing last year's AlphaTauri in the end-of-year Abu Dhabi running, de Vries presented the engineers with a list of things he felt could be improved after last year's AT03 had regressed throughout the season. His ideas had initially taken the team aback, but Tost backed his new driver's feedback and direction, albeit too late to have too much of an effect on the 2023 car's initial spec.

It's still far too early to come to a definitive conclusion about de Vries, and the other rookies on the F1 grid – Oscar Piastri and Logan Sargeant – have also struggled in the opening barrage of races. The expectation that de Vries would run an out-of-form Tsunoda much closer off the bat was always going to be difficult to live up to, especially since Tsunoda has been a revelation in 2023 and has stepped up to take on more responsibility while the AT04 is one of the least potent cars on the grid.

De Vries at least deserves the opportunity to respond, and outqualifying his younger team-mate in Miami was a start. Imola is next, and he has at least been able to experience the track in the Italian squad's machinery, yielding an opportunity to reset at a familiar venue with familiar equipment. His technical feedback has at least ensured that he is not completely expendable, and AlphaTauri will need de Vries to keep pitching in as it attempts to address its slide to the back of the grid. His job is to ensure that, when his knowledge and experience yield diminishing returns, his performances are no longer of Tost's and Marko's concern. 🍀

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How MotoGP stands at milestone

Last weekend's MotoGP round at Le Mans marked two-wheeled grand prix racing's 1000th event. A good time to assess what's hot and what's not...

LEWIS DUNCAN

Of all the places to celebrate such a milestone as a 1000th grand prix event, Le Mans is a pretty good one. The Circuit de la Sarthe oozes history and a passion for motorsport, so it's a symbolic place to reflect on motorcycle GP racing and look to its future.

Two-wheeled racing has come a long way since the first event that counted towards the world championship. That 350cc race at the Isle of Man TT in June 1949 bears no resemblance to what spectators witnessed in France last weekend.

It's good to appreciate the past, but the world championship we have now is much faster and much safer. It's also vastly more popular and available now than it was in 1949. But it's clear that most within the series' sphere think two things: the spectacle is still fantastic, but the popularity of the championship has collapsed in recent years.

"Something a bit special happened with me, because there were a lot of people who didn't follow motorcycles and then became fans," MotoGP legend Valentino Rossi told Autosport at the Spanish GP – the 999th GP event. "Now, let's say that the popularity levels of the world championship have returned to normal, to the stage before I came along. They are looking for formulas, like sprint races, to attract more people, but in sporting terms I think the championship is working. It's exciting to watch MotoGP, from the stands or on TV."

MotoGP's decline in popularity has not gone unnoticed by the championship's promoter, Dorna Sports, and definitely

"It seems like it is trying to copy from the F1 playbook on how to improve mainstream appeal"

not series owner Bridgepoint.

Jerez and Le Mans are, unfortunately, outliers when it comes to MotoGP's popularity, with a record-setting 278,805 people descending upon the French venue over the weekend. But take a race like the Spanish GP at Jerez: in 2015, 243,570 turned up across the weekend, while in 2016 that number fell to 120,255. It rose to 129,890 in 2017, continued to grow to 144,771 in 2018 and 151,513 in 2019 before dropping to 123,101 in 2022, then rising again to 163,479 in 2023.

There are some caveats to consider, such as the COVID pandemic forcing almost two years of spectator-less events and an economic situation in the wake of the crisis that has changed spending habits. But the Formula 1 Miami GP this month welcomed 270,000 fans across the weekend and the cheapest weekend ticket, which was general admission, was \$590. For MotoGP's visit to Le Mans, a

three-day general admission ticket cost €98. At Mugello, the same ticket is €160; in Germany it's €109; and at Silverstone it's £100. MotoGP isn't exactly unaffordable, yet a lot of events are struggling to get fans through the door.

The loss of superstar names such as Rossi, Jorge Lorenzo and Dani Pedrosa, as well as injury woes for Marc Marquez, hasn't helped. But the spectacle on track is still wildly unpredictable, with the addition of sprint races bringing about chaotic Saturday contests to create a double bill. The top 12 in qualifying at Le Mans were covered by 0.891 seconds, with pole decided by 0.058s. And that is standard now in the premier class.

How fans access the series is something that new CCO Dan Rossomondo, who was previously vice-president of global partnerships and media at the NBA, is starting to work on as outside influence finally penetrates Dorna's ranks.

But, for all of its flaws, the fact that MotoGP is still here at its 1000th GP event is testament to Dorna. When it took over as commercial rights holder in 1992, it steadily built the championship up as a mainstream presence. It navigated MotoGP through the 2008 financial crisis and helped propel the series into new competitive heights – first with the CRT rules in 2012 to boost grid numbers by allowing production-based platforms to allow new teams to run cheaper bikes, before bringing in the unified electronics to level the playing field between factory and satellite teams. Dorna brought in financial aid to help satellite teams stay competitive, guided it through COVID, and – until this season – had six winning manufacturers on its grid.

It's clear that MotoGP isn't in the best of health right now. Introducing sprint races and creating docuseries to help bring in a new audience are solid ideas, but aren't unique to MotoGP. It seems like it's trying to copy from the F1 playbook on how to improve mainstream appeal, and it's not working.

Rossomondo's arrival will help the series figure out a lot of things about itself. And while he isn't shy about copying good ideas from elsewhere, he wants to ensure that MotoGP is viewed in its own right. Unquestionably, a push to engage a new audience will ultimately lead to the alienation of an older generation, and the seemingly eternal 'it was better in my day' debate will never go away. But its brilliance as a racing spectacle remains strong.

"Some people will say they love two strokes, others four strokes, other people will love the 1990s more..." said Aleix Espargaro, who has competed in 30% of all GP weekends. "These are just opinions and everyone has their own opinion. We always try to compare, but sometimes this is a mistake. Sometimes we just need to try to improve and have fun with what we have now." ❄

 **P42 MOTOGP REPORT**

COVER FEATURE

What next for McLaren?

A significant shake-up of senior staff and the promise offered by big infrastructure upgrades are part of the plan to get back to winning ways

ALEX KALINAUCKAS

PHOTOGRAPHY  motorsport
IMAGES

Norris and Piastri
have scored just 14
points from the first
five rounds of 2023





Brazil 2008: fresh-faced
Hamilton's first title
was last for McLaren

FERRARO

MAUGER

SINCERELY-MEDIA/UNSPLASH



Pneumatic air leak
forced Norris to stop
five times in Bahrain

TEE



Sanchez (left) was lured
from Ferrari; Prodromou
has new senior aero role

GORIA



TEE



Norris rear-ended
by de Vries at start
of the Miami GP

POTTS

S

ome people have been seeing McLaren in a very different light recently. In the 2019 film *Hobbs & Shaw*, the McLaren Technology Centre factory becomes a villainous organisation's base. In the HBO science fiction television comedy series *Avenue 5*, the same building is restyled as mission control for an interplanetary cruise ship operator.

Most recently, Disney+ Star Wars TV spinoff *Andor* reimagined the MTC as a bustling space port.

But, to Formula 1 fans, the results of the real-life work completed inside the gigantic Norman Foster-designed complex appear very familiar. If anything in 2023, they're looking rather worse than previous years, when it appeared that the orange team was finally gaining the momentum required to take it back to race and title-winning peaks it has not scaled since 2008 and Lewis Hamilton's first world championship triumph.

At this stage in 2022, McLaren had racked up 46 points and sat fourth in the constructors' championship, its start to life in the new rules era exactly where it had finished the last in 2021, and even behind the third place it rather impressively secured in 2020.

Now, however, the squad is fifth in the teams' standings with just 14 points from the opening five rounds. It's just a one-position slip, but standing in stark contrast are the results and silverware haul of Aston Martin. McLaren's former midfield rival is currently Red Bull's closest challenger and has four podiums and counting. Since 2019, McLaren has managed eight rostrum visits – a total Aston seems on course to match in this campaign alone, judging by the typically ferocious form of its new talisman, former McLaren star Fernando Alonso.

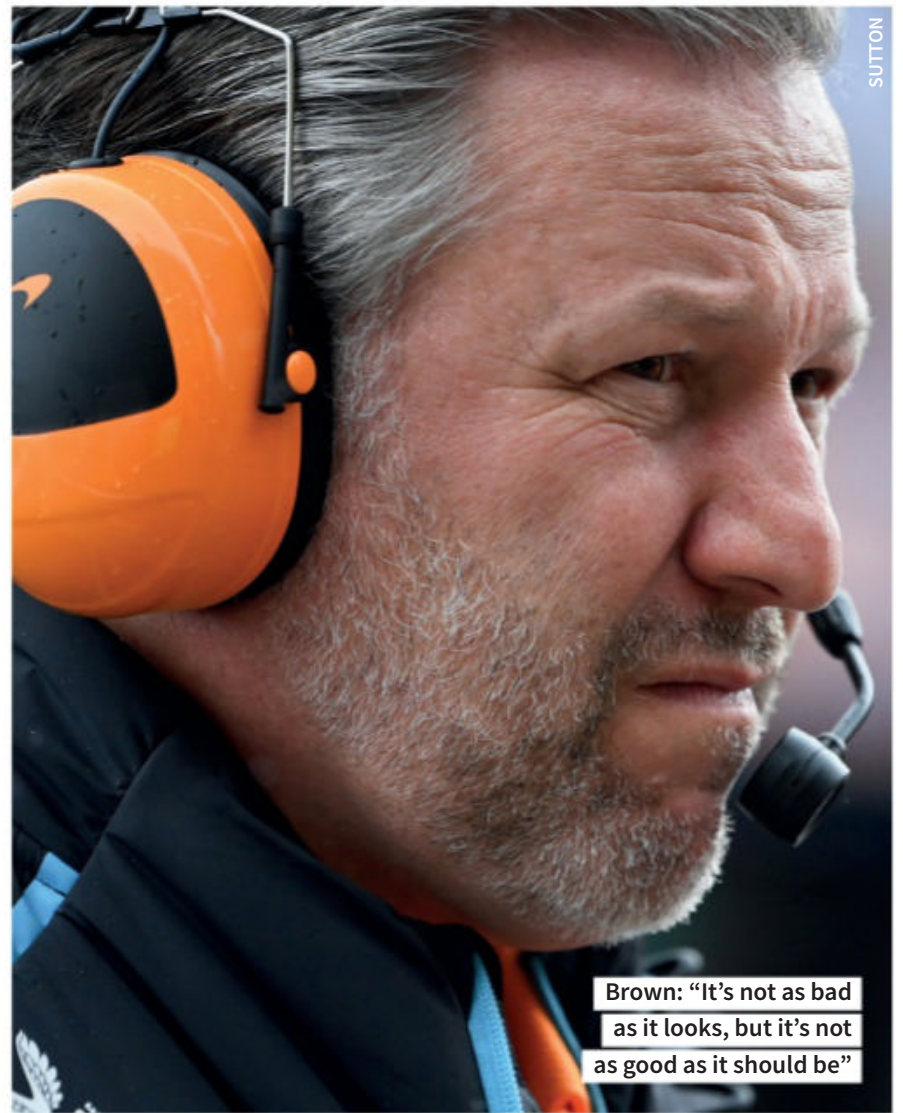
"It's not as bad as it looks," insists McLaren Racing CEO Zak Brown. "But it's not as good as it should be."

Correct on both scores. First off, McLaren has been mightily unlucky at various points so far in 2023. In the season opener, Lando Norris had to stop five times due to a pneumatic air leak and ended up 17th, establishing his worst ever F1 career result, which he has since equalled twice more. In the same Bahrain race, new arrival Oscar Piastri retired due to an electrics issue developing on his steering column. Next time out in Jeddah, a chunk of Piastri's front wing came loose thanks to contact with Pierre Gasly's Alpine, and flew back and hit Norris's wing, destroying both their races in one fell swoop.

Piastri was so seriously struck with a stomach bug in Baku that he could only manage to eat "four pieces of toast for the whole weekend" but he finished a still impressive 11th, two spots behind Norris. This followed both McLarens making the points in Australia and Norris reaching Q3 in 'normal' Baku qualifying, which Piastri had done in Jeddah. Then most recently in Miami, Norris was rear-ended by the AlphaTauri of Nyck de Vries at Turn 1, which damaged his car, while Piastri ended up 19th after his MCL60 suffered a brake-by-wire failure early on, which he had to drive around to the end, finishing a lap down on Max Verstappen. Norris finished just two spots higher again, but this time 87.7 seconds behind the winner.

All the Bahrain woe was, however, self-inflicted, given the circumstances that stifled both McLarens there. And in Miami, Norris insisted that the estimated 0.2–0.3s he was losing as a result of de Vries's latest rookie gaffe "didn't change my day". McLaren's 2023 malaise runs deeper than it and its fans would like. And it all comes back to inside the gleaming MTC.

"Running through all the big changes was an apparent frustration that updates hadn't been coming quickly enough, nor making big enough gains when new ideas did arrive"



Brown: "It's not as bad as it looks, but it's not as good as it should be"

Upheaval at home

It was at McLaren's HQ in February where both Brown and newly appointed team principal Andrea Stella frankly admitted that the team would be starting the season off the pace and not where it had targeted being in the second year of F1's new rules cycle, thanks to missed car development targets. Stella felt his squad's aims therefore had to be "realistic" and muted, a wait until Baku in late April required before a major car upgrade would put the MCL60 back where it should have started in Bahrain in terms of performance.

That milestone passed two races ago. But between those two points, McLaren enacted a major staffing upheaval as a result of its underwhelming position and poor car design execution. This not only revealed what if felt had been going wrong, but in turn it impacted the efforts to turn things around.

Headlining the change announced after the second round in Jeddah was the exit with immediate effect of former technical director James Key, in post since 2019 after joining from what was then Toro Rosso. But McLaren also moved to overhaul its technical structure, replacing Key's position with three roles reporting to Stella.

David Sanchez will become technical director of car concept and performance at the start of next year after leaving Ferrari, with Peter Prodromou moving to be technical director for aerodynamics and Neil Houldey promoted into the newly created role of technical director for engineering and design. Prodromou will be supported by the promoted Giuseppe Pesce, as director of aerodynamics and chief of staff. Above them all, Piers Thynne – previously the team's operations director – is a new dedicated chief operating officer for the F1 team, rather than its overall parent company, supporting Stella.

"What we've done is optimise the organisation and given real clarity to roles," Brown explains of the decision making around these big changes. Running through them all was an apparent frustration that previously McLaren's updates hadn't been coming quickly enough, or making big enough gains when new ideas did arrive.

"At the end of last year, second half of the year, I wasn't happy with the progress we were making. And so, when I got the opportunity to put in Andrea Stella as team principal [following Andreas Seidl's departure to Sauber/Alfa Romeo/soon Audi], and he's very technical, that was >>>

a move I was very happy with.

“First thing I asked him to do is take a look at why we weren’t developing at the pace I felt we should. And what he identified was that we structurally weren’t optimised. So, we went about setting out what would the optimum structure look like.”

As that new technical structure beds in, in the meantime Norris reckons McLaren is “fighting for ninth and 10th at the minute” – the scraps left behind from the drivers feasting from Red Bull and Aston, and to a lesser extent Mercedes and Ferrari too. “It doesn’t sound like a lot,” Norris adds, “but the small points will add up.”

But that is not remotely near what McLaren’s ambitions add up to. Nor is it befitting the ultra-successful history of a team that has amassed 20 world titles. So, what does McLaren have to do to recover to the positions it wants to be fighting for?

Short-term aim: fix the MCL60

Off track, 2023 is quite the year for McLaren, as it celebrates 60 years since its formation as Bruce McLaren Motor Racing. The team’s followers should look out for a particular celebration around the upcoming Monaco GP. That anniversary is why McLaren’s 2023 challenger has the designation it does. But, based on what it’s achieved so far, the MCL60 is not going to go down as one of the team’s most-famous or most-loved creations.

Its 2021 machine, the MCL35M, is McLaren’s most recent winner, the memory of that momentous 1-2 result at Monza still providing

“Even since the Baku upgrade, it suffers badly from an aerodynamic inefficiency, aka, a drag problem. McLaren admitted as such back at its season launch”



Stella says there’s a renewed energy and cohesion at McLaren

a certain boost to team staff. But that car also claimed four other podiums thanks to Norris and another near-win in what should be the final Sochi F1 race. The MCL60 can’t get to such lofty heights, but improvements have been made.

“We have a good baseline to really work from now,” Norris says of his car since it was fitted with the floor upgrade Stella highlighted back in February. “[That means] more confidence to be able to work from where we are.”

The MCL60, which unlike its MCL36 predecessor is running at the weight limit, is “strong in straightline braking”, says Stella, who adds: “We see that the car is strong in high-speed sections.” F1 is yet to visit any truly high-speed track layouts so far in 2023.

But even since the Baku upgrade, the car suffers badly from an aerodynamic inefficiency, aka, a drag problem. McLaren admitted as such back at its season launch. The class of the current field, the Red Bull RB19, has exactly the reverse situation and its aero efficiency is one of its key strengths.

The MCL60 also suffers when running in low temperatures and low-grip conditions, which is why McLaren felt Miami was a “reality check”, according to Stella. The course around the Hard Rock Stadium is full of the “longer corners” Norris reckons his machine is not well suited to. And this centres on its off-throttle and off-brake performance, where the drivers are clinging on trying to keep speed up with attacking braking approaches. But they don’t have the tools and grip to compensate sufficiently. On this, Stella says, “our car doesn’t work very well”.

The Baku update featured a heavily revised floor edge, plus inevitable harder-to-spot changes to the venturi tunnels underneath. Its main aim was to add downforce, while not fundamentally changing the MCL60’s handling characteristics. A new beam wing addition was, however, targeted at improving the aero efficiency problem.

“It’s not like I saw some different [floor] channels on another car [and] I can copy, it’s a very three-dimensional flow,” Stella explains. “This is also why you not only have to get the basic concepts right, which is something we haven’t done for the start to the season, but it also starts to become a game of millimetres here and there.”

These critical tiny changes will feed into the next part of McLaren’s update plan. After minor refinements arriving this weekend at Imola, this is coming in two more major upgrades, one either side of the summer break.

The first will be introduced in a split over the races in Montreal in June and at Silverstone in July, with Canada likely to be the point where McLaren introduces new upper aero surface shapes, which Stella suggested in Australia would amount to looking “like kind of a B-spec car”. For Silverstone, another floor change is predicted.

This approach skips changes coming at the next sprint weekend in Austria, where track time is very limited. McLaren opted to bring its first new floor to Baku and the first 2023 sprint because evaluating the correlation between a floor’s predicted results and real ones isn’t a complex task. Dozens of pressure taps built into them mean the team can quickly create a map of what the aero is doing and see if it matched the MTC factory’s predictions. Happily for McLaren, it did in Baku.

“We have definitely been reassured that as soon as we saw the initial data from the car, [it was] correlating with what was expected,” Stella explains, “and there was no significant level of porpoising.”

The Baku floor/beam wing update alone is thought to be worth up to 0.3s in lap time gain versus what the MCL60 was capable of in its launch spec. With much bigger changes coming, Brown hopes there is much “more to come” in terms of pace improvements.

But, as he points out, “that’s what the nine other teams are doing” too. And so McLaren is also having to look longer-term for those desired greater prizes.

Medium-term aim: harness new technical structure and escape the crowded midfield

Bigger aims for F1 squads get more complex, which means longer-term thinking. And a key step on McLaren’s journey will be to combine the ➤



Data from new floor introduced in Baku has “reassured” the team

HONE



Former midfield rival Aston Martin has made leaps and bounds

TRENTITZ



PIASTRI'S IMMEDIATE IMPACT

"We're very impressed with him. He's very focused. He's not really made any big mistakes. Typical exploring the limits, so the odd lock of a wheel here and there, but he's not been to all these races. So, early indications are we've got a future world champion on our hands. We just have to work to give him a faster car now."

Quite the assessment from McLaren Racing CEO Zak Brown. Quite the boost for a Formula 1 driver. And the racer in question is McLaren's fourth rookie signing in 10 years – the one it went to court to secure: Oscar Piastri.

Almost one year on from celebrating his 21st birthday as an Alpine reserve driver at the Australian Grand Prix, Piastri was securing his first ever F1 world championship points in his home race, just like his mentor and manager Mark Webber did 21 years earlier on his debut with Minardi.

But Piastri has shone

even within the darker moments of McLaren's season. He made Q3 with a beautiful qualifying display in Jeddah, where team-mate and established McLaren star Lando Norris made a costly error in clouting a wall and damaging his MCL60's suspension and steering in Q1. In Baku, Piastri persevered despite a stomach bug to finish less than three seconds off a repeat points performance behind AlphaTauri's Yuki Tsunoda.

Then in Miami he was "excellent in being able to cope with" an early

"EARLY INDICATIONS ARE WE'VE GOT A FUTURE WORLD CHAMPION ON OUR HANDS"

brake-by-wire failure that wrecked his race, said McLaren team principal Andrea Stella. After a few lock-ups with the system suddenly not working as it should, Piastri adapted his braking efforts and gained back nearly 2s per lap compared to when he had been working out what to do.

But perhaps the most significant assessment of what Piastri brings to McLaren was provided by Norris ahead of the Miami GP, when the Briton suggested that his third F1 team-mate was able to get closer to his level than Daniel Ricciardo in the previous two years. This is something that McLaren had been hoping for – that such a development would ideally both raise Norris's game and balance its points haul between its drivers. Only its car limitations is hindering that plan.

"It's a good vibe,"

Norris says of his new relationship with Piastri. "What's it like? Honestly, just as a genuine answer, it's not too different [to] how I worked with Daniel. Maybe they [McLaren's engineers] lean on me a little bit more for the knowledge of how we were in previous years, to look at the development from last year to this year and things like that. But apart from that, you both give your sides of the feelings and the story of what's going on to the car, what you want from the car – which aligns very well.

"I wouldn't say we have the same driving style, but our comments and complaints are generally the same. So, I think that's a good thing. He's a lovely guy. Down to earth, normal guy, hard worker and so on. Different, I guess, to Daniel. I feel like a bit of a contrast of Australian but still good fun. He's very fast at the same time. Probably been pushing me a little bit more than the past couple of years."



gains and lessons learned developing the MCL60 with the potential it feels it has in its new technical structure.

According to Norris, Stella and Brown, even just the reorganisation itself has caused quick improvements, let alone the impact of still-to-arrive hires. A McLaren recruitment drive to bolster its aero department led to new deals with 15 people, including some from rivals at Red Bull, Aston and Ferrari. It is headlined by Sanchez, but also includes signing senior Aston aerodynamicist Mariano Alperin.

“It’s about the efficiency and how you work through things and coming up with the ideas from that side of it,” Norris says of the impact of the technical team changes. “And working from there, and just how people work together at the same time, just the teamwork and team ethic of it all.”

When asked about his charge’s comments, Brown claims that now “there’s a lot of energy and clarity inside the MTC”, while Stella reckons “certainly, what we have observed over the last weeks is a re-energised group of people and if anything, even more cohesion”.

Soon to be boosting the design effort is McLaren’s new simulator and manufacturing facility. But, most significantly, its new wind tunnel will finally be on stream inside the MTC next month after being commissioned by Seidl back in 2019.

Such massive infrastructure projects always take time to complete and then bear fruit, but it is understood that in McLaren’s case this was hampered by the pandemic and delays wrought by the lockdowns and various working restrictions, plus strains on resources.

Soon, McLaren will stop using the Toyota wind tunnel in Cologne – an arrangement the team feels has limitations in addition to the obvious time/travel inefficiencies that have contributed to the drag issues of its current package, plus those in the MCL36 of 2022.

“Certainly with the wind tunnel that we use, it is even more difficult than other facilities and it will become easier and more representative in the wind tunnel that we’ll have available in the short term,” reckons Stella. “This is because you have a better representation thanks to, for instance, having adaptive walls in the [new] wind tunnel of what the car sees on track.”

The combined efforts of McLaren’s overhauled technical team and its new facilities must be aimed at significantly improving the handling characteristics of its F1 machines. Both Norris and former team-mate Daniel Ricciardo struggled to adapt their preferred styles to the McLaren package’s recalcitrant requirements on braking and corner entry – the Briton was able to cope better. Piastri noted back in testing that the MCL60 has a “similar” handling feel to the machine he only tested in 2022.

Addressing this for 2024 and through the next generation of McLarens would provide a major boost to its highly rated young driving stars. If it can be successful in doing so while outdeveloping its rivals, then logically McLaren would expect to escape what is a very crowded midfield.

This is exacerbating its struggles with the MCL60 – it leaves the team at the mercy of falling badly down the order, as it did in Miami, when other teams get things nailed at venues that suit them better.

Balancing that issue for McLaren is that it could be in a far worse championship position thanks to Alpine – its regular rival these past few years – dropping huge points chances in Bahrain, Australia and Baku. Only now are the two squads level on points, after Alpine scooped up eighth and ninth positions in Miami. “It’s unbelievably tight,” Brown says of McLaren’s current position. “You used to have a front, mid and back field. There’s no longer a back field. I wouldn’t even say it’s the big four. It’s Red Bull and kind of everybody else.”

“You used to have a front, mid and back field. There’s no longer a back field. I wouldn’t even say it’s the big four. It’s Red Bull and kind of everybody else”



Long-term aim: get back in victory and title contention

That Monza 2021 win felt like a major milestone on McLaren’s journey back to lasting F1 success. Two of the key players involved that day are gone, Ricciardo paying the price for his poor form compared to Norris’s over two years, and Seidl keen to take up a chance to head Audi’s upcoming F1 project closer to his home and family in Germany.

Norris feels that Piastri is pushing him closer than Ricciardo did, even based on their short time as McLaren team-mates (see panel, left). That should boost the team further should it successfully retrace its steps back to Monza 2021 and then push on beyond.

In a sign of McLaren’s confidence and intent, Brown explained in Miami that he’d like his squad and its rivals to sign up to F1’s next Concorde Agreement “sooner rather than later, just for the stability and longevity of the sport”. “I think everything’s working great, if you look at the health of the sport,” he says. “I also think it’s a little bit of a rinse and repeat. I think it’s working. I don’t think there’s much to add or change to the existing agreement, so I don’t think it needs to be a prolonged conversation either.”

The next Concorde Agreement would bind the teams from the start of 2026 and F1’s next car-design rules upheaval. Should McLaren’s progress not have been as great as it hopes by then, pressure will be mounting on Brown and co. Remember that McLaren used to have a three-person design team leadership structure when Stella joined from Ferrari back in 2015, which it abandoned feeling it was too confusing in 2018, and signed Key to lead the designs solo for the following year. Plus, there’s the chance that Norris might be poached by a rival at the end of his current McLaren deal, set to run out at the end of 2025, if things don’t improve as he wants.

But with the chance to leap up F1’s competitive order created by the new engine requirements, plus a mooted expansion in active aero parts, it begs the question of when teams such as McLaren will start identifying that as their big chance to fundamentally improve their competitive positions. That was a big talking and PR point with the change to the ground effect cars planned for 2021 and realised in 2022. Such a repeat in thinking in the run-up to 2026 would be quite the redressed set for McLaren... ❄️

NEXT WEEK

EMILIA ROMAGNA GP

Can McLaren banish its early season bad luck and harvest a decent points haul at Imola?

RACE CENTRE

WRC RALLY PORTUGAL

Rovanpera reminds everyone of his class

The reigning world champion hadn't won since October but put that right with a masterful performance for his ninth WRC victory

TOM HOWARD

PHOTOGRAPHY MCKLEIN AND RED BULL

W

ithout a win since becoming the youngest World Rally champion last October, and with only one podium in four events this season, Kalle Rovanpera's quiet start to his World Rally Championship title defence had started to raise questions. But in

Portugal last weekend, the Finn delivered an emphatic answer to prove once again that form is temporary and class is permanent.

Rovanpera already knew that defending his crown was going to be more difficult than winning the first, but few would have predicted his start to 2023 after raising the bar to heights never seen before from a 22-year-old in the WRC. Twelve months ago, Rovanpera didn't seem human during his relentless record-breaking run to the title. These mesmerising performances were so frequent that they had become the norm and were expected every time he jumped behind the wheel, leaving many surprised by his absence from the podium in the three events prior to Portugal.

This run was bought to an abrupt end last weekend and in some fashion: Rovanpera was back to his very best. The Toyota driver produced one of the best performances of his career to utterly dominate Portugal's tough gravel stages and win by almost a minute. And true to the 'Full Send' moniker that adorns his crash helmet and a rapidly growing merchandise range, the trademark Power Stage prowess returned to complete the perfect victory.

"It has been a bit too long coming but I knew when we get a clean

REE/RED BULL CONTENT POOL



Full send: Rovanpera was back to his best on Rally Portugal

weekend and a good drive we would be back in the game," said a relieved Rovanpera. "It was nice to have it here and be back."

While he ultimately made the victory look easy, it was far from it. Rovanpera admitted after Rally Croatia last month that he hadn't been preparing well for rallies by nailing the car set-up in the pre-event tests. With a premium on test days now as part of the FIA's cost-saving strategy of reducing teams to 21 days, Toyota elected to test in Sardinia prior to Portugal to gather knowledge for



“It has been a bit too long coming but I knew with a clean weekend we would be back in the game”

the upcoming round on the Italian island, where it struggled last year. It meant Rovannerpa was more hopeful than convinced that he would be on the pace in Portugal. Starting second on the road behind team-mate Elfyn Evans, who shared the points lead after his drought-breaking emotional win in Croatia, also wasn't ideal.

When asked whether he felt better-prepared, Rovannerpa replied: “I hope so, we chose to test for these two events in Sardinia so that makes it a bit tricky. I feel confident we have a good car now. For sure starting second is better than being first but it is not a big help, to be honest. Like we saw last year, you can do a good result from being first also if everything goes right.”

Everything pretty much went right for Rovannerpa on Friday, the toughest day of the rally. Rough stages that elevated the risk of punctures coupled with road-cleaning duties left those at the top of the order facing a damage-limitation exercise. But there were warning signs that something special was brewing after the morning loop, when Rovannerpa headed to the remote tyre-fitting

service after winning stage three to leave him only three seconds adrift of the rally-leading M-Sport Ford of Ott Tanak.

M-Sport, however, grabbed the early headlines as Pierre-Louis Loubet made the most of his advantageous road position to win the opening test and claim an early lead. Tanak took the honours in the second test to usurp his team-mate at the top of the leaderboard despite a challenging run through the rough roads. “It's a shaky ride at the moment – it feels like a wooden horse!” described the Estonian. “When it's smoother it's better, but on the bedrock it's a bit shaky.”

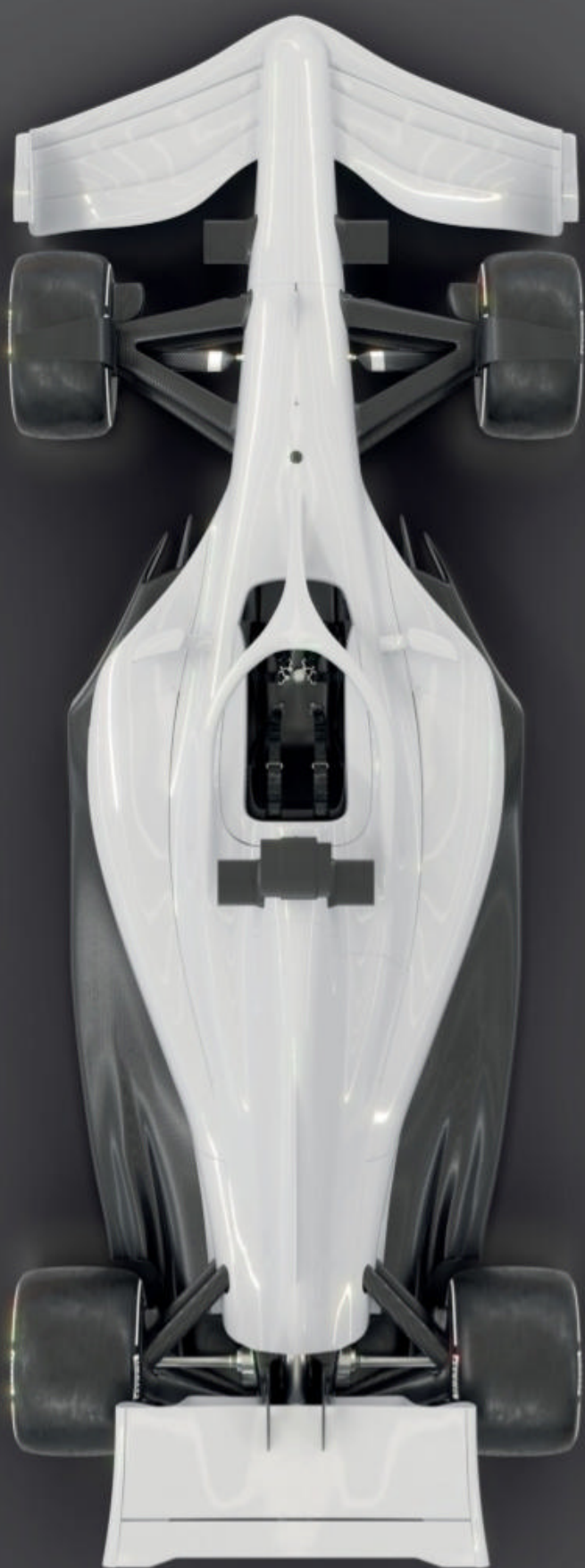
Some of the shine was taken off the British team's strong start when a small internal fire broke out on Loubet's Puma towards the end of the third stage. The Frenchman and co-driver Nicolas Gilsoul had the doors open as they crossed the finish line ready to jump out to attend to the fire that had emerged underneath the car. It was caused by the exhaust, which had moved out of alignment and was touching the chassis.

An angry Loubet threw his gloves to the floor in the belief that his rally was over. But once the fire was controlled, he was able to reach the remote service, although the prospect of retirement remained high since regulations permit only a couple of mechanics to assist, and only equipment carried in the car can be used to fix any issues. It meant brute force was required.

“Luckily the guys were able to get it back in alignment,” >>

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Hyundai part-timer
Sordo finished second,
far in Rovanner's wake

recounted M-Sport team principal Rich Millener. "I think there was some very precision kicking, it was as simple as that. You can't get to it [the exhaust], you can see the front and you can see the back. They lined the front up and kicked the back as hard as they could to get it straight again. That's rallying."

A thankful Loubet survived the scare and would go on to end the day fourth overall, less than half a minute adrift of the lead. While Loubet dodged a potential bullet, his team-mate and rally leader Tanak wasn't so fortunate. His front-right tyre came off the rim in stage four, spelling disaster for his victory hopes after dropping 54.1s. "It went on the start, I think," grumbled a frustrated Tanak, who dropped from the lead to seventh.

Tanak's problems initially handed the lead to Dani Sordo, who led Hyundai's charge, while team-mates Thierry Neuville and Esapekka Lappi struggled to find the set-up window. A month on from the tragic death of Craig Breen, the team-mate with whom he shared the third i20 N, Sordo honoured his friend by wearing a special Irish flag-liveried crash helmet, while all three Hyundai i20 Ns continued to carry tributes to the popular Breen. The heartbreaking loss was still felt in the service park and around the stages, and the droves of spectators paid respect by painting Irish flags on the roads.

Sordo's lead was short-lived as Rovanner showed his class to surge to the front by winning stages five and six, and from there he never looked back. The Yaris returned to the service park equipped with a 10.8s lead from Sordo, with Neuville rising to third, 26.0s back after an afternoon push. Lappi was 1.3s further back but comfortably ahead of Tanak in sixth. "I was struggling with the car in the morning, but once we got the set-up right it was good," explained Rovanner. "I just had to avoid all the stones but there



Lappi scored a second
consecutive podium
for a Hyundai 2-3



MCKLEIN

“The car has done its job really well. It was a difficult day and the cleaning effect was tough”

was thousands of them. You just hope for the best.”

It proved to be a bittersweet day for Toyota, though. Roanperera had stunned to lead, but the sister cars driven by Evans and Takamoto Katsuta were forced into retirement. Katsuta suffered a rare alternator failure that reared its head after the opening stage. He rejoined the action on Saturday. As for Evans, he and co-driver Scott Martin were lucky to emerge unscathed from a huge crash on stage seven. Evans was caught out by a fast, sandy left-hander, which resulted in a heavy impact with the trees that lined the road, the car rolling six times. Evans and Martin underwent extensive medical checks and the car was too badly damaged to continue.

“We had a few checks last night, which took some time, but it all turned out well,” sighed Evans. “The car has done its job really well. It was a difficult day and of course the cleaning effect as we knew was going to be tough, but I also struggled with confidence and feeling in the car to be honest. Things were working better and I had a better feeling in the stage but I just got caught out.”

Saturday provided the return of the ‘Kalle Roanperera Show’. There were several episodes last year, but this was perhaps its first episode of 2023. He was simply untouchable at times, winning five of the seven stages, but his best display arrived on the morning’s first test. He posted a time 12.8s faster than the next best from Lappi, and a further 0.5s faster than his nearest rally rival Sordo.

When asked for his thoughts after seeing the time, Sordo admitted: “You feel like you are driving an R5 [Rally2 car] in a different category. We know he drives very well and has a big talent. He already did it last year. We know he can always go a little bit more and he can go, ‘Ciao, bang’”

Roanperera’s response was modest: “I just woke up today and thought we should drive a bit of rally, so that is what we tried to do.”

The domination left the field in his wake, with Sordo 57.5s in arrears. The victory almost certainly seemed to be heading to the reigning world champion as long as he could avoid trouble across the final four stages on Sunday.

The attention switched to the minor podium places that were fought out between Hyundai team-mates Neuville and Lappi — the pair had traded third overall on four occasions. The fight had involved Loubet, although the Frenchman exited that battle after stage 10 when he clipped a bank, which broke his steering and >>

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Tanak had to play catch-up after tyre rim delay on Friday

put him out of the rally until Sunday. That allowed Tanak to recover another spot, although he was struggling to “ride his horse” as he put it when describing the problems he was encountering with the set-up of his Puma.

Sunday morning, however, was dominated by the battle for the WRC2 win that took an ultimately decisive and unexpected twist. Oliver Solberg had dominated and was enjoying a trouble-free run and a 35.4s lead over Toksport Skoda team-mate Gus Greensmith, who had battled a water leak and lost time to a puncture. But Solberg breached regulations by performing donuts following his run through Saturday evening’s side-by-side superspecial, held at the bespoke Lousada rallycross circuit, crammed with thousands of spectators. A one-minute penalty was deemed appropriate by FIA stewards, instead of the prescribed minimum five-minute penalty written in the regulations and introduced after Sebastien Ogier performed donuts prior to the final podium at Rally Spain last year.

The penalty was labelled “harsh” and “unpopular” by Greensmith and was widely questioned by drivers and team bosses in the service park given Solberg’s exhibition driving was executed in a safe environment. It drew even more ire thanks to a wider discussion about improving the WRC’s appeal to fans and manufacturers that ran throughout the weekend.



Solberg (left) and Greensmith enjoyed their duel to the finish

“The sport can be so much more and so much bigger for fans. I just do what I enjoy in life”

“The sport can be so much more and so much bigger for fans,” emphasised Solberg. “I just do what I enjoy in life and I try to bring joy to other people. I got that inspiration from Ken [Block]. I don’t regret anything I did, but clearly it was a mistake.”

The other topic heading into Sunday was whether Hyundai would deploy team orders to elevate its main championship contender Neuville ahead of Sordo to maximise his points. Team boss Cyril Abiteboul said on Saturday night: “We are one team, we have one goal and the three crews know exactly what needs to happen come Sunday.”

Unfortunately for Hyundai, matters were taken out of the team’s hands when Neuville suffered a turbo issue that the Belgian believed stemmed from a human error. Severely restricted on power, he was forced to trundle through the remaining four stages, losing more than seven minutes, to claim fifth overall. That result was fortunate after Neuville’s co-driver Martijn Wydaeghe forgot to hand in the timecard after stage 17 while under pressure due to the circumstances unfolding. Exclusion is often the punishment for this, but the stewards showed leniency given the situation and slapped the pair with a €10,000 fine.

There was no such trouble for Rovaniemi, who was able to clinch a drought-ending victory in style by taking the final Power Stage by 0.7s from Tanak. The M-Sport ace had struggled with a hybrid system that “hadn’t woken up” after a short Saturday night, although luckily it returned for the final stage to help Tanak gain fourth overall and four extra points.

Sordo claimed second, his best result to date driving the i20 N Rally1, as he trailed Rovaniemi by 54.7s. It was a result he dedicated to Breen: “I want to say thanks to Craig [Breen] because he was with me for the whole rally and pushing me to the limits.”

The WRC2 battle went down to the wire as Solberg almost recovered the gap to Greensmith, struggling with a power-steering issue. Ultimately, Solberg fell 1.2s short after a grandstand display on the Power Stage.

But the main takeaway from Rally Portugal was the return of Rovaniemi to the top of the championship standings. It appears that he could take some beating if this form continues. 🌪

ROVANPERA RELIEVED AFTER TOUGH TIME



Kalle Rovanperä was relieved to end his World Rally Championship victory drought after admitting to “having a hard time personally” since last year.

Rovanperä had endured a quiet start to his title defence, and headed into Portugal having scored only one podium from the previous four rounds. But the Toyota ace has remained in the thick of the title fight, finishing fourth in Sweden, Mexico and Croatia, where road position and misfortune hampered his charge.

When interviewed at the end of the final stage in Portugal, Rovanperä was quick to praise co-driver Jonne Halttunen, his team and a close friend for helping him through a difficult few months.

“It has been too long coming, but finally we are back,” he said. “I have to say a big thank you to Jonne and the team. They have been pushing all the time and going forward. I also have to give a good thank you to my very good friend Arttu. I have been having a hard time since the end of last year personally, and he has been pushing me to come back.

“Everything was like it should be with the car so we were back on the game and pushing on. You always miss the feeling when you are not there. It’s nice to be back.”

Toyota boss Jari-Matti Latvala admitted that he could sense Rovanperä was poised to deliver a “different level” performance. “Of course when you achieve the world title it is natural that you might lose a little bit of motivation,” Latvala pointed out. “There is a combination of other factors. He has been a little bit unlucky with road position and then the car hasn’t been 100% correct.

“I could sense at the beginning of this rally that he is at a different level compared to other events. In my eyes, the best day was Friday, because that was the most difficult one. He was second car on the road with lower grip conditions and driving at that speed to lead at the end of the day. Saturday morning was also a great performance.”

RESULTS ROUND 5/13, RALLY PORTUGAL, 11-14 MAY

POS	DRIVER / CO-DRIVER	TEAM / CAR	TIME
1	Kalle Rovanperä (FIN) Jonne Halttunen (FIN)	Toyota Gazoo Racing WRT / Toyota GR Yaris Rally1	3h35m11.7s
2	Dani Sordo (ESP) Candido Carrera (ESP)	Hyundai Shell Mobis WRT / Hyundai i20 N Rally1	+54.7s
3	Esapekka Lappi (FIN) Janne Ferm (FIN)	Hyundai Shell Mobis WRT / Hyundai i20 N Rally1	+1m20.4s
4	Ott Tänak (EST) Martin Jarveoja (EST)	M-Sport Ford WRT / Ford Puma Rally1	+2m04.1s
5	Thierry Neuville (BEL) Martijn Wydaeghe (BEL)	Hyundai Shell Mobis WRT / Hyundai i20 N Rally1	+8m22.5s
6	Gus Greensmith (GBR) Jonas Andersson (SWE)	Toksport WRT 3 / Skoda Fabia RS Rally2	+9m43.4s
7	Oliver Solberg (SWE) Elliott Edmondson (GBR)	Skoda Fabia RS Rally2	+9m44.6s
8	Andreas Mikkelsen (NOR) Torstein Eriksen (NOR)	Toksport WRT 3 / Skoda Fabia RS Rally2	+10m26.4s
9	Yohan Rossel (FRA) Arnaud Dunand (FRA)	PH Sport / Citroen C3 Rally2	+11m33.3s
10	Teemu Suninen (FIN) Mikko Markkula (FIN)	Hyundai Motorsport N / Hyundai i20 N Rally2	+12m16.4s

OTHERS

32	Pierre-Louis Loubet (FRA) Nicolas Gilsoul (BEL)	M-Sport Ford WRT / Ford Puma Rally1	+1h01m29.1s
33	Takamoto Katsuta (JPN) Aaron Johnston (GBR)	Toyota Gazoo Racing WRT / Toyota GR Yaris Rally1	+1h01m54.8s
R	Elfyn Evans (GBR) Scott Martin (GBR)	Toyota Gazoo Racing WRT / Toyota GR Yaris Rally1	SS7-accident

STAGE TIMES

STAGE	FASTEST	LEADER	SECOND
SS1 Lousa 1 (7.48 miles)	Loubet 9m02.7s	Loubet	Sordo +0.3s
SS2 Gois 1 (12.01 miles)	Tanak 12m59.3s	Tanak	Sordo +0.5s
SS3 Arganil 1 (11.63 miles)	Rovanperä 11m49.3s	Tanak	Rovanperä +3.0s
SS4 Lousa 2 (7.48 miles)	Lappi 8m56.3s	Sordo	Rovanperä +0.4s
SS5 Gois 2 (12.01 miles)	Rovanperä 13m03.9s	Rovanperä	Sordo +0.8s
SS6 Arganil 2 (11.63 miles)	Rovanperä 11m53.8s	Rovanperä	Sordo +2.9s
SS7 Mortagua (11.28 miles)	Lappi 11m56.7s	Rovanperä	Sordo +14.2s
SS8 Figueira da Foz (SSS) (1.42 miles)	Sordo 2m29.8s	Rovanperä	Sordo +10.8s
SS9 Vieira do Minho 1 (16.53 miles)	Rovanperä 16m50.6s	Rovanperä	Sordo +24.1s
SS10 Amarante 1 (23.14 miles)	Rovanperä 24m33.3s	Rovanperä	Sordo +45.8s
SS11 Felgueiras 1 (5.54 miles)	Rovanperä 5m57.3s	Rovanperä	Sordo +52.4s
SS12 Vieira do Minho 2 (16.53 miles)	Rovanperä 16m54.1s	Rovanperä	Sordo +55.2s
SS13 Amarante 2 (23.14 miles)	Sordo 24m31.2s	Rovanperä	Sordo +54.5s
SS14 Felgueiras 2 (5.54 miles)	Rovanperä 5m57.3s	Rovanperä	Sordo +59.4s
SS15 Lousada (SSS) (2.09 miles)	Sordo 2m34.5s	Rovanperä	Sordo +57.5s
SS16 Paredes (9.32 miles)	Katsuta 8m02.9s	Rovanperä	Sordo +58.0s
SS17 Fafe 1 (6.95 miles)	Rovanperä 6m42.1s	Rovanperä	Sordo +59.4s
SS18 Cabeceiras de Basto (13.81 miles)	Tanak 13m48.5s	Rovanperä	Sordo +47.8s
SS19 Fafe 2 (Wolf Power Stage) (6.95 miles)	Rovanperä 6m26.5s	Rovanperä	Sordo +54.7s



DRIVERS' CHAMPIONSHIP

1 Rovanperä 98; 2 Tänak 81; 3 Sebastien Ogier 69; 4 Evans 69; 5 Neuville 68; 6 Lappi 49; 7 Sordo 36; 8 Katsuta 20; 9 Craig Breen 19; 10 Greensmith 16.

MANUFACTURERS' CHAMPIONSHIP

1 Toyota Gazoo Racing WRT 201; 2 Hyundai Shell Mobis WRT 169; 3 M-Sport Ford WRT 134.

NEXT REPORT

RALLY ITALY
8 JUNE ISSUE

Perfect Palou pummels the Indy pack

Chip Ganassi's 2021 champion was a cut above the rest on the Indianapolis road course – which in itself is no mean feat

DAVID MALSHER-LOPEZ

PHOTOGRAPHY  motorsport
IMAGES

There are drivers and even race engineers who will throw out words like “straightforward” and “simple” to describe the road course in Indianapolis. And yes, there are no wild bumps or gradient to contend with around its 2.439-mile, 14-turn layout. The ideal racing line for each corner is easy to decipher. Even some of the kerbs have lost their viciousness, which has subtly decreased the acuteness of angle at which they’re attacked. This is presumably to appease NASCAR, which holds a crash-fest here each summer.

And drivers risk pushing the limit here because in most corners, their greatest potential harm is time loss or, at worst, getting buried in a gravel trap. Unlike impacts with tyre walls at street courses or SAFER barriers on ovals, you’re unlikely to end up with deranged suspension or broken scaphoids.

But it’s the track’s supposed simplicity, which resulted in all 27 cars on the grid being covered by 1.3 seconds, that makes it so demanding: it’s very hard for a driver to make up time on his peers. Jackie Stewart, describing his Monza 1973 performance from dead last to finish fourth as his greatest Formula 1 drive, told Autosport’s former Grand Prix editor Nigel Roebuck: “Anyone can go quickly at Monza, so therefore it was much more difficult to gain ground there. You had to be technically perfect, clinical and clean... That drive was dictated entirely by my head, and it was as good as ever I did.”

Alex Palou, the 2021 IndyCar champion, may come to look back on his fifth series victory in similar terms. Certainly it was dictated by his head – well, his and those of his strategist Barry Wanser and race engineer Julian Robertson. After warm-up, they elected to start the #10 Chip Ganassi Racing entry on a fresh set of alternate tyres. He would be starting the race from third on the grid, but Palou alone among the top seven starters would be on these softer Firestones. Given the 0.6-1.2s (very much depending on who you asked) per lap time difference between these red-sidewalled tyres and fresh primary tyres, and the fact that the reds come up to

temperature faster, theoretically stealing the lead could be like taking candy from a baby. But also, given the fragility of the reds when running in the wake of other cars in longer duration corners, that move to the front would have to be incisive and swift.

Palou’s job was made easier at the start when Felix Rosenqvist, the driver he replaced at Ganassi and will next year likely replace again at Arrow McLaren, appeared to fumble his gears under acceleration from the outside of the front row. That left surprise first-time polesitter Christian Lundgaard (see panel, p35) with only the menacing Palou to contend with at Turn 1. Palou flicked out from the slipstream of the Rahal Letterman Lanigan car to draw alongside into Turn 1 but on the outside. The Danish sophomore

“Alex Palou may come to look on his fifth win in similar terms to Jackie Stewart at Monza 1973”

braked his Dallara-Honda as late as he dared but by luck or design he ran slightly long, ushering Palou towards the grass. The former champ chose caution over valour, asphalt over turf, but he was only temporarily deterred. He carried only a tad more momentum than Lundgaard through the Turns 5-6 left-right onto the back straight, but he was in the Dane’s slipstream and drew closer still under braking, there and at Turn 12’s right-angled right-hander.

Lundgaard thought he had enough daylight to take the conventional line into the left-handed Turn 13, but there was Palou coming down the inside, able to brake later and turn sharper and thereby choose his exit line. That took him across the bows of Lundgaard’s car, eliminating any chance of retaliation there.





First win of the year for Palou. Next he wants this photo in the reverse direction

FARMER

Lundgaard bravely took an alternative line through Turn 14 onto the 190mph front straight, and was on Palou's gearbox, but the Ganassi car moved right to hug the long pitwall, so that Lundgaard would have to brake later and go the long way around at Turn 1 to pass, and those primaries were just not yet at their peak.

Behind Lundgaard ran one of his RLLR team-mates, Jack Harvey, while next were the three Chevrolet-powered Arrow McLaren machines, Alexander Rossi using reds to jump from 10th on the grid to fourth on that opening lap ahead of Rosenqvist and Pato O'Ward. Then came Marcus Ericsson holding station on primaries, while another big 'red' mover was Josef Newgarden, up from 13th to eighth for Team Penske.

Less fortunate alternate runners were Graham Rahal, who had been pivoted into O'Ward at Turn 1 by a tap from Kyle Kirkwood, sustained a broken front wing and had to head to the pits; Scott Dixon, down from ninth on the grid to 16th due to getting baulked by the wayward Rahal; and Penske's Scott McLaughlin, who also pitted after picking up a broken front wing in the Turn 1 mayhem.

They were in better shape than Dale Coyne Racing duo David Malukas and Sting Ray Robb, however. Robb and Romain Grosjean of Andretti Autosport, who had qualified down in 18th, had a game of chicken on the brakes into Turn 7 on the opening lap, and there were no winners. Grosjean locked up and skated wide onto the »



Grosjean needed a new nose but came back to finish 11th

BAKER

grass, while Robb impaled his team-mate hard enough so that both DCR cars were out on the spot.

The need to retrieve these cars caused the race's only caution period. On the lap six restart, Palou held off Lundgaard, while Harvey locked up heavily into Turn 1 rather than take to the escape road, and so at the end of the back straight he was easy meat for Rossi. By the time he pitted on lap 15, Harvey was down to ninth, and that, along with a spin, ensured he was never a factor thereafter.

On lap seven, Will Power had thought he could take both Devlin DeFrancesco and Kyle Kirkwood into Turn 1 to snatch 10th, but it required him to run deep, which put Kirkwood on the grass. As he

“At the chequered flag, Palou was some 16.8s to the good having made it look all too easy”

rejoined the track, he punted the champ into a spin, which meant Power resumed at the back of the field.

Palou extended his lead to over five seconds, but by lap 15 the tyre crossover had occurred, and the primary-rubbered Lundgaard was coming back at him. Palou's lead was 3.1s by the time Wanser called him in on lap 18, at which point McLaren also pitted Rossi. Both Alexes took on primaries, Palou's just lightly used.

RLL called in Lundgaard just two laps later rather than take full advantage of his more durable primaries. On reds and only two seconds behind Palou, he closed down his quarry and passed him on lap 24 under braking for Turn 7. The pair were being pursued by the Arrow McLaren trio, who by the end of lap 27 were in the order Rosenqvist (fresh reds), O'Ward (old reds), Rossi (primaries). But up front, and increasingly a nuisance to leader Lundgaard, was his off-strategy team-mate Rahal. The enforced pitstop at the start, and another under yellow, was allowing him to run long on primaries but lean on fuel, trying to make it on just two more stops. He was now leading, but his dirty air was ruining the chances of Lundgaard taking advantage of his reds and doing to Palou what Palou had done to him in the first stint. By the time Rahal pitted on lap 31, the damage was done, and Lundgaard's reds were past their prime. He eked out the gap to 2.8s, but by lap 40 Palou's primaries were holding up fine and he was filling Lundgaard's mirrors, and taking the McLaren machines with him.

Or two of them, anyway – O'Ward blinked first and pitted for primaries on lap 39. Rossi soon followed, while Rosenqvist stopped for used reds on lap 42.

Lundgaard also stopped that lap for scrubbed alternates, leaving Palou in the danger zone, whereby if another yellow had flown he would have been on track and the pitlane closed just as he needed to pit. Without the RLL car ahead, Palou hurled himself around that in-lap like the ace that he is, and the #10 crew was flawless. He emerged from pitlane half a car length ahead of Lundgaard.



Rossi scored his first podium since joining Arrow McLaren

They were both behind O'Ward, who had shown how well the undercut could work, and his tyres were up to temperature. But stopping three laps earlier than Palou on a day when there were apparently going to be no cautions to ease drivers' fuel worries meant he was driving to a mileage number. It only took until lap 45 for Palou to pass the #5 McLaren-run machine, and a lap later Lundgaard was through, too. But the Dane's used reds weren't long for this world. By the end of lap 57, Palou's lead was out to over 6s, and O'Ward had repassed Lundgaard.

That was essentially job done for Palou. His final set of tyres were almost-new primaries and, while he lacked the ultimate grip of O'Ward, who remained in front of Lundgaard following the final stops, the Ganassi driver could of course make them last longer. At the chequered flag on lap 85, Palou was some 16.8s to the good and had made it look all too easy – very fast and aggressive when he most needed it, but also smart. O'Ward seemed reasonably content with his third runner-up finish in five races.

And behind them came Rossi. With the track well rubbered up by the closing stint, he had felt that he could keep a set of used reds from degrading too badly while still exploiting their grip. And he was right; he passed Lundgaard with nine laps to go to claim his first podium finish since departing Andretti Autosport.

Lundgaard managed to keep ahead of one McLaren, that of his fellow front-row starter and fellow Scandinavian Rosenqvist, to claim fourth.

Dixon charged well to claw back to sixth – one more yellow flag could have put him in contention for the podium, given his pace – while Newgarden could be content with seventh on a weekend when Penske, like Andretti Autosport, was simply not in the hunt. 🏆

NEXT REPORT

INDY 500
1 JUNE ISSUE



Power in reverse (12) after moment with Kirkwood (27) and DeFrancesco (29)

LUNDGAARD PROVES HE'S AN INDY GP ACE

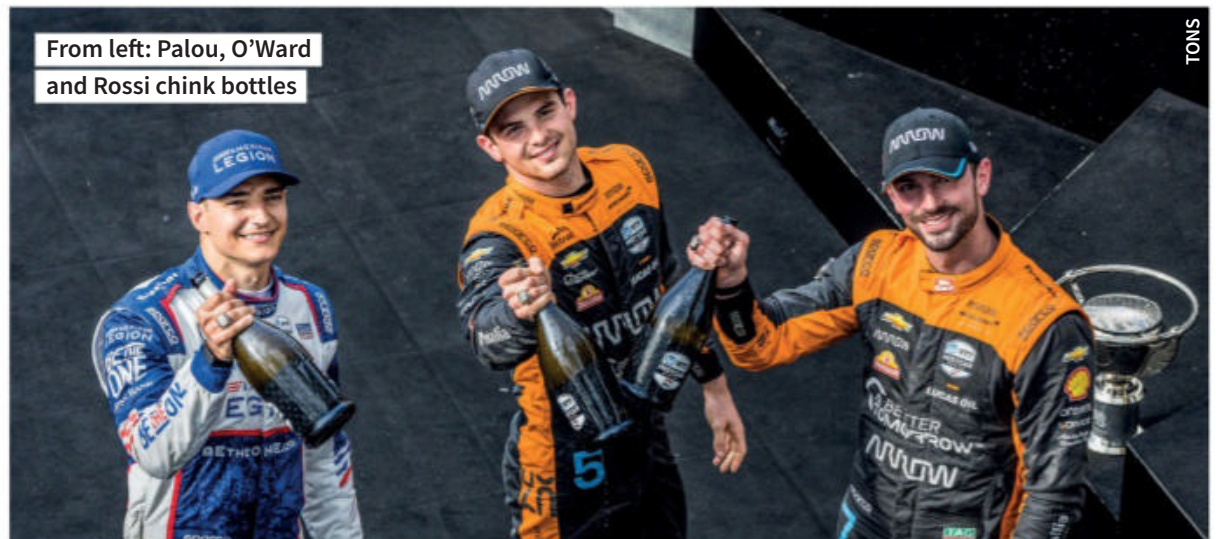
Christian Lundgaard made his debut in IndyCar as a one-off extra for Rahal Letterman Lanigan in the August 2021 race on the Indianapolis road course, and he qualified a rather startling fourth. Last year, in the May race here he qualified eighth and finished ninth; in the late July race, he started sixth and went on to finish second, his first IndyCar podium. And now this is the venue where he scored his first pole position in the series.

It's no secret that the start of the 2023 season for Rahal Letterman Lanigan has looked like a slightly worse version of the start to its 2022 season, which has left the team scratching its heads in bewilderment. They turned it around in Toronto last year, so that Lundgaard and Graham Rahal became regular top-five contenders, but seemed to then lose momentum in the off-season.

But Lundgaard flagged up another revival – thankfully way before mid-season, this year – at Barber Motorsports Park last month by qualifying and finishing sixth, and he was probably only a tyre strategy call away from nailing second place last weekend. (Neither he nor anyone was going to beat Alex Palou). Had Rahal not been thumped and damaged by Kyle Kirkwood at lap one/Turn 1, he too might have been contending for the podium.

Their team-mate, Jack Harvey, proved that he can still turn a good lap, with fourth on the grid. But, almost 18 months into his time with RLL, you can almost smell the desperation, and it's naturally messing with his race day composure.

It's impossible to predict how RLL will perform in the Indy 500, although the two-time 500-winning team owned by Bobby Rahal, David Letterman and Mike Lanigan has more good than bad days on the famous 2.5-mile oval. But it would be a surprise if RLL isn't contending for podiums at Detroit, Road America and beyond.



From left: Palou, O'Ward and Rossi chink bottles

TONS

RESULTS ROUND 5/17, INDIANAPOLIS (USA), 13 MAY (85 LAPS – 207.315 MILES)

POS	DRIVER	TEAM/CAR	TIME
1	Alex Palou (ESP)	Chip Ganassi Racing / Dallara-Honda	1h47m56.7003s
2	Pato O'Ward (MEX)	Arrow McLaren / Dallara-Chevrolet	+16.8006s
3	Alexander Rossi (USA)	Arrow McLaren / Dallara-Chevrolet	+18.1448s
4	Christian Lundgaard (DNK)	Rahal Letterman Lanigan Racing / Dallara-Honda	+23.4801s
5	Felix Rosenqvist (SWE)	Arrow McLaren / Dallara-Chevrolet	+23.9258s
6	Scott Dixon (NZL)	Chip Ganassi Racing / Dallara-Honda	+25.5206s
7	Josef Newgarden (USA)	Team Penske / Dallara-Chevrolet	+26.3159s
8	Marcus Ericsson (SWE)	Chip Ganassi Racing / Dallara-Honda	+31.8308s
9	Colton Herta (USA)	Andretti Autosport with Curb-Agajanian / Dallara-Honda	+38.4189s
10	Graham Rahal (USA)	Rahal Letterman Lanigan Racing / Dallara-Honda	+48.8712s
11	Romain Grosjean (FRA)	Andretti Autosport / Dallara-Honda	+52.5732s
12	Will Power (AUS)	Team Penske / Dallara-Chevrolet	+59.7698s
13	Rinus van Kalmthout (NLD)	Ed Carpenter Racing / Dallara-Chevrolet	+1m07.0708s
14	Kyle Kirkwood (USA)	Andretti Autosport / Dallara-Honda	+1m08.1940s
15	Marcus Armstrong (NZL)	Chip Ganassi Racing / Dallara-Honda	+1m15.8499s
16	Scott McLaughlin (NZL)	Team Penske / Dallara-Chevrolet	+1m23.6382s
17	Devlin DeFrancesco (CAN)	Andretti Steinbrenner Autosport / Dallara-Honda	-1 lap
18	Callum Iltott (GBR)	Juncos Hollinger Racing / Dallara-Chevrolet	-1 lap
19	Conor Daly (USA)	Ed Carpenter Racing / Dallara-Chevrolet	-1 lap
20	Jack Harvey (GBR)	Rahal Letterman Lanigan Racing / Dallara-Honda	-1 lap
21	Agustin Canapino (ARG)	Juncos Hollinger Racing / Dallara-Chevrolet	-1 lap
22	Helio Castroneves (BRA)	Meyer Shank Racing / Dallara-Honda	-1 lap
23	Santino Ferrucci (USA)	AJ Foyt Enterprises / Dallara-Chevrolet	-5 laps
24	Benjamin Pedersen (DNK)	AJ Foyt Enterprises / Dallara-Chevrolet	-6 laps
25	Simon Pagenaud (FRA)	Meyer Shank Racing / Dallara-Honda	58 laps-wheelnut
26	David Malukas (USA)	Dale Coyne Racing with HMD / Dallara-Honda	2 laps-accident
27	Sting Ray Robb (USA)	Dale Coyne Racing with RWR / Dallara-Honda	1 lap-accident

Winner's average speed 115.234mph. Fastest lap Palou 1m11.2912s, 123.162mph.

Q3 1 Lundgaard 1m09.3321s; 2 Rosenqvist 1m09.3348s; 3 Palou 1m09.3780s; 4 Harvey 1m09.4220s; 5 O'Ward 1m09.5422s; 6 Kirkwood 1m09.6292s.
Q2 Palou 1m09.2082s; Lundgaard 1m09.2282s; O'Ward 1m09.3405s; Rosenqvist 1m09.3604s; Harvey 1m09.3767s; Kirkwood 1m09.4131s; 7 Ericsson 1m09.4419s; 8 Rahal 1m09.4711s; 9 Dixon 1m09.4757s; 10 Rossi 1m09.5471s; 11 Armstrong 1m09.6148s; 12 Power 1m10.1872s.

Q1 – GROUP 1 Lundgaard 1m09.4639s; Rahal 1m09.5627s; Rosenqvist 1m09.5838s; Armstrong 1m09.6186s; Power 1m09.7835s; Ericsson 1m09.8343s; 13 Newgarden 1m09.8402s; 15 DeFrancesco 1m09.8676s; 17 van Kalmthout 1m09.9625s;

19 Pagenaud 1m10.2625s; 21 Daly 1m10.2669s; 23 Pedersen 1m10.5181s; 25 Canapino 1m10.5424s.
Q1 – GROUP 2 O'Ward 1m09.2937s; Rossi 1m09.4747s; Palou 1m09.5351s; Harvey 1m09.6238s; Kirkwood 1m09.6277s; Dixon 1m09.6708s; 14 Herta 1m09.8375s; 16 McLaughlin 1m09.9899s; 18 Grosjean 1m10.0747s; 20 Malukas 1m10.2562s; 22 Robb 1m10.2747s; 24 Iltott 1m10.2920s; 26 Castroneves 1m10.3509s; 27 Ferrucci 1m10.5879s.

CHAMPIONSHIP

1 Palou 174; **2** O'Ward 168; **3** Ericsson 155; **4** Grosjean 134; **5** McLaughlin 133; **6** Newgarden 131; **7** Dixon 127; **8** Power 122; **9** Lundgaard 111; **10** Kirkwood 108.



Rossi stars as Audi and Mercedes take the wins

GT WORLD CHALLENGE EUROPE SPRINT CUP

BRANDS HATCH (GBR)

14 MAY

ROUND 1/5

Mercedes and Audi took the victories at Brands Hatch last Sunday, but the headlines went to Valentino Rossi courtesy of the bike legend's first podium in the GT World Challenge Europe. The WRT BMW driver did everything that was required of him to hang on to the runner-up spot in the second of the two races on the opening weekend of the Sprint Cup when he emerged from the pitstops in that position.

Rossi's WRT BMW M4 GT3 ran third in

the hands of Maxime Martin prior to the pitstop cycle in the middle of the one-hour race. A typically quick turnaround from the Belgian team won two positions, though it did lose one. That gave Rossi second position behind Mattia Drudi in the Attempto-run Tresor Orange 1 Audi R8 LMS GT3 for the run to the flag.

Rossi could do nothing about the Audi ahead of him as Drudi edged away from 2.5s ahead with just over 20 minutes remaining to just under 4s as he completed the victory together with Ricardo Feller. But crucially, or perhaps that should be significantly, he did have the measure of team-mate Charles Weerts behind him in third.

The Italian was half a second up when the

pit window closed with 23 minutes to go and, after coming under pressure from the three-time Sprint Cup champion, he managed to edge away into some kind of breathing space. That was partly because Weerts, paired as usual with Dries Vanthoor, was coming under pressure from Benjamin Goethe in the Garage 59 McLaren 720S GT3 EVO shared with Nicolai Kjaergaard.

When that pressure disappeared, Weerts edged back towards his team-mate. But Rossi, whose Bimmer had the benefit of a fresh set of sticker tyres unlike the sister car, didn't put a foot wrong around the 2.43-mile Brands Hatch Grand Prix Circuit to wrap up his first silverware since switching full time to cars last year.



Marciello inspired ASP
Merc win in opener



Mies leads field at
start of second race



Drudi kept his Audi
out of reach of Rossi...



...but the bike legend still
celebrated with Martin

Martin praised his team-mate after the race. “He did the perfect job,” said the Belgian. “His whole stint was competitive and he didn’t do any mistakes. It was really intense at the end; we were like, keep it calm.”

Rossi for his part was “so ‘appy” after completing the best result of his short car-racing career right at the start of his second season in the GTWCE with WRT. “We all did a good job, the team, myself and Maxime,” he said.

Yet it’s too early to say that Rossi and Martin are going to be winning races this year in the sprints or, together with Augusto Farfus, in the Endurance Cup rounds of the GTWCE. There was any number of factors that contributed to their podium on a weekend when the BMW wasn’t a match for the Audi, or the Mercedes-AMG GT3 in which Raffaele Marciello and Timur Boguslavskiy won the opening race, or the Ferrari 296 GT3 that probably should have taken honours in the opener.

Martin had qualified a decent fifth for the second race, which became third when the Emil Frey Ferrari in which Giacomo Altoe had initially been third was given a three-place grid penalty for an infringement in the session, and the Sainteloc Audi of Patric Niederhauser and Erwan Bastard that took fourth was docked five positions for a pitlane infraction in race one.

Slow pitstops from the Audis that ran 1-2 through the opening exchanges also helped. The Sainteloc car in which Christopher Mies had led by a couple of seconds lost time courtesy of a problem with a rear wheelnut, and then team-mate Gregoire

Demoustier took a little trip through the gravel at Sheene Curve on his out-lap anyway. Christopher Haase’s handover to Lucas Legeret in the best of the Comtoyou entries was similarly slow, though the team didn’t reveal the reason.

Attempto’s turnaround of the winning car was more than a second quicker than WRT’s with #46. That, and a quickfire safety car that delayed the opening of the pit window by two minutes and bunched up the field, explained why the best of its Audis vaulted from fifth to the lead of the race.

Quickest in the pits in race two was the Auto Sport Promotion Merc that Boguslavskiy had qualified down in 19th. That propelled Marciello to seventh after the stops. He was able to overtake Calan Williams’s WRT BMW, but fell short in his battle to get past Legeret for fifth.

Marciello had claimed pole for the opener on Sunday morning and drove away from the field, building up a 7.5s lead over Albert Costa’s Emil Frey Ferrari before handing over to his team-mate. Crucial in Boguslavskiy hanging on to take victory was a problem for Thierry Vermeulen when he took over the Ferrari, which doubled his advantage up front.

Feller hounded down the Merc, ultimately closing to 0.6s down. Drudi had run third to the stops, though wasn’t remotely in touch with Costa. He was another 7.5s in arrears, which explained Boguslavskiy’s initial 15s cushion. Had the Russian only had half that gap to the Ferrari, he and Marciello almost certainly wouldn’t have won, no matter how hard it is to overtake on the full circuit at

WEEKEND WINNERS

GT WORLD CHALLENGE EUROPE SPRINT CUP BRANDS HATCH (GBR)

Race 1 Raffaele Marciello/Timur Boguslavskiy
ASP (Mercedes-AMG GT3 Evo)

Race 2 Mattia Drudi/Ricardo Feller
Attempto (Audi R8 LMS GT3 Evo II)



For full results visit motorsportstats.com

Brands. They owed their victory to the Frey Ferrari’s problem with the drop-start system, which fires the engine when the line to the air jacks is removed.

It was an opportunity missed for the Swiss team on its debut with the Ferrari after moving over from Lamborghini (the team isn’t doing the enduros this year). Costa and Vermeulen had the pace to win even with a bit of Balance of Performance tinkering after qualifying, which allowed their rivals to shed some weight.

Vanthoor crossed the line in the final podium slot. Weerts had been down in sixth before the stops, but WRT’s prowess in the pits got his team-mate out in third. Even with a fresh set of Pirellis, the BMW didn’t have the pace to get on terms with the Audi ahead of it.

GARY WATKINS

➔ P62 MORE BRANDS ACTION



Veloce machine leads in a disused Scottish coalmine

Veloce and X44 work hard at Scottish coalface

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

Veloce Racing took its second Extreme E win of the season at Scotland's double-header, with Lewis Hamilton's X44 team the other victor after a penalty denied Andretti.

A challenging course at Glenmuckloch and very contrasting weather led to two eventful days of action, with all 10 teams hitting issues at some point. Heavy fog led to the cancellation of Saturday's opening qualifying heats, with X44 and Rosberg X Racing triumphing in clear conditions in the solitary pair of heats later on. The second of those contests was restarted after a huge roll for Abt Cupra driver Klara Andersson, who was unharmed, and Veloce also retired with damage.

After edging McLaren for the last berth in the final, the Andretti car led into the first turn in the hands of Timmy Hansen, but X44's Fraser McConnell used his hyperdrive

on the exit to surge from fifth to first. McConnell then ran wide and slipped to second, and contact with Hansen as he tried to fight back cost him a further place to RXR star Johan Kristoffersson.

Un sighted by a dirty windscreen, Kristoffersson then drove into a wall and rolled out. Hansen arrived at the changeover with a seven-second lead, and Catie Munnings maintained that advantage on the second leg from Cristina Gutierrez, who had taken over from McConnell. But a time penalty at the finish for leaving the Switch Zone fractionally too early demoted Andretti to second, denying Briton Munnings a home triumph.

Carl Cox Motorsport took third with Timo Scheider and Christine Giampaoli Zonca, while a puncture left Chip Ganassi Racing's RJ Anderson and Amanda Sorensen fourth. After struggling in qualifying, Acciona Sainz pair Mattias Ekstrom and Laia Sanz won the Redemption Race ahead of Veloce's Kevin Hansen and Molly Taylor.

Ganassi and Sainz topped the first round

of qualifying heats on Sunday, with a broken driveshaft leaving Andretti a distant fifth in the second of those contests. Both heats in the second round were red-flagged due to crashes. Andersson was a hapless victim again in the first after going off in avoidance of Scheider, who had spun into a hay bale. Ganassi went on to win again ahead of McLaren, who took second despite a spin for Emma Gilmour before the stoppage.

An even more dramatic incident followed in the second heat, with contact between Sanz and RXR's Mikaela Ahlin-Kottulinsky putting both into a spin before the first corner, the Swede then becoming airborne and collecting Gutierrez. Despite both retiring, Sainz and RXR made the final, but X44 missed out. Veloce also progressed after winning the restarted heat, while a penalty prevented Andretti from joining them.

Kevin Hansen grabbed the lead for Veloce in the final on a rain-soaked course, with wet clay on drivers' windscreens making visibility almost impossible. Tanner Foust snatched second from Ekstrom on the opening leg, despite being unsighted as to where his rival was. Taylor completed a commanding victory for Veloce in the second leg, coming home 6.4s ahead of Foust's partner Gilmour, while Anderson and Sorensen ended a consistent weekend with third for Ganassi. Sainz and RXR both retired after Sanz and Ahlin-Kottulinsky again came to blows in the difficult conditions.

Andreas Bakkerud and Hedda Hosas ended a difficult weekend with victory in Sunday's Redemption Race for Jenson Button's JBXE squad ahead of Andretti, while McConnell crashed out in the X44 machine.

STEVE WHITFIELD



Green X44 machine battles it out with Andretti car

Nannini soaks up pressure from Foster

INDY NXT
INDIANAPOLIS (USA)
13 MAY
ROUND 3/12

A fierce duel on the Indianapolis Motor Speedway road course was resolved in favour of Matteo Nannini over reigning Indy Pro 2000 champion Louis Foster. The victory for the nephew of Alessandro Nannini and Juncos Hollinger Racing broke the three-year wins stranglehold that Foster’s team Andretti Autosport and HMD Motorsports have held over the feeder series to IndyCar.

Nannini took pole from Hunter McElrea and Foster. And while the Italian fumbled the first and second attempted starts, it was third time lucky. Immediately Foster came through as his



Nannini scored his maiden Indy NXT win

primary challenger, while Andretti driver McElrea dropped to fifth behind HMD pair Christian Rasmussen and Kyffin Simpson.

By lap 18 of the 35-lap race, Foster had halved his deficit to Nannini to 0.7 seconds, but Nannini had enough pace to ease away once more. They were 5s ahead of Simpson, who had an identical margin over a mighty scrap between Rasmussen and McElrea.

On lap 25, Foster was back on Nannini’s

tail, but the JHR driver kept his head and retained the lead, while six tours later McElrea passed Rasmussen for fourth.

Nannini had to hug the inside line into Turn 7 on lap 33 and the final tour to fend off Foster, but did just enough to win by 0.39s. The pair of them were 10s clear of Simpson, with McElrea and Rasmussen completing the top five.

DAVID MALSHER-LOPEZ

WEEKEND WINNERS

EXTREME E
GLENMUCKLOCH (GBR)

Race 1 Fraser McConnell/Cristina Gutierrez
X44 Racing

Race 2 Kevin Hansen/Molly Taylor
Veloce Racing

INDY NXT
INDIANAPOLIS (USA)
Matteo Nannini
Juncos Hollinger Racing

NASCAR CUP
DARLINGTON (USA)
William Byron
Hendrick Motorsports (Chevrolet Camaro)

TCR EUROPE
PAU (FRA)
Race 1 Dusan Borkovic
Target Competition (Hyundai Elantra N)
Race 2 Tom Coronel
Comtoyou Racing (Audi RS3 LMS II)

S5000
PHILLIP ISLAND (AUS)
Race 1 Joey Mawson
88 Racing
Races 2 & 3 Cooper Webster
Versa Motorsport



For full results visit motorsportstats.com

Byron’s Darlington bud of May

NASCAR CUP
DARLINGTON (USA)
14 MAY
ROUND 13/36

William Byron claimed his third NASCAR Cup win of the season at Darlington Raceway, but this one was more of a gift.

Kyle Larson emerged late in the race with the lead following the final round of green-flag pitstops, before a caution for a spin by Ryan Newman left Larson and Ross Chastain to battle side by side on the restart with 13 laps to go. Larson nudged Chastain up into the wall as a multi-car wreck behind them placed the race back under caution. On the ensuing restart with six laps remaining, the Chevrolets of Chastain (Trackhouse Racing) and Larson (Hendrick Motorsports) again lined up alongside each other.

This time, it was Chastain who nudged Larson up the track, which wrecked both cars and allowed the Hendrick Chevy of Byron, who was running third, to move into the lead. Byron then had little trouble holding off Kevin Harvick’s Stewart-Haas Racing Ford in the two-lap overtime to earn the seventh Cup win of his career.

One year ago at this race, Byron appeared to have a victory in hand only for Joey Logano to nudge him out of the way to claim the win. “It’s pretty amazing – my grandad passed away on Thursday, and man, I wish my family could be here today,” said



Byron was on hand to pick up victory

an emotional Byron after the race. “Things have a way of working out, honestly.

“We didn’t have the best third stage. We just kept battling, and things just kind of came back around. Want to wish happy Mother’s Day to my mom. My sister just graduated school, so big day.”

Byron’s win was the 100th in the Cup Series for Hendrick Motorsports’ #24, and HMS as an organisation now has 296 victories. “We want to celebrate 300, so it will be an awesome year if we can do that,” said team owner Rick Hendrick.

Chase Elliott wound up third from Brad Keselowski, while Bubba Wallace rebounded from a bad pitstop to finish fifth.

JIM UTTER



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Cadillac pair atone for errors to defeat Porsche of Tandy

IMSA SPORTSCAR
LAGUNA SECA (USA)
14 MAY
ROUND 4/11

Sebastien Bourdais and Renger van der Zande rebounded from a series of recent disasters for the Chip Ganassi-run Cadillac Racing team to score an improbable IMSA SportsCar victory last Sunday at Laguna Seca Raceway. Their triumph served to illustrate not only the unpredictability of the new GTP era, but also how this exciting breed of car has brought an entirely different complexion to the championship.

In recent years with the DPi cars, the streets of Long Beach have always favoured the instant torque of the V8 Cadillac, while the massive elevation change and flowing nature of permanent road courses such as Laguna Seca have played to the strengths of the more nimble turbocharged Acuras or Mazdas. But that was then and this is now. The new Acura ARX-06 seemed to be comfortably the fastest car on the Californian streets a few weeks ago, even though a superior strategy ensured a surprise victory for the exciting Porsche 963. And this past

weekend, a few hundred miles to the north, Porsche ruled the roost in qualifying while Cadillac romped to victory in Sunday's two-hour-and-40-minute race.

It was hard to envisage such an outcome following the first practice session on Friday afternoon when the Porsche Penske Motorsports 963 of Matt Campbell led the way and the pair of Cadillacs languished in fifth and eighth. Worse, Bourdais had turned only eight laps before losing control under braking at Turn 6 and crashing heavily. The incident followed Bourdais's error on the opening lap at Long Beach as well as a huge crash for van der Zande during the subsequent World Endurance race at Spa.

There was once again drama on the opening lap on Sunday as Colin Braun, aboard Meyer Shank Racing's Acura, made a spectacular launch from third on the grid to pass both Penske Porsches before the first corner. Polesitter Campbell then experienced a massive brake lock-up that also resulted in the sister 963 of Mathieu Jaminet running wide into the dirt.

Braun raced clear in the early stages, but struggled massively during the second stint when his team elected not to change tyres.



WEEKEND WINNERS

IMSA SPORTSCAR

LAGUNA SECA (USA)

- GTP** Sebastien Bourdais/Renger van der Zande, Chip Ganassi Racing (Cadillac V-Series.R)
- LMP2** Mikkell Jensen/Steven Thomas TDS Racing (ORECA-Gibson 07)
- GTD Pro** Daniel Juncadella/Jules Gounon Proton (Mercedes-AMG GT3 Evo)
- GTD** Kay van Berlo/Alan Metni Kellymoss w Riley (Porsche 911 GT3-R)



For full results visit motorsportstats.com

Neither he nor team-mate Tom Blomqvist were able to recover.

Pipo Derani took control of the middle stages, taking advantage of fresh Michelin tyres. The Action Express Cadillac, which won at Sebring, remained out front with Alexander Sims at the wheel after the final full-course caution ended with 40 minutes remaining. But van der Zande was in second and on a mission. The Dutchman quickly dispensed with Sims and never looked back. Nick Tandy, in for Jaminet, also passed his fellow Brit with about 15 minutes remaining to ensure second place for Porsche and an extended championship lead.

A thrilling LMP2 battle finally fell the way of TDS Racing ORECA pair Steven Thomas and Mikkell Jensen in eighth overall.

GTD also brought excitement aplenty. Alan Metni and Kay van Berlo parlayed a perfect strategy into a maiden victory for themselves and the new Kellymoss with Riley Porsche partnership, while Dani Juncadella and Jules Gounon combined to win the GTD Pro class for Mercedes and WeatherTech/Proton. Not far behind, Vasser Sullivan Lexus driver Ben Barnicoat overtook Patrick Pilet's Pfaff Porsche on the final lap to claim second and maintain his series lead with Jack Hawksworth.

JEREMY SHAW

Bezzecchi closes on Bagnaia

MOTOGP
LE MANS (FRA)
14 MAY
ROUND 5/20

After five rounds of the 2023 MotoGP season, it's already become apparent who the sprint races suit best. And it's not Pramac Ducati rider Jorge Martin, who brilliantly took his first MotoGP win of any kind since 2021 in Saturday's sprint contest at the French Grand Prix.

No, it's his fellow Ducati racer Francesco Bagnaia. The factory team rider was third in Saturday's sprint contest, adding to his two wins in the short races in 2023 and one other podium. It's what has ultimately kept him at the top of the standings, albeit by one point after a dominant performance in the main event by Marco Bezzecchi.

At grand prix racing's 1000th world championship event, chaos enveloped Sunday's 27-lap GP and Bagnaia was part of it. From pole, Bagnaia was shuffled down to fifth off the line in the as the returning Marc Marquez scorched into the lead.

Bagnaia's weekend to that point hadn't been the easiest; he'd battled set-up issues in Friday practice and a technical problem in the session prior to qualifying. The potential for something big was there, and Bagnaia was just trying to stay settled to



Bezzecchi's VR46 Ducati was too strong for rivals and is now one point off the top

avoid the repeats of his Argentina and Americas crashes while running well.

While he lay third on lap five, Bagnaia had a hard-charging Maverick Vinales bearing down on him. The Aprilia rider threw his RS-GP up the inside of the world champion into the Turn 11 right-hander. Vinales ran wide and Bagnaia cut back to his inside for the direction change into Turn 12. The pair collided at the crossover point, Vinales was sent out of control and could do nothing but wipe out the Ducati rider. Heat-of-the-moment shoving in the gravel gave way to cooler heads later on, as both – generally regarded as two of the cleaner riders on the grid – agreed it was a racing incident.

This was of little concern to KTM's Jack Miller, who took the lead from Marquez on lap three, having leapt to second off the line from fourth. Neither was the frightening collision between Luca Marini and Alex Marquez at the Dunlop chicane on lap six.

Marini, who was battling with VR46 team-mate Bezzecchi, ran deep into the first part of the chicane and clipped the exit kerb. This tucked the front of his

Ducati and, as he just about got his bike pointing in the right direction, his lack of momentum coupled with Marquez accelerating hard out of the turn unsighted led to a tangle. Both were OK.

Bezzecchi knew little of this as he darted away to force Marc Marquez wide at Turn 8 on lap eight to take second, copping him an order from the stewards to drop one spot. He did so, to Martin – who took advantage of that moment to move ahead of Marquez also – but quickly got back in front.

Faster than anybody on track, Bezzecchi eased past Miller on the run up to Dunlop on lap 11 and never looked back. He crossed the line 4.3 seconds clear, and Bezzecchi's second grand prix victory has thrust him well and truly into title contention – even if he doesn't want to admit it.

Miller crashed after fading to seventh in the latter part of the race, while Marc Marquez, on a Honda kitted out with the new Kalex-designed chassis that has improved form somewhat, also ended his afternoon in the gravel.

Fifth in the sprint, Marquez felt he was riding better than he had done for a long time despite having not raced in a GP to full distance since last November. He locked horns with Martin for second



Alex Marquez and Marini had a nasty clash that put both out...



...while Marc Marquez led early on for Honda before his own fall



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Martin won the sprint,
then took second in GP

but fell on the penultimate tour. This left Martin to secure second and home hero Johann Zarco to complete the podium on his Pramac Ducati, to the delight of the record crowd. Tech3 KTM rookie Augusto Fernandez gave the French squad a rousing result in fourth ahead of Aleix Espargaro's Aprilia and Brad Binder (KTM), who was knocked wide on the opening lap and dropped down to the back of the pack. He headed Fabio Quartararo, who battled arm pump that he believed was brought on by physio treatment at the circuit earlier on Sunday morning. Feeling like he lost 0.5s per lap to this, seventh from 13th after a wretched weekend did nothing to boost the Frenchman's form on the struggling Yamaha. While Bagnaia's title defence has hung by a thread recently, Quartararo – while not ruling anything out – appears nowhere near being able to replicate his 2021 success. That won't stop his home support from turning up in their droves in 2024 though!

LEWIS DUNCAN

NEXT REPORT

ITALIAN GP 15 JUNE ISSUE

RESULTS ROUND 5/20, LE MANS (FRA), 14 MAY (27 LAPS – 70.212 MILES)

POS	RIDER	TEAM	TIME
1	Marco Bezzecchi (ITA)	VR46 Ducati	41m37.970s
2	Jorge Martin (ESP)	Pramac Ducati	+4.256s
3	Johann Zarco (FRA)	Pramac Ducati	+4.795s
4	Augusto Fernandez (ESP)	GasGas Tech3 KTM	+6.281s
5	Aleix Espargaro (ESP)	Aprilia	+6.726s
6	Brad Binder (ZAF)	KTM	+13.638s
7	Fabio Quartararo (FRA)	Yamaha	+15.023s
8	Fabio Di Giannantonio (ITA)	Gresini Ducati	+15.826s
9	Takaaki Nakagami (JPN)	LCR Honda	+16.370s
10	Franco Morbidelli (ITA)	Yamaha	+17.828s
11	Danilo Petrucci (ITA)	Ducati	+29.735s
12	Lorenzo Savadori (ITA)	RNF Aprilia	+36.135s
13	Jonas Folger (DEU)	GasGas Tech3 KTM	+49.808s
R	Marc Marquez (ESP)	Honda	25 laps-accident
R	Jack Miller (AUS)	KTM	24 laps-accident
R	Alex Rins (ESP)	LCR Honda	14 laps-accident
R	Joan Mir (ESP)	Honda	12 laps-accident
R	Luca Marini (ITA)	VR46 Ducati	5 laps-accident
R	Alex Marquez (ESP)	Gresini Ducati	5 laps-accident
R	Francesco Bagnaia (ITA)	Ducati	4 laps-accident
R	Maverick Vinales (ESP)	Aprilia	4 laps-accident
NS	Raul Fernandez (ESP)	RNF Aprilia	injury

Winner's average speed 101.187mph. Fastest lap Bezzecchi 1m31.855s, 101.916mph.

QUALIFYING 2 1 Bagnaia 1m30.705s; 2 M Marquez 1m30.763s; 3 Marini 1m30.842s; 4 Miller 1m30.984s; 5 Martin 1m31.023s; 6 Vinales 1m31.120s; 7 Bezzecchi 1m31.173s; 8 A Marquez 1m31.275s; 9 Zarco 1m31.298s; 10 Binder 1m31.445s; 11 Espargaro 1m31.523s; 12 Fernandez 1m31.596s.

QUALIFYING 1 Marini 1m31.268s; 2 Fernandez 1m31.343s; 13 Quartararo 1m31.366s; 14 Nakagami 1m31.545s; 15 Di Giannantonio 1m31.718s; 16 Mir 1m31.810s; 17 Morbidelli 1m31.886s; 18 Rins 1m31.959s; 19 Petrucci 1m32.092s; 20 Savadori 1m32.410s; 21 Folger 1m33.605s.

SPRINT RACE (13 LAPS – 33.806 MILES)

1 Martin 19m59.037s; 2 Binder +1.840s; 3 Bagnaia +2.632s; 4 Marini +3.418s; 5 M Marquez +3.541s;

6 Zarco +4.483s; 7 Bezzecchi +5.224s; 8 Espargaro +6.359s; 9 Vinales +8.336s; 10 Nakagami +9.439s; 11 Rins +12.388s; 12 Di Giannantonio +14.125s; 13 Morbidelli +15.121s; 14 Mir +15.383s; 15 A Marquez +15.591s; 16 Petrucci +19.415s; 17 Savadori +26.992s; R Quartararo 9 laps-accident; R Folger 8 laps- accident; R Fernandez 5 laps- accident; R Miller 1 lap-accident.

Winner's average speed 101.498mph.
Fastest lap Bezzecchi 1m31.343s, 102.488mph.

RIDERS' CHAMPIONSHIP 1 Bagnaia 94; 2 Bezzecchi 93; 3 Binder 81; 4 Martin 80; 5 Zarco 66; 6 Marini 54; 7 Vinales 49; 8 Miller 49; 9 Quartararo 49; 10 Rins 47.

CONSTRUCTORS' CHAMPIONSHIP 1 Ducati 174; 2 KTM 103; 3 Aprilia 80; 4 Honda 73; 5 Yamaha 58.

WEEKEND
WINNERS

MOTO2
LE MANS (FRA)
Tony Arbolino (below)
Marc VDS Racing
(Kalex)

MOTO3
LE MANS (FRA)
Daniel Holgado
Tech3 (KTM)



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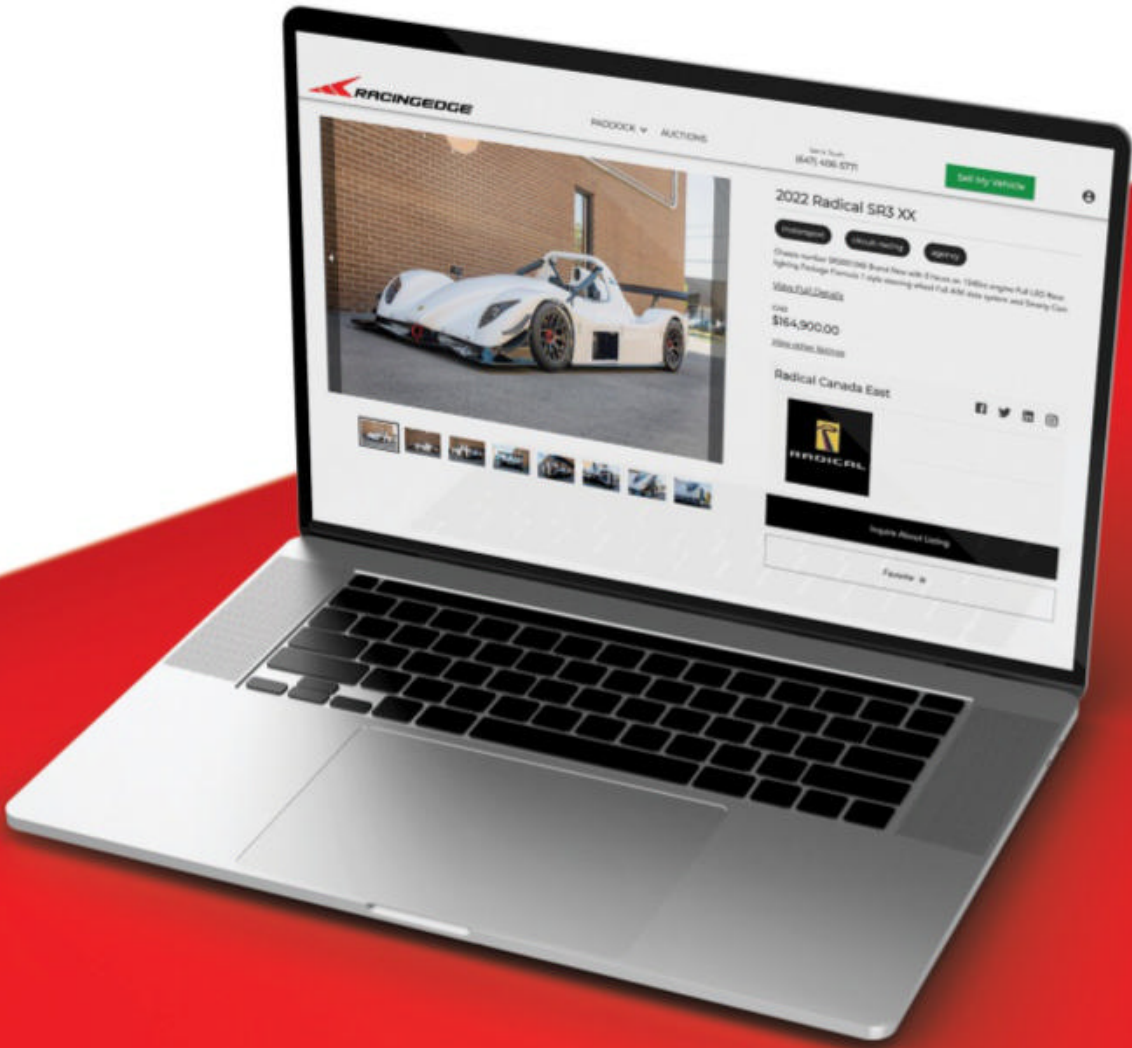


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- Designing and continuously improving electrical harnesses and circuits for use on cars and support equipment to remain competitive at a professional level.
- Performing quality control of finished products to ensure items exactly fit design specifications.
- Researching and developing new materials and components to build and preserve a competitive advantage while keeping costs at a minimum.
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- Maintaining accurate records of changes to all electrical components of the car to track progress in development and document proven wiring strategies.
- Produce and maintain databases and spreadsheets to log and track all electrical/electronic parts
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- Prototyping and development of electric and electronic systems
- Creation and maintenance of documentation and traceability systems
- Electric propulsion and Electric Vehicle subsystems
- Hybrid engine control systems
- Software development particularly data displays and embedded real-time software

You will also have:

- Minimum degree education in Electronic Engineering or a related Subject
- Previous exposure to the technical aspects of budgetary proposals and tendering for future work
- Excellent project management skills

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- Electronic analysis & design – Matlab, Simulink or similar (Electrical)
- Coding and/or embedded coding (Electrical)
- Software development particularly data displays (Electrical)

For all roles you must be able to demonstrate

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- Prepare data/monthly in conjunction with the Talent Acquisition Manager
- Catalogue and maintain document libraries e.g. job descriptions, adverts, process maps
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As a Talent Acquisition Coordinator, you'll:

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The Mondeo that Radisich took to 1994 World Cup glory is now owned by O'Donnell

Radisich to race Mondeo at Brands

SUPER TOURERS

Paul Radisich has become the latest star of the British Touring Car Championship's Super Touring era to confirm he will pilot one of the popular cars at the new Brands Hatch event dedicated to the machinery.

New Zealander Radisich competed in the BTCC between 1993 and 1998, driving for the factory Ford and Peugeot squads. He won six races and twice finished third in the standings.

Now he is due to be reunited with the Ford Mondeo he raced in 1994, and took to Touring Car World Cup glory at Donington Park, at the 1-2 July Brands Hatch event. The car is one of several Super Tourers owned by Kiwi businessman Scott O'Donnell, who lived in London in the 1990s, and Radisich has driven it a

handful of times in recent years.

"There are four or five cars coming from New Zealand to Brands and the Mondeo was one of them, and Scott was scheduled to drive it," Radisich told Autosport. "But he's just had shoulder surgery, so he called me and said he can't do it and would I drive it, and I said I've love to. I know the car and I've driven it lately – I raced it last month in the George Begg Festival at Teretonga. It's not going to be competitive compared to a lot of cars, but it will be nice to get back to Brands Hatch.

"It's quite ironic, because Scott as a young guy was watching me from the outside of the track in 1993 and 1994, and that's part of the reason why he bought the cars. I want him to stand in the same place as he did in 1993 and 1994 and this time I'll wave to him!"

Radisich – who regularly contests historic

and endurance races in his home country – is looking forward to a reunion with some of his old Super Touring rivals, including John Cleland and Anthony Reid, at Brands. "It's not about the competition – it's a weekend to see a few familiar faces and I'm looking forward to being part of it," he said. "I might be doing it in an older car, but I'll be driving it as hard as it will go! Scott prepares these cars extremely well and it'll be as good as it ever was."

Radisich is not the only Kiwi tin-top star on the entry list – multiple Bathurst winners Greg Murphy (Nissan Primera) and Steve Richards (Volvo S40) are also due to compete.

Meanwhile, a star of the BTCC's modern era is also due to contest the Super Tourers races that headline the Kent fixture, with Jake Hill set to join Reid and Richard Wheeler in a fleet of Primers. Hill is slated to drive the car Laurent Aiello took to the 1999 BTCC title and it will be the first time he has raced a Super Touring machine.

"I'm just buzzing to be honest with you!" said Hill. "It's arguably one of the best Super Tourers ever, especially in BTCC history, and I'm a very lucky boy. A huge thank you to Richard Wheeler and John Danby Racing for letting me drive it."

Hill has shared cars with Wheeler in Classic Sports Car Club events, and says Wheeler "is the reason why I have a career in historic racing now".



Current BTCC star Hill is due to drive Nissan guided to 1999 title by Aiello

MARCUS SIMMONS & STEPHEN LICKORISH

➔ P52 HILL'S OTHER NEW CHALLENGE

BTCC star Hill plans GT3 bow with Century

BRITISH GT

British Touring Car Championship frontrunner Jake Hill will make his GT3 debut with Century Motorsport in British GT next week at Donington Park.

Hill has become a championship challenger in the BTCC since joining West Surrey Racing for 2022, going on to finish third in the standings, while he sits fifth in this year's order after two rounds.

The 29-year-old will now swap his BMW 330e M Sport for an M4 GT3 machine on two occasions this year at both Donington rounds of British GT.

"This is my debut in GT3 – it's not my debut in British GT because I did it once upon a time in a GT4 Porsche with AmD and Shaun [Hollamby] in 2015," said Hill.

"So I'm not a complete stranger to British GT, but it has changed massively since I was last there. I am extremely excited about it. It's a new chapter, something I've wanted to do for a little while."

Hill has made numerous one-off appearances in a variety of machines over the past few years, primarily historics, and sees the British GT outings as a chance



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to experience a new car.

"To be honest it's just testing the water, and it's a great experience to jump at," he said. "I'm not eyeing a switch from the BTCC; it's just that this opportunity has come about."

"I wanted to do some modern GT racing. It had to be in a BMW because of my BTCC commitments, but I see that only as a positive. The M4 is currently one of the best three GT cars to be in in the world."

He will partner former RJN McLaren driver Simon Watts – the pair have already teamed up at Masters Historic and Peter Auto events, including in a BMW 3.0 CSL Batmobile at Spa last weekend.

Century leads the British GT drivers' championship after Dan Harper and Darren Leung took victory at the Silverstone 500, with team boss Nathan Freke excited by the squad's newest combination.

"I've known Jake since I was racing in the Ginetta G50 series and he was in Ginetta Junior way back in 2009, and he has gone on to become one of the real stars of the BTCC, especially since he joined WSR BMW last year," said Freke.

"He has shown how adaptable he is in all kinds of cars, including of course racing with Simon very successfully in various historic series, and Simon himself had some really strong races last season with RJN, so I'm really excited to have them onboard."

MARCUS SIMMONS & STEFAN MACKLEY



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New series aimed at helping students

UK MOTORSPORT

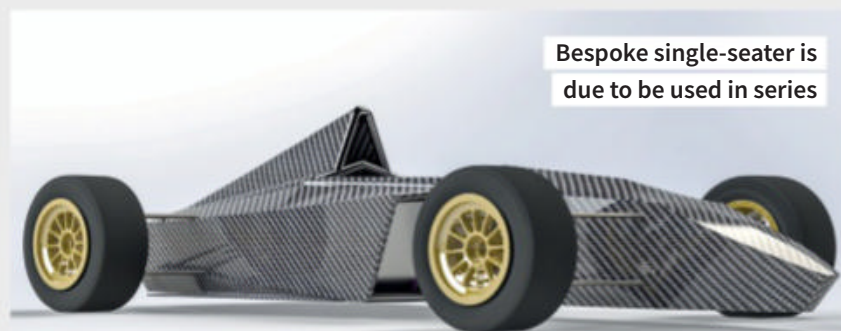
An education-based race series is being planned for next year as part of a bid by SCU Motorsport to offer students a new course to prepare them for working as engineers and mechanics within motorsport.

SCU was founded by Alan O'Neill – who previously taught a motorsport college course – and it intends to develop a new qualification that will use augmented and virtual reality to help

students learn key skills before they put them into practice in the race series.

A grant from the Ufi VocTech Trust, which funds new vocational learning projects, has been secured to help create the 3D learning environment. This will begin with a set-up masterclass delivered to UTC Oxford.

It is planned that the race series will feature a bespoke single-seater developed specifically for the championship and the cars will all be run by students



Bespoke single-seater is due to be used in series

from universities and colleges. Both internal combustion and electric methods of propulsion are being explored.

"The inspiration is we wanted to make sure motorsport continues to grow and that we're able to support students getting the right qualifications to increase their chances of

securing a job in motorsport," said O'Neill.

"We've talked to a lot of industry experts – race engineers, mechanics, team owners, manufacturers and suppliers – to get an understanding of what they need. The key thing is they need the skills but students need to practice those skills."

STEPHEN LICKORISH

IN THE HEADLINES

GIRLS ON TRACK ROLE

F1 Academy driver Chloe Grant has become a Girls on Track UK Ambassador. The 17-year-old Scot is currently racing with ART in the new-for-2023 championship, taking a best result of fourth last time out in Spain. The ex-GB4 racer will provide an insight into the sport at school and networking events in her new role.

BLACK BACK ON TOP

Callum Black returned to asphalt rallying in style to score an emphatic victory on a tough Manx Rally in his Ford Fiesta Rally2. Co-driven by Jack Morton, Black moved ahead of early leader Dave Wright on Saturday morning to win after 140 competitive miles. When Wright joined a growing list of retirements, it was Neil Roskell who took second in his Fiesta Rally2.

SPEED FEST EVENT OFF

The organisers of the planned Kincardine Castle Speed Fest have announced that the 2023 event has been cancelled due to matters beyond their control. The new hillclimb in Scotland had been granted a track licence for a short competitive course but it will now not happen this July. Instead, the team is working towards bringing the event to fruition in 2024.

FLORENCE-THEMED LIVERY

Porsche Carrera Cup GB Pro-Am frontrunner Will Aspin will tackle the Imola round of the Porsche Supercup this weekend in a car with a special Florence-themed livery (below). The Florence local will be driving for the Ghinzani Arco Motorsport squad created by ex-Formula 1 racer Piercarlo Ghinzani and has linked up with the nearby Centro Porsche Firenze dealership. The livery features the statue of David, the Florence Cathedral and Florence's coat of arms.



Young shines on TCR China debut with runner-up finish

TCR

TCR Europe race winner Jack Young impressed on his debut in TCR China last weekend, finishing as runner-up in his maiden outing at Shanghai. Despite his lack of experience of the circuit, the Northern Irish driver – who won the Renault UK Clio Cup in 2019 – qualified third in a factory-supported Dongfeng Honda Racing Team Civic. After initially slipping back, Young was able to recover lost ground and eventually finished second. In the partially reversed-grid race, he moved into the lead briefly

and was on course for second again before car problems meant he had to retire. “Race two was amazing – I was able to fight my way through and take the lead of the race by half distance from eighth,” said Young, who sits fifth in the standings. “It was still an amazing weekend, and we did a brilliant job with this car, which is five years old and in its last race weekend, as we’ll have the brand-new Civic for Zhejiang next month. After the great weekend we’ve just had, I can’t wait.” Irishman and former TCR UK driver Max Hart was also in action in the category but retired from both races.



TCR Honda prize for Civic winner

CIVIC CUP

This year’s Civic Cup champion will receive a prize TCR test with Honda’s touring car partner, JAS Motorsport, in Italy. The trip will offer a day at JAS’s Milan factory, including a session in its simulator. A day’s track testing will follow, at the wheel of the new FL5-version of the Honda Civic

Type R TCR, as driven in TCR UK by reigning champion Chris Smiley. The car recently took its first win with Niels Langeveld in TCR Italy. JAS Motorsport’s Mads Fischer said: “As builders of the Honda Civic Type R TCR, we have the unique opportunity to introduce the champion to the most advanced and highest-performance Civic touring car anywhere in the world to show them that they can move up the racing ladder with Honda.”

Former Mazda MX-5 pacesetter Jack Harding currently heads the Civic Cup standings after its opening two race weekends. He said: “Stewart Lines [Civic Cup promoter] has been putting the TCR test on for the top three in the championship for a couple of years now, which enticed me into Civic Cup last year, and this is absolutely mega. “It might just be an awesome experience but it also might lead to more, you never know. It’s a good way to showcase your talent, going to go test a touring car with a works team.”

MARK PAULSON



Four F1 teams due to appear at Goodwood

GOODWOOD FESTIVAL OF SPEED

Ferrari and Mercedes are among the Formula 1 teams scheduled to appear at this year's Goodwood Festival of Speed.

The 13-16 July event will celebrate 30 years of the automotive extravaganza – as well as 75 years since the Goodwood circuit first opened – and will once again host several current F1 squads. McLaren and Williams are also due to attend, although no details have yet been given about the cars or drivers that will head to Sussex – however, the event does fall the weekend after the British Grand Prix at Silverstone. Last year, George Russell, Esteban Gutierrez and Zhou Guanyu were among those entertaining the Festival of Speed crowds.

“In this special year for Goodwood, we are thrilled that some of the most



JEP/MOTORSPORT IMAGES

prominent names in Formula 1 will be joining us at the Festival of Speed,” said the Duke of Richmond. “Each year we are honoured that the teams take time out of their busy calendars to head to Sussex, drive the hillclimb and spend time with our visitors.

“As we look to the next 75 years of motorsport at Goodwood, the future of Formula 1 will play a big part in our storytelling as we all look to preserve the passion of the sport, but also enter

the next phase of innovation.”

Alongside the F1 teams announced as attending, four-time champion Sebastian Vettel has already been confirmed as driving a number of his classic grand prix machines up the Goodwood hill. Other key features announced for this year's event include a celebration of 75 years of Porsche producing cars – the German manufacturer being chosen for the central feature sculpture – while the centenary of the Le Mans 24 Hours will also be commemorated.

Ex-FIA and F4 man Lowe sets up his own team



MAUGER/MOTORSPORT IMAGES

C1 ENDURANCE SERIES

Former FIA man and ex-British Formula 4 championship manager David Lowe has set up his own race team and plans to initially compete in the C1 Endurance Series.

Lowe has held a variety of roles over the past 30 years, progressing from working as a mechanic at Arrows in F1 to being a key figure at Carlin, before spending time with the

FIA and as sporting manager for W Series. Now he wants to use that experience to help drivers develop through his new David John Racing outfit.

“There's one thing I haven't done and that's have my own team!” said Lowe. “I restore classic race cars at my workshop and I thought, ‘I've got some extra space and I'm sure I can put a modern car in there.’ I had a long think about it and spoke

to some close friends and they said, ‘Go for it!’”

He has selected the C1 category to begin with, but has ambitions to progress into sportscars. “I want to give something back,” said Lowe, who will attend this weekend's Silverstone C1 event. “I've got access to a lot of engineers and they want to work with me. I can give the club driver a little bit more with my experience in motorsport.”

STEPHEN LICKORISH

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Bike champion Guintoli to return to Radical racing

RADICAL CUP UK

Former World Superbike champion Sylvain Guintoli has signed with North Motorsport to contest the Radical Cup UK's British Touring Car-supporting rounds at Snetterton this weekend and the championship's Silverstone fixture in July.

The 40-year-old Leicestershire-domiciled Frenchman will compete in the premier SR3 class in a latest generation XXR machine. It follows a series of recent car outings in the UK, which have enabled him to gain his international licence. He has ambitions to race in the Le Mans 24 Hours, having won the French classic's motorcycle equivalent in 2021 en route to that year's World Endurance crown with Suzuki.

Guintoli, who raced a Radical in 2016, said: "Nobody has ever won both the motorcycle and also the car 24 Hours at Le Mans — you never

know what offers might open up in the future and this would be good preparation.

"The Radical lap times around Snetterton are a bit scary and the drivers at the front are really quick. But I tested the car there and loved the downforce and cornering — it's a different feeling to a bike but I just want to enjoy myself."

North Motorsport boss Sam North said: "We're working with a world champion — what more can I say except there's all the desire and professionalism you'd expect. In testing he's shown great promise."

Last autumn Guintoli raced a VW Golf TCR in the Birkett Relay at Silverstone and in March he appeared in the Mazda MX-5 Clubman series, followed in April by a Supersport Endurance Cup outing at Snetterton in a Suzuki Swift.

CARL MCKELLAR



Guintoli has raced several cars already, including Swift

RICHARD STYLES

IN THE HEADLINES

TURBO MG3 TO MAKE DEBUT

A turbocharged MG3 will race for the first time when it competes in the MG Trophy at Silverstone next month. Colin Robertson has been leading development of the MG3, which has so far lacked competitiveness because of its increased weight compared with the older MG ZR. Having successfully tested the turbo car, Robertson will give the new combination its debut at the MG and Triumph century event on the Silverstone Grand Prix circuit.

COLLIER FLIES IN FROM SPAIN

Professional tyre tester Ray Collier made a success of his fleeting visit from work in Spain to compete in the Cockshoot Cup at Oulton Park last Saturday. After completing a 16-hour drive on Friday evening, the 2018 champion qualified his MG ZR 190 second fastest in Saturday morning's 0830 session. Collier then split first and second positions in the races with Chris Greenbank, before dashing for a flight back to Spain.

TAYLOR'S MAD DASH TO UK

Another driver facing a race against time last weekend was Snetterton Mini Challenge Trophy winner Nicky Taylor, after his flight from the US was cancelled on Thursday. "I flew in from Washington to Heathrow and arrived at 6am on Saturday, drove straight to the circuit and qualified on pole, before winning the first race of the weekend, too," said Taylor. "Jet lag didn't come into it, I just put my head down and got on with it."

UNUSUAL PORSCHE RACES

Kenn van Hauen gave an outing to his distinctive Porsche 911 (below) at Anglesey last weekend, having bought the car on eBay. The wide-hipped, whale-tailed Porsche was originally built in America and van Hauen did not see it in person before making his purchase. Fellow 750 Motor Club racer Phil Brough's EPS Motorsport operation helped get the car into shape ahead of the All Porsche Trophy races in Wales.



STEVE JONES



MICK WALKER

Midget & Sprite grid grew to 23 cars at Oulton

New class helps to boost grids for Midget & Sprite Challenge

MGCC

The MG Car Club's Midget & Sprite Challenge achieved one of its largest grids for several years — and its best at Oulton Park since 2007 — last weekend, helped in part by its new-for-2023 historic class.

The additional division, which caters for FIA-spec machinery, complements the existing three classes that allow various levels of modification. Cars in the historic class retain a standard silhouette, windscreen and hard-top roof or hood. Engines have a maximum capacity of

1293cc, breathing through Weber carburettors, mated to the A Series gearbox. Suspension modification is very limited and cars run on crossply tyres.

"The idea behind it is that we perceive the interest is in the older cars at the moment, and the pretty-looking cars, as they were back in the period," explained series chairman John Collinson, who races an Ashley Midget in the class. "They're simple to build, relatively simple to run and they're good fun on these Dunlop historic tyres."

MARK PAULSON



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Capris and Group Cs star at Spa Peter Auto

HISTORICS

Packed grids and some close racing characterised the 2023 running of Peter Auto's Spa Classic meeting last weekend, with the thrilling lead battle in the Heritage Touring Cup opener among the highlights.

After an hour-long night race, just under eight seconds covered the top three at the flag, with a barely believable 0.615s winning margin for Maxime Guenat from Armand Mille, while Yves Scemama completed the podium — all in Ford Capri RS3100s. Mille triumphed in race two, in sunshine on Sunday, but his margin was a much more comfortable two minutes. Among the other Capri entries were McLaren Formula 1 boss Zak Brown and his fellow United Autosports chief Richard Dean, but they did not finish either time.

Two races for Group C cars were contested by a very healthy grid. The rain-affected first race was won in convincing style by Philip Kadoorie in his 1990 Porsche 962C (in iconic pink-and-white Italia Sports livery), with almost 26s over second-placed Kriton Lendoudis in the ex-Michael Schumacher 1990 Mercedes-Benz C11. Lendoudis triumphed in race two, though the highlight had to be the hard-charging performance of Ralf Kelleners to



finish third in another Porsche 962C after this car dropped down the order from pole. Brown was seventh in a Jaguar XJR-10.

Elsewhere, there was British success among the field of 28 identical classic pre-1966 Porsche 911s of the 2.0L Cup as British Touring Car racer George Gamble and fellow former Carrera Cup competitor Seb Perez brought their car home in first with a 28s winning margin.

Other races featured endurance GT and prototypes from the mid-1970s up to the very beginning of the 1980s (think Porsche 935s, BMW M1 Procars and a host of open

prototypes), and the Greatest's Trophy for 'exceptional' cars that ran in the major endurance events of the 1950s and 1960s (such as the Bizzarrini 5300 GT, Ferrari 250 'SWB' and Lister Jaguar Knobbly), which was topped by the D-type of Christian Glasel and Gary Pearson both times.

A packed grid of classic 1966-74 endurance racing machinery brought the event to a fine conclusion. The hour-long race was won by Max and Andrew Banks in their 1968 McLaren M6B, with Mille second in his 1969 Lola T70 Mk3B.

CHRIS TARLING

MR2 champion Cooke samples Topley's Elva

EQUIPE CLASSIC

Triple Toyota MR2 champion Aaron Cooke is on a voyage of discovery this year, showcasing his ability in different race categories while trying to raise support for his ongoing career, and sampling an Elva at Brands Hatch last weekend was the latest example of this.

He shared fellow MR2 racer Ali Topley's 1963 Elva Courier in the two Equipe Classic races that supported the GT World Challenge.

"I'll have a go in Mazda MX-5 [racing in the MX-5

Supercup], there's a Club Enduro race coming up next month in an Audi TT, and I want to race with the Legends at the American SpeedFest," he said. "I believe I can definitely go a lot further but have no funds to make it happen."

Cooke met Topley when both raced on short ovals, and they joined the MR2 championship together. MR2 rookie champion in 2019, he followed this by winning the main title in the following three years.

Neither driver had experienced the full Brands



Hatch Grand Prix layout before Saturday's pitstop race, and they had the Elva in the top 10 in a field of 46 cars before it stopped with a broken radius arm. Sunday's second outing took them

successfully to the finish in a class competitive 15th overall. The left-hand-drive car had one previous UK owner following an extensive racing history in the USA.

BRIAN PHILLIPS

Baker/Swift win as Roadsports entertains in the Anglesey sun

ANGLESEY
750MC
13-14 MAY

Anglesey Circuit is one of the most picturesque in the British Isles, especially on a late spring day when the sun is shining. And, last Saturday, the first day of the 750 Motor Club's weekend of events at the venue, was one such occasion where competitors were blessed with blue skies from dawn to dusk – although Sunday was another matter entirely, with blustery showers and cold winds.

The 750MC had put together a programme of races that provided a wide variety of cars across a number of championships, with the Tegiwa-backed series providing the greatest variety across a single grid. Entries for both the 45-minute Roadsports and two-hour Club Enduro contests ranged from relatively humble hot hatches to small-volume racers with a good spread between front and rear-wheel-drive cars, with most entered for both races.

Reigning Club Enduro champions Robert Baker and Carl Swift had put their Volkswagen Golf GTI on pole for the Roadsports encounter but, despite not arriving in time to take part in qualifying and consequently starting from the pitlane, there was still a suspicion that William Stacey could feature at the front with his ultra-rapid Lotus Elise S2.

In fact, it was Alec Livesley's Ginetta G20, dwarfed by the Golf alongside, that took the lead from second at the rolling start. By the time they approached the climb to Rocket Corner, the status quo had been re-established, though, and the Ginetta challenge faded with Livesley and Adam Bessell eventually finishing 11th after the 25 laps. Luke Handley in his Golf had a good early showing, running in second, but retired after only eight laps. However, while this was all going on, Stacey was scything through the field, the sun flashing off the diminutive Lotus's metallic blue paintwork

as he made hay at a circuit more suited to handling than outright power. He was already up to 11th after 10 minutes of the allotted 45 and was fighting with Baker for the lead by the half-way point.

Mandatory pitstops threw a joker into the mix but, although Stacey still led after them, the Golf was staying in touch. Sadly, the Lotus's alternator gave up the ghost and Stacey came to a halt, leaving Baker/Swift to take a well-deserved win. Despite a coming together on the last lap, Ryan Parkin and Mark Grice/William Beech continued to finish second and third in Audi TT and SEAT Cupra machinery, respectively.

Sunday's two-hour race swapped tyres degraded by high Tarmac temperatures for cold intermittent rain, to the same overall effect of catching out the unwary. This time, Stacey and Rob Boston were not to be denied, with the Elise winning by a whole lap from Baker and Swift's Golf. A remarkable feat not only because of the conditions but also the four safety car periods that bunched the field up.

Mighty Minis was the direct opposite in not only being a single model of car, but also by fielding a grid of only 12 entries compared to Roadsports' 34. This didn't stop them putting on a cracking race during Saturday, however. The cars were being thrown around the Welsh circuit with cocked rear wheels around most corners and accompanied by the distinctive manic gearbox buzz and rasping exhausts. Stuart Coombs and David Kirkpatrick, second and third on the grid behind Neven Kirkpatrick, seemed a little too eager to get the fun started while waiting for the lights to go out but escaped penalty.

Neven Kirkpatrick kept the lead to the end of lap one, with brother David second and Steven Rideout third. The Super Mighty trio went on to finish in this order but the bare fact does a disservice to the racing in between. The Kirkpatrick brothers could be seen outbraking each other and the laws of adhesion in pursuit of the win. Greg Jenkins



Stacey had a close battle with Baker/Swift Golf until Lotus alternator woe

also threw everything at getting onto the podium, recovering well from excursions onto the grass and one particular "very sideways" moment, but still finished fourth.

Further back among the Mighty machines, Suzy Inch, the latest member of the Inch family to go Mini racing, was doing her best to prove it's a genetic thing with some demon overtaking moves. Olly Samways ultimately took the class honours. Sadly, a further depleted field on Sunday contributed to a more subdued second outing, which was again won by Neven Kirkpatrick as Samways took class spoils.

Small grids were not a problem for the Campaign Against Living Miserably All Porsche Trophy, with 30 entries taking to the track. Steve Hewson and his Cayman



Hewson claimed three CALM All Porsche wins



Kirkpatrick brothers had an enjoyable Mini scrap



may have walked away with the silverware in all three races but Richard Harman's slow-starting and fast-running 944 Turbo, complete with flame-spitting exhaust, kept him honest. Conspicuous among the front-engined four pots and Boxsters was Kenn van Hauen's wide-hipped, whale-tailed, supercharged 911. Despite confusion over pitstop rules during their 40-minute race on Sunday, the Porsches had some good, clean and close racing throughout.

Although there were some minor taps in most races, the generally respectful racing across all the series reflected the friendly paddock that has gathered under the 750MC banner. Unfortunately, one of the few inadvertent moments of contact resulted in by far the biggest off at the

meeting, with Daniel Sibbons' fast spin on the grass in his Ma7da ending with taking out some of the tyres lining the Armco, bringing out the red flag. Thankfully after a moment to collect his thoughts, he climbed out of the car unaided. This didn't dampen the enthusiasm of the rest of the Ma7das, along with the Bikesports, Locost and MX-5 runners who were making the most of being let loose on Anglesey's full 'International' track for the first time.

The Ma7da spoils were ultimately shared between Martin West and Jonathan Lisseter, while Charles Hall's Mittell proved unbeatable in Bikesports. Meanwhile, Todd Boucher narrowly denied Craig Land a Locost clean sweep.

STEPHEN MOSLEY



WEEKEND WINNERS

ROADSPORTS

Robert Baker/Carl Swift (Volkswagen Golf GTI)

CLUB ENDURO

Will Stacey/Rob Boston (Lotus Elise S2)

MIGHTY MINIS

Races 1 & 2 Neven Kirkpatrick (Super)

CALM ALL PORSCHE TROPHY

Races 1, 2 & 3 Steve Hewson (Cayman)

MA7DA

Race 1 Martin West

Race 2 Jonathan Lisseter

BIKESPORTS

Races 1 & 2 Charles Hall (Mittell MC-41R, below)

LOCOST

Race 1 Todd Boucher

Races 2 & 3 Craig Land

MX-5 CUP

Race 1 Jordan Johnson

Races 2 & 3 Ben Hancy



For full results visit: 750mc.co.uk



Jeff Smith (l) and Astin enjoy
one of many Snetterton
Miglia battles

Smiths and Astin head the battling Mini masters

**SNETTERTON
BARC
13-14 MAY**

Both classic and more modern Minis provided some entertaining racing at Snetterton last weekend, with Kane Astin and Jeff Smith sharing the spoils in two hotly contested Mini Miglia contests.

Astin, Aaron Smith and Rupert Deeth got a first-lap break in race one, after Jeff Smith and Ben Colburn collided into Riches. As the lead trio squabbled, it was not long before Jeff Smith started to close in again. Things came to a head on lap five of nine, when Aaron Smith attempted to dive inside Astin into Agostini, only for the pair to touch and spin. Deeth therefore emerged with the lead, from Jeff Smith, Colburn and the two recoverees, who quickly made it a five-car train again.

Into Riches for the final time, Jeff Smith

clipped Deeth, which handed Aaron Smith a decisive lead. Astin took the flag in second, from Jeff Smith, Deeth and Colburn. However, both Smiths then received penalties for the contact, which left Astin the victor, from Aaron Smith.

Poleman Shaun King managed to hold the early advantage in race two, before Jeff Smith and Astin sailed by into Brundle and began to pull away. As the lead duo swapped and changed, Aaron Smith joined them, before Phil Bullen-Brown made it four at the front. Jeff had the lead on lap four, before Aaron and Astin went ahead into Brundle, but it all came down to the last tour. Astin led onto the Bentley Straight but couldn't hold off the Smiths, as Jeff took victory by 0.152 seconds over Aaron, with Bullen-Brown fourth.

The Mini Se7en races proved to be equally competitive, highlighted by duels between Mike Jordan and Joe Thompson both times.

In race one, Thompson repeatedly led into Riches, before Jordan retook the place on the Bentley Straight, which later proved decisive. Spencer Wanstall was third from lap four after Connor O'Brien retired.

The second race had started in a similar vein, but Jordan was able to make good his escape from half-distance to secure his second win. Wanstall was third again, while O'Brien completed the top four after edging out Darren Thomas on the line.

The combined Caterham Graduates Sigma 150 and Sigmax fields took their battles to the flag in all three races. James Wingfield and Harry Senior spent most of the opener swapping and changing, which allowed Will Stilwell to split them on a couple of occasions. Senior led into Murrays on the last lap, but Wingfield outdragged him to take victory with 0.048s to spare, with Stilwell retaining a solitary third.

It was a similar pattern in the second race for the lead, while Stilwell duelled with Harry Cramer for third. Wingfield led onto the final tour, but it was Senior taking victory, as his race-long rival was left to hold off Rob Warner for second. Cramer finally saw off Stilwell for fourth.

Stilwell looked set for a win in race three, after Senior slipped up two laps from home. But Wingfield closed the gap again to make a last-lap challenge, securing his second victory, with Cramer holding third from the recovering Senior. Further back, Thomas Horton took two Sigmax class wins, to Matthew Willoughby's one.

There were three different winners in the Caterham Graduates Sigma 135s. Theo Theato led most of race one, but couldn't



Caterham Sigma 135 star
Theato slides as he leads

WEEKEND WINNERS

MINI MIGLIA

Race 1 Kane Astin

Race 2 Jeff Smith

MINI SE7EN

Races 1 & 2 Mike Jordan

CATERHAM GRADUATES – SIGMA 150 & SIGMAX

Races 1 & 3 James Wingfield

Race 2 Harry Senior

CATERHAM GRADUATES – SIGMA 135

Race 1 Theo Theato

Race 2 Ben Wheatley

Race 3 Richard Groom

MG OWNERS' CLUB

Race 1 Steve McDermid (ZR 170, below)

Race 2 Scott Bugner (ZR 160)

SNETTERTON SALOONS

Bryan Bransom (BMW E36 M3)

HYUNDAI COUPE CUP

Races 1 & 2 Luca Staccini Anzanello

KUMHO BMW

Races 1 & 2 Jason West (E46 M3)

MINI CHALLENGE TROPHY

Race 1 Nicky Taylor

Races 2 & 3 Maximus Hall

For full results visit: tsl-timing.com

shake off Ben Wheatley and Stefano Marra. Wheatley led briefly but failed to hold off Theato's last-lap challenge.

Wheatley led from the start of race two, but lost out to both Richard Groom and Theato within a lap. Groom started to escape, but couldn't sustain his advantage. Theato therefore led onto the last lap, but exited Nelson on the grass, dropping him to third, behind Wheatley and Groom. Groom then finally got his win in the last race, comfortably heading home Marra.

Steve McDermid's ZR 170 won the first MG Owners' Club bout after his race-long duel with Scott Bugner's ZR 160 ended when Bugner ran wide at Coram. But Bugner got his revenge in race two, heading home the defending champion, while Martin Wills completed a brace of thirds.

PETER SCHERER

JUNIOR SALOON CHAMPION HALL COMES OF AGE WITH MAIDEN MINI VICTORIES



Hall's first podium came in opener, followed by two wins

Junior Saloon Car champion Maximus Hall not only took his first Mini podium at Snetterton, but followed it with a maiden double victory.

Jack Byrne led from the start of the opening race, from Nicky Taylor, Hall and Rhys Hurd. "Then Jack slid wide at Oggies, I got down the inside and had the lead," said Taylor.

Hurd had managed to get ahead of Hall, too, with Tom Ovenden and Alex Solley soon following, as it became an eight-car train at the front. Taylor and Byrne had started to build a gap to the huge battle for third, but Taylor was soon on his own as Byrne fell back. "I lost the rear into Coram and dropped three places," he explained.

Hall was into second with Ovenden third into Agostini while, ahead, Taylor sealed victory by 3.8 seconds. Byrne managed to recover fourth on the last lap but was then penalised for contact, which left Harry Hickton, James Black and Solley completing the top six.

Taylor led the opening lap of race two from Hall and Hickton, before Hall made his move on Taylor and led out of Agostini on lap two. Hickton joined the lead pair in a making break while, behind them, Solley was pressing Ovenden for fourth. With Taylor and Hickton briefly exchanging places, Hall was able to extend his lead.

Ovenden then spun on oil at Brundle and dropped well down and, with countless others being caught out, the safety car was deployed before red flags flew. This meant Hall had claimed his first Mini win, from Taylor, Hickton and Solley.

Byrne had the lead again at the start of the finale and tried to build a cushion ahead of the reshuffling pack behind. But Hickton made a challenge for the lead into Coram and managed to get ahead into Riches. Byrne then retook the place at Coram, with Hall following into second, after starting the lap sixth.

The pressure was off Byrne for a while as Hall fended off Solley, Hurd and Taylor, all challenging for second, as Hickton started to slide down the order. As they began the fifth lap, Hall had shaken off the threat from behind and was challenging Byrne for the lead, taking charge from Murrys. Hall managed to consolidate his lead to make it win number two by 1.3s. "I had to just keep focusing and not looking behind, great weekend though," he said.

Byrne managed to hold onto second from Solley, but Hurd and Black touched at Hamilton on the last lap, allowing Taylor to jump them both. But they managed to retake the race-one winner, and it was Black who eventually secured fourth.

PETER SCHERER



Taylor took the spoils in frantic opening race

Double delight for Mitchell in close contests

BRANDS HATCH
MSVR
13-14 MAY

Jonathan Mitchell wowed a crowd lured to Brands Hatch by GT World Challenge Europe with an incredibly narrow win in the weekend's first 7 Race Series 420R appearance on the main event undercard.

He crossed the line in a three abreast finish with Anthony Barnes and Jason McCormack after a typical Caterham confrontation to win by 0.01 seconds.

Starting 10th on a partially reversed grid, it took Mitchell only four laps to reach the front in race two. For a while it looked as if he'd broken the tow from the following bunch but, despite lacking a nosecone, McCormack hauled him in and won by nearly half a second, with Mitchell, Andy Perry and Barnes line astern. However, McCormack was later demoted to third for contact with Perry, creating double delight for Mitchell.

Series newcomer Stephen Clark perfected his last-lap slipstreaming to lead over the line on several occasions in the first 1600 race. The only problem was that, when the actual last lap arrived, he was in the wrong position, as Max



Mitchell (l) won twice in 420R races, but was aided by a penalty for rival McCormack

Haynes won the final dash, with David Baldwin and Clark right behind.

The early stages of Sunday's thrash were overshadowed by wildly cheering Valentino Rossi fans greeting their hero on the podium. Once the excitement subsided, Baldwin was in front when an early stoppage followed an incident at Surtees, as he finished ahead of Haynes and Clark.

Josh Law's faltering Sports 2000 title defence continued at Brands Hatch, as he twice finished second. Former champion Michael Gibbins took top honours, but the second win depended on a big slice of luck.

Nearly half of Saturday's race ran behind

a safety car during protracted efforts to shift a stranded car. Gibbins had jumped well clear of poleman Law at the start, but the caution period helped Law to stay in touch after the green flag. Paul Trayhurn, David Houghton and Tim Tudor contested third and the Historics were headed by Jon Harmer, William Schryver and Charlie Hyett.

A red flag for a shunt at Paddock Hill Bend on lap two rescued Gibbins' second race, giving his team time to mend a loose hub that caused him to trail round to the pits in last place. A whole new race for the rerun was cut to a meagre three laps, Law and Trayhurn again following Gibbins as

Cockshoot Cup spoils shared in dramatic opener

OULTON PARK
MGCC
13 MAY

The MG Car Club's long-running Cockshoot Cup produced two entertaining tussles at its Oulton Park season-opener, won by Chris Greenbank and Ray Collier.

Targeting overall wins, Class F champion Greenbank upgraded his MGF with a VHPD engine to run in the modified class. Pole



Davis (l) couldn't get ahead of Watson in first Sevens race

MICK WALKER

position, alongside Collier's MG ZR 190, was a good start, but both were jumped by Keith Egar's K Series-powered MG Midget and Mark Wright's ex-Warren Hughes MGF Cup car.

Wright and Collier then demoted Egar, before Collier squeezed ahead into Island. As Wright experienced gear-selection problems, Greenbank took second at Druids mid-race then reeled in Collier, who'd glazed his brakes. Collier held firm until Greenbank got a run exiting Lodge on the final lap and squeezed past through Deer Leap. "I've come with an aim and we've achieved it," smiled the maiden winner. "Now I've got to keep it going!"

The fast-starting Egar was ambushed by Collier and Greenbank approaching Lodge early in the rematch. Greenbank hit the front next time around but there would be no dream double as, although he repassed Collier after losing time through the Hislops escape road, a red flag gave Collier victory on countback.

While still unbeaten in this year's Midget & Sprite Challenge, Modsports runner Stephen Watkins's well-used slicks helped the race-modified Austin-Healey Sprites of Pippa Cow, James Hughes and Richard Bridge initially keep in touch. After Cow and Bridge had spells in front, they ran three-wide with Watkins before his Midget pulled clear. Cow toured in after a long brake pedal sent her off at Hislops, while Bridge and Hughes continued to trade second – Bridge getting the nod after a red flag.

After passing Cow in race two, Watkins was untroubled, leaving the double champion to fend off Hughes as Bridge struggled with a heavy vibration caused by rear-tyre pickup. A brush at Hislops pitched Hughes into retirement and let Bridge ahead of Cow, but she retook second exiting Deer Leap on the penultimate lap.

The Caterham C400s of Tim Davis and Colin Watson had the measure of the rest of the guesting Magnificent Sevens field. The pair were separated by just 0.08 seconds in



the same trio headed the Historics.

Equipe Classic Racing brought out more than 50 cars for qualifying and 40-plus for each of its two races. Chris Beighton's Sunbeam Tiger led all but a couple of laps on Saturday, with Jamie Boot's TVR Griffith giving chase. A caution period reduced Beighton's winning advantage, but he was never under threat. Third place was a different story, Bruce White's Lotus Elan just beating Rick Willmott (AC Cobra) and Tom Smith (MGB).

Cars from the 1970s joined the field on Sunday – notably a Ford Escort Mk2 shared by Nick Whale and Michael Lyons.

This proved a runaway combination, Whale leading from the start and Lyons extending their advantage to more than a minute over Martin and Oliver Pratt's Morgan +4 as Beighton and Boot completed the top four.

Racing only on Sunday, the first of two BMW Car Club outings was dominated by Niall Bradley's M3 E46, maintaining his early season success. Runner-up Graham Crowhurst had other ideas in race two, leading from lap three. An off-road moment at Stirling's Bend didn't help Bradley's chase.

BRIAN PHILLIPS



qualifying but an incorrect dash reading tricked Davis into starting in second gear. He dropped to around 10th as Watson streaked away from pole. Davis mounted a sterling recovery and was second by lap four but, using a spare engine that was 40bhp down, he could not find a way past and Watson held on to win. That consigned Watson to start the sequel from 11th due to a winner's penalty and, although he made second, polesitter Davis was 30s ahead.

Ian Boulton was delighted to secure his first overall MG Cup victory, despite running low on fuel. As invitational entry

Stuart Tranter's Rover Tomcat struggled for grip, Boulton closed in and made his move into Shell Oils. A slow getaway dropped Boulton to fifth in race two and, after recovering to second, he was unable to challenge Tranter.

New tyres and a set-up tweak found Adam Jackson 0.6s between qualifying and the first MG Trophy race. Having been pipped by Graham Ross to pole, Jackson was quicker away and drove into the distance for a 14s win. A safety car kept race two closer, but Jackson was still a comfortable winner.

MARK PAULSON

WEEKEND WINNERS

BRANDS HATCH

7 RACE SERIES – 420R

Races 1 & 2 Jonathan Mitchell

7 RACE SERIES – 1600

Race 1 Max Haynes

Race 2 David Baldwin

SPORTS 2000

Races 1 & 2 Michael Gibbins (MCR S2n)

EQUIPE CLASSIC

Race 1 Chris Beighton (Sunbeam Tiger)

Race 2 Nick Whale/Michael Lyons
(Ford Escort Mk2, below)

BMW CAR CLUB

Race 1 Niall Bradley (E46 M3)

Race 2 Graham Crowhurst (E46 M3)

For full results visit:

msvr.co.uk/car/events/2023/may/bh-14



OULTON PARK

COCKSHOOT CUP

Race 1 Chris Greenbank (MGF)

Race 2 Ray Collier (MG ZR 190)

MIDGET & SPRITE CHALLENGE

Races 1 & 2 Stephen Watkins (Midget)

CSCC MAGNIFICENT SEVENS

Race 1 Colin Watson (Caterham C400)

Race 2 Tim Davis (Caterham C400)

MG CUP

Race 1 Ian Boulton (MG ZR 170, below)

Race 2 Stuart Tranter
(Rover 220 Tomcat Turbo)

MG TROPHY

Races 1 & 2 Adam Jackson (ZR 190)



For full results visit: tsl-timing.com

THE FUTURE OF SCRUTINEERING CONTINUES TO EVOLVE

As the trial of a revised approach progresses, the introduction of a new database later this year could be a game-changing development

STEPHEN LICKORISH

Changing a long-established practice is never easy. However positive the new proposal sounds, there will inevitably be some who believe that the traditional method is best. That's why, for a change to be successful, it needs to be tested, considered and discussed with the key stakeholders, rather than being rushed into. And that careful process is exactly what Motorsport UK is undertaking when it comes to revolutionising its approach to scrutineering.

Autosport outlined last year (23 June) how the governing body was trialling a new system where, instead of the pre-pandemic situation of every single car at a meeting being given a six-minute check before qualifying, 25% of entries (either chosen randomly from all competitors or all cars from certain categories are selected) are given a more extensive 15-minute examination. Around 100 events were run in such a manner last year and there was some very positive feedback. The trial is now continuing into this season, ahead of Motorsport UK finalising proposals for 2024.

But, alongside the method of scrutineering being assessed, a new scrutineering vehicle database is also going to be piloted in the second half of this year. The database is designed to provide a record of faults found on a particular car, and means that, for machines raced across multiple clubs, instructions from scrutineers are not lost when the driver subsequently competes elsewhere.

"The consistency of keeping on top of the standard of vehicle preparation and making sure issues that are identified are resolved



MICK WALKER

can become quite disjointed if there isn't the same scrutineering group each weekend with super short-term memory to remember every fire extinguisher that needed a service the last week to make sure it's been done," says Motorsport UK technical director Ian Smith. "So this centralised scrutineering vehicle database is going to give all of the scrutineers an opportunity to access a digital record for each car.

"We would absolutely encourage scrutineers to apply some pragmatism and a little bit of leeway where it's appropriate and this gives them a way of doing that with some reassurance. If a scrutineer says to a competitor, 'You must sort that by next time,' they'll be held accountable because there's a record the next scrutineer can check."

For the initial launch, the focus is very much on simplicity. When consulting with the race committee on the plans, there was a clear message about the need to avoid any additional burden on competitors, clubs or scrutineers. Therefore, initially, the database will just record



Longer checks allow more time for scrutineers to speak to drivers

MICK WALKER



More extensive inspections can now be carried out

MICK WALKER



the make and model of a car and give an event history of any faults found. “The point is, it doesn’t matter who the driver is, it’s a very simplified record that is associated with a unique identifier for that vehicle,” explains Smith. “Keeping it simple makes perfect sense, but there’s the opportunity to expand it as far as we feel, collectively, we want to go.”

Further down the line, there is perhaps the potential for competitors to be notified when a fire extinguisher is due to expire, but those discussions will follow once the system is running successfully. MotorSport Vision Racing chief scrutineer Nigel Thorne has built his own prototype database that he has been using for the past two years and says it brings clear benefits.

“What it gives me is records, which I’ve never had before,” he says. “I can look and see the last time I saw these cars, these are the cars with failures. This time, we need to target this and this and this

“The word goes round the paddock and, when you tell them to fix it, they fix it because of the database”

because we’ve not seen them or they needed to replace that because it had a problem last time. That is working – the word goes round the paddock and, when you tell them to fix it, they fix it because they know you will come back to them because of the database.”

Having such a system could be a game-changer for the scrutineering process and fits perfectly with an approach where cars are no longer being inspected before every meeting. And the feedback on the 25% trial has so far been good – from clubs, competitors and, importantly, many scrutineers.




“The big thing for me is club motorsport is a hobby and spending your precious hobby time in a queue pushing your car to scrutineering every event just seems really backward now,” says Classic Sports Car Club director David Smith. “We would be the first to say it’s not working if it was allowing unsafe vehicles through, but we’ve not really noticed any increase in incidents or breakages through not having 100% scrutineering. At the last round, of the series checked, I think more things were picked up because they had a little more time.”

Scrutineer Nigel Jones certainly believes that having those longer 15-minute inspections is useful. “For the cars that need a little more attention, scrutineers have the time to talk with the entrant/driver/mechanic and explain why things need to be corrected,” says Jones, who scrutineers for a diverse range of categories and clubs, including the Historic Racing Drivers Club, British Formula 4 and British Rallycross. “That doesn’t impact on the scrutineering programme because you’ve got a 15-minute window. Another plus is competitors don’t have the early morning start and have to queue in the pouring rain. It starts their weekend in a calm and controlled way.”

And Jones is adamant that not seeing each car at every event does not mean standards have decreased. “It’s totally the opposite,” he says. “Instead of saying, ‘that needs fixing,’ and send it away, you can spend more time with people. Also, there are still spot checks in parc ferme and you can have a look around in the assembly area.”

Regardless of whether you vehemently believe in traditional 100% scrutineering or are in favour of the new system, Smith stresses that Motorsport UK is not looking to implement a one-size-fits-all approach. He also says there will be a focus on education and an examination of the common faults found by scrutineers. “None of this is about catching anybody out, it’s about making sure whenever someone presents their vehicle they’ve got all the information they need to make sure it’s compliant and safe,” he concludes. Every tool to help achieve that objective is undoubtedly worth exploring – even if it does mean a new way of working. ❧



The P4t had its first run out at Loton Park in March after seven years of work

NATIONAL FOCUS

HOW A SUMMERS DREAM BECAME REALITY

The hillclimb ace and his family have spent the past seven years creating the P4t and the car has now made its first appearance

PAUL LAWRENCE

Hillclimbing has always been a hotbed of design innovation, and a whole industry has grown around the construction of low-volume single-seater racing cars. Current British Hillclimb Championship contender Alex Summers has now joined the select band of drivers who have built their own car and it has taken seven years of effort, frustration and tears. Yet the P4t is not currently destined to be a BHC challenger.

Seven years after the initial sketches, the car ran for the first time at Loton Park in late March. Those years were an emotional rollercoaster for 2015 British Hillclimb champion Summers and his family, but the result is sensational. Sleek, low, purposeful and superbly engineered, the P4t is a triumph of tenacity, determination and engineering ability. The P4t uses the 2.5-litre Cosworth engine previously fitted to the DJ Firestorm that Summers runs in the BHC, now with a Cosworth Indycar motor.

The founding concept behind the P4t was a car that would better suit and fit the women in Summers's life: his wife Debbie and his mum Lindsay. Both are fiercely competitive hillclimbers but can struggle to get an optimum driving position.

"It's a car for them," explains Summers, who wants to use the project to promote women in motorsport. "It's very different in a number of ways. Its influence is the GWR Predator and I make no apologies for that. Graeme Wight is a god to me and I hope he sees it as a compliment. Anyone who has designed, built and raced their own car, like Ray Rowan, Steve Owen, and Sean and David Gould, is a hero and they've been the influence and the motivation."

With massive hands-on support from his parents Richard and Lindsay, they built the chassis from the ground up. "The donor Van Diemen was a set of brakes, a set of pedals, steering column, steering rack and stuff like that," recounts Summers Jr. "The first iteration is steel tubing with a resin-infused carbon skin bonded together, and it's bolted to the front and rear bulkheads on the floor. So the chassis and the body is all down to us."

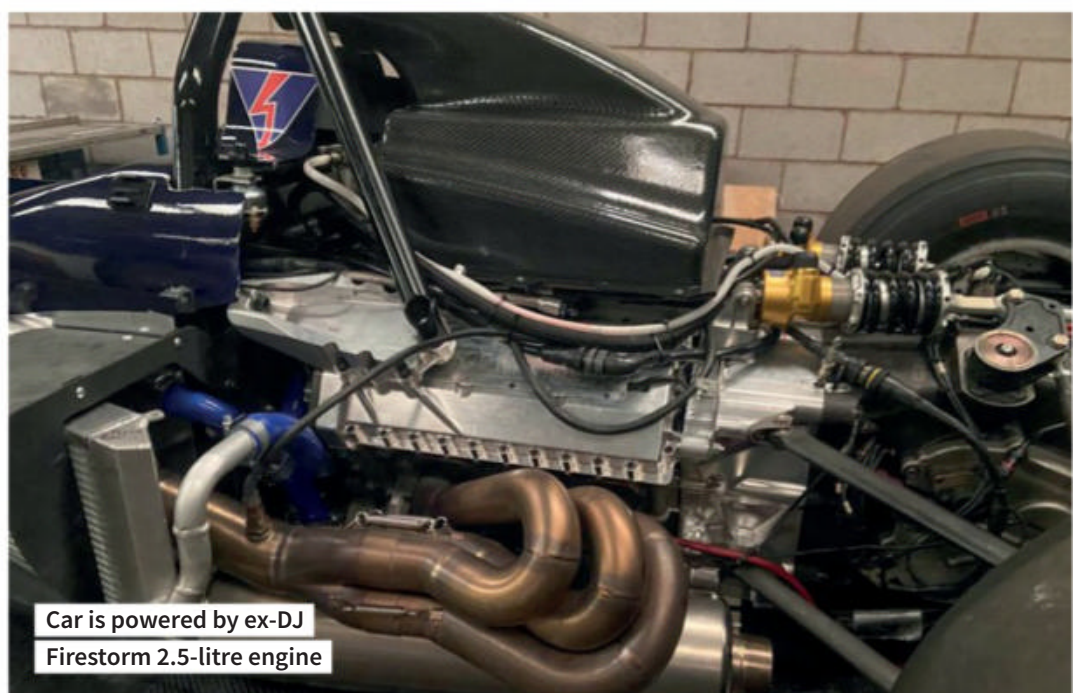
The P4t is extremely low so that smaller drivers such as the Summers women can sit on the floor of the car, without any foam or padding, and see out of the front. "When you see my mum sit in the Firestorm it highlights a very serious problem," continues Summers, whose day job is in the automotive industry, working for the likes of Aston Martin and as a test driver for McMurtry. "Ergonomically, if



Summers has created the car alongside his parents



The P4t is designed to allow shorter drivers to sit low to the ground



Car is powered by ex-DJ Firestorm 2.5-litre engine



Summers's wife Debbie is due to compete in the car

you're smaller, you are at a disadvantage in these racing cars, because you end up sitting too high, and therefore you're too close to the steering wheel because the pedals are too far away.

"My mum genuinely is the best composite laminator in the family. She's made one of the nosecones, which is a structural component, entirely on her own and a lot of composites like radiator ducts and wing brackets.

"The process was so intense and I hope it inspires someone somewhere to get the spanners out and have a go, whether it's a Mini, a Caterham, a kart or whatever it is, just have a go. That's how engineers are created and that's what club motorsport should be.

"When I started it, I didn't have a clue what I was getting myself into and it was a massive emotional rollercoaster. I've done things like the Festival of Speed at Goodwood, I've won run-offs and championships, but nothing prepared me for the significance of seeing a car that we'd created sitting there in the paddock looking good.

"Painting it was the most stressful part of it for me. I'm quite happy with the mechanical engineering. The carbon is very satisfying when you get it right, which is about half the time."

Summers set himself a target of having the car running before the

start of the new British Hillclimb season. If not, it would have been another year because chasing the title is intense and time-consuming and leaves no time for a project like the P4t. The support of a number of companies and individuals, including BHC rival Trevor Willis, helped make it all come together.

"We started it up on the Thursday night before its first run, and I cried for about 20 minutes," Summers admits. "I couldn't quite believe it. What people don't necessarily understand is that you've got an

"When I started it, I didn't have a clue what I was getting myself into and it was a massive emotional rollercoaster"

engine and you've made your own oil tank, which we did. Well, Trevor Morris made the tank but I designed it all and we made our own pipes and fabricated everything in the garage. Any tiny little bit of swarf left in a pipe, the tank or a line and that's it, the engine is dead. And we're talking about a 1990s race engine that is almost impossible to replace.

"When we started the engine, it held its oil and it held its fuel and started beautifully. We stood there for 20 minutes afterwards with a fire extinguisher checking for drips and there were no drips and no leaks. Nothing. Wow, Christ!"

Now that the P4t is up and running, the natural question is what comes next. But Summers says it's unlikely there will be any more of the cars made, at least in the near future. "God knows — no idea," he says. "There's no plan. We've got the tooling and we've got the moulds so we could make another one. But I don't necessarily plan on doing that in the immediate future because I'm just very tired from the last one!"

The P4t is likely to be back out in the mid-season and will be primarily driven by Debbie and Lindsay. "The name is a bit of a joke really," adds Summers. "It started as a P40, which was a sort of target budget, and the joke was then, when we exceeded that by some margin, that it was a P45. But the name stuck." ❧

FINISHING STRAIGHT

Austria 1987:
Schlegelmilch
captures speed and
colour of Michele
Alboreto's F1-87

SCHLEGELMILCH

Dual perspectives on an F1 legend



BOOK
**FERRARI: FROM
INSIDE AND
OUTSIDE**
Rainer Schlegelmilch
and Ercole Colombo
Edited by
James Allen
RRP £60

There's *something* about Ferrari. Whether the Formula 1 squad is riding high or enduring one of its periodic slumps, or yo-yoing confoundingly somewhere in between, the fascination, and the emotional investment of devoted fans, remains the same. And Ferrari's consistent presence within the championship reinforces a sense that it's woven into the fabric of F1.

So, any fresh perspective on this endlessly intriguing motorsport icon is to be welcomed. In *Ferrari: From Inside and Outside* that perspective is chiefly visual, captured through the viewfinders of two of Formula 1's longest-serving – with careers starting in the 1960s and lasting well into the 21st century – and most celebrated photographers, Rainer Schlegelmilch and Ercole Colombo. Both are responsible for producing arguably the most recognisable images of grand prix racing and the world of F1, but in the context of this book, their first ever collaboration, they're presented as coming from two quite discrete directions.

Schlegelmilch, who is now best known for his technical artistry, pushing the

boundaries of innovation with techniques for capturing the speed and colour of F1, first saw himself as an outsider, admiring the reportage style of photography made popular by Henri Cartier-Bresson, Robert Capa and the Magnum photographers – looking in from the outside. His portraiture, outstanding examples of which feature in this book, remains peerless.

Colombo, meanwhile, is described as the ultimate insider, a man whose skills as a networker rival his abilities with a camera. He earned the trust of Enzo Ferrari in the late 1970s, becoming the great man's photographer, capturing major events and behind-the-scenes moments. A case in point: it was that access and familiarity, plus his instinct – that uncanny photographer's sixth sense – that ensured he alone squeezed the shutter release when *il Commendatore* unexpectedly, and touchingly, kissed the head of Gilles Villeneuve at a press conference in 1980 after the driver had suffered a heavy crash due to a tyre failure in the previous day's Italian Grand Prix.

This book isn't just a collection of

feast-your-eyes images. There are contributions from key players in the history of Ferrari, kicking off with a foreword by Enzo's son Piero Ferrari, and followed by a scene-setter from the book's editor, James Allen, who witnessed up close how the team created the blueprint for how to win in modern F1.

Schlegelmilch and Colombo describe the paths that led them into the F1 paddock and their relationship with Ferrari. The outsider Schlegelmilch: "I don't think I ever spoke a word to Enzo. I was just a photographer. Why should I ask him something stupid? So, I would just watch him and take pictures. That was enough for me."

Colombo, meanwhile, talks of being summoned by Enzo to be given "a picture of what was really happening in F1 behind the scenes. He was super well-informed. Nothing would escape him." He recounts his relationship with Villeneuve, and their final words at Zolder in 1982, how "super professional" Michael Schumacher was "great to work with", and the trust and rapport between him and legendary



COLOMBO



ALL PHOTOGRAPHY
motorsport
IMAGES



Enzo Ferrari plants a kiss
on Gilles Villeneuve's head

engineer Mauro Forghieri.

The book is broken up into sections of images from the 1960s, 1970s, 1980s, 1990s, 2000s and 2010s, alternating with the key figures' insightful reflections on Ferrari and their place in its history: Forghieri, Luca di Montezemolo, Jean Todt, Stefano Domenicali (who is Colombo's son-in-law!) and Italian journalist Leo Turrini, whose description of abandoning his press-box post during the final laps of the 2000 Japanese Grand Prix in a fit of nerves and feverish anticipation only to discover in the paddock Ferrari engineers doing just the same – imagine old-school expectant fathers pacing a hospital corridor – is priceless.

Turrini will be the least familiar to an anglophone audience, but it's fitting that he should have the last word. He states: "I am convinced that the identity of Ferrari is a feeling, an emotion."

The brilliant work of Schlegelmilch and Colombo, displayed across the pages of this book, encapsulates that sentiment quite beautifully.

PETER HODGES

WHAT'S ON

INTERNATIONAL MOTORSPORT

Emilia Romagna GP F1 World Championship Round 6/23

Imola, Italy

21 May

TV Live

Sky Sports F1, Sun 1355

TV Highlights

Sky Sports F1, Sun 1730,

Channel 4, Sun 1830

Formula 2 Round 5/14

Imola, Italy

20-21 May

TV Live Sky Sports F1,

Sat 1310, Sun 0915

Formula 3 Round 3/10

Imola, Italy

20-21 May

TV Live Sky Sports F1,

Sat 0900, Sun 0735

Porsche Supercup

Round 1/8

Imola, Italy

21 May

TV Live

Eurosport 2, Sun 1040,

Sky Sports F1, Sun 1050

Australian Supercars

Round 4/12

Tasmania, Australia

20-21 May

TV Live BT Sport 3,

Sat 0630, BT Sport 1, Sun

0345, BT Sport 2, Sun 0630

Super Formula

Round 3/7

Autopolis, Japan

20-21 May

TV Live on

Motorsport.tv, Sat 0625,

Sun 0645



Emilia Romagna GP

Nurburgring 24 Hours

Nurburgring Nordschleife,
Germany

19-21 May

TV Live Viaplay, Fri 1625,

Sat 0330, Sat 1330

FRECA

Round 2/10

Catalunya, Spain

20-21 May

TV Live Viaplay, Sat 1655,

Sun 0905

NASCAR Truck Series

Round 10/23

North Wilkesboro, USA

20 May

UK MOTORSPORT

Snetterton BARC

20-21 May

BTCC, British F4, Mini

Challenge, Porsche Sprint

Challenge, Radical Cup UK

TV Live ITV4, Sun 1045

Oulton Park MSVR

19-20 May

Ferrari Challenge UK

Mallory Park BARC/CMMC

20-21 May

CMMC (Classic Challenge,

Intermarque Silhouettes,

Super Saloons, Tin Tops),

Mini Challenge Clubsport,

Northern Saloons/Sportcar,

Pickup Truck, Super

Classic FF1600

Croft BARC

20-21 May

Caterham (270R, 310R,

Academy, Championship

UK, Roadsport), Scottish

Mini Cooper Cup, Z Cars/

Production GTI

Pembrey BARC

20-21 May

2CV, British Truck, JSCC,

Track Attack, Welsh

Sports & Saloon

TV Live via barc.net

Brands Hatch 750MC

20-21 May

116 Trophy, 116 Sprint/

Coupe Cup, 750 Formula,

Classic Stock Hatch, Clio

Sport, F1000, Formula Vee,

Historic 750 Formula, Hot

Hatch, MR2, Type R Trophy

TV Live via

alphalive.co.uk

Anglesey MSVR

20-21 May

Boxster Cup, Clubmans

Sports Prototype, Miata

Trophy, MSVT Trackday

Championship, MSVT

Trackday Trophy, Porsche

Club, Porsche Open

Silverstone BRSCC

20-21 May

C1 Endurance Series,

Fiesta, Supersport

Endurance Cup,

Zeo Prototype

NATIONAL MEETING OF THE WEEK

The third round of the British
Touring Car Championship takes
place at Snetterton, with the
Radical Cup UK appearing on
the TOCA support bill for
the first time in 2023



MICK WALKER

MASTERS HISTORIC FESTIVAL

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injected nostalgia
on the majestic
Brands Hatch
Grand Prix Circuit



BRANDS HATCH
SAT 27/SUN 28 MAY 2023

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Weekend Admission £40* - Saturday Admission £23* - Sunday Admission £28* - Children Under 13 GO FREE

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*Discounted advance booking closes 16:00 Thursday 25 May.



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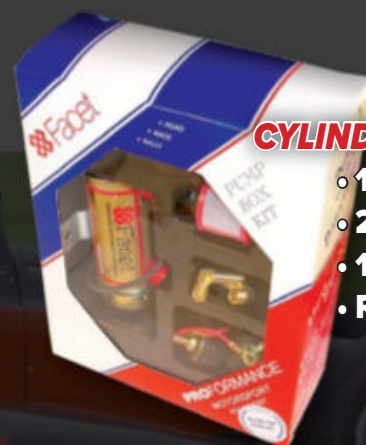


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- Soft Mount Kit

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LE MANS HEARTBREAKS



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STALEY

There have been plenty of dramatic late retirements in the Le Mans 24 Hours, but some have been more heartbreaking than others. Here are the top five that seemed the most harsh, unfair and unbelievable.

KEVIN TURNER



5 PEUGEOT DISASTER, 2010
Titanium conrods proved the undoing of Peugeot's attack in 2010. After qualifying 1-2-3-4, with the ORECA entry backing up the three factory 908s, Peugeot lost its long-time leading car of Stephane Sarrazin/Nicolas Minassian/Franck Montagny on Sunday morning. The charging remaining works car also suffered engine failure, leaving ORECA to chase Audi until it too succumbed with just over an hour to go.



SUTTON

4 FINAL LAP LOSS, 2021
GT3 racing standout WRT moved into LMP2 in 2021 and quickly proved to be a force. Robert Kubica, Louis Deletraz and Yifei Ye, who would all go on to win the European Le Mans Series crown, seemed to have class honours sewn up as the 24 Hours drew to a close. But on the final lap the Gibson V8 shut down thanks to a sensor issue and Ye was left stranded. The other WRT car won, leaving very mixed feelings in the camp.



JEP

3 HEROIC PRIVATEERS, 1990
Against works opposition from Nissan and Jaguar, Oscar Larrauri qualified Brun's Porsche 962 second in 1990. He then fell ill during the race, leaving Jesus Pareja and team owner Walter Brun on their own. They rose to the challenge and were running second, helped by the decision to use the high-downforce configuration for the new Mulsanne chicanes, when the engine failed with just 15 minutes left on the clock.



2 LEVEGH DENIED, 1952
Driving solo, Pierre Levegh (real name Pierre Bouillin) almost pulled off one of the most remarkable Le Mans victories of all time in 1952. His Talbot T26 GS Spyder gradually climbed the order and, into the closing stages, held a sizeable lead over the works Mercedes team. Levegh was never going to be caught, but the 4.5-litre straight-six's big-end failed with just over an hour to go, handing Mercedes a lucky 1-2.



1 TOYOTA'S CURSE, 2016
After several near-misses, Toyota finally seemed to have cracked Le Mans in 2016. The TS050 of Anthony Davidson, Sebastien Buemi and Kazuki Nakajima appeared to have won out in an intense battle with Porsche when a connection in an air line between turbocharger and intercooler fractured in the final six minutes. Nakajima got going but his last lap was too slow for the car to even be classified as a finisher...



MAUGER



FROM THE ARCHIVE

The tarp-shrouded Lotus 72s of Emerson Fittipaldi and Dave Walker are prepped in the sun-baked Österreichring paddock at the 1972 Austrian Grand Prix. Polesitter

Fittipaldi, who opted to race his spare car (#31), was demoted to third place at the start by Jackie Stewart (Tyrrell 005) and Clay Regazzoni (Ferrari 312B2), but by half-distance was settled in a lead he would not

relinquish. There was no easy run to the flag, though, as over the closing laps he was hounded by the McLaren M19C of Denny Hulme. Walker (#21), who qualified 19th, was out of the race on lap seven of 54 with engine failure.



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It's rare that a successful sportscar racing double act spans multiple manufacturers. Once strong foundations are built up, loyalty (and an accompanying pay bonus) typically keeps one or both drivers in the environment in which they hit it big. Examples of both parties moving on to the same destination, then recapturing previous glories in entirely different surroundings without it being the result of a boardroom-level mandate, are scarce.

But Dirk Müller and Joey Hand proved to be the exception when the former BMW racers, who together claimed the American Le Mans Series GT class title in 2011, were reunited at Ford and conquered the GTE Pro division at Le Mans in 2016.

The pair remain contracted to the Multimatic organisation that operated the Ford GT programme from 2016-19, so have been colleagues on and off for over a decade. Perhaps unsurprisingly then, Müller's choice of Hand as his favourite team-mate isn't motivated purely by success. "It's probably something unique – to call a team-mate a friend," the 47-year-old explains. "What I think suits both of us is that he knows, when he's doing set-up work, what I need and vice versa. We have the same kind of thinking. The sense of humour is the same, so it really fits well."

A first victory came at Road America with a Rahal-run M3 E92 in 2010, before



three in a row started off their run to the 2011 crown. Hand's 2012 DTM move meant their appearances together were more sporadic until 2016, when Müller joined the Blue Oval in IMSA a year after the Californian. They were paired again, Müller believes, due to a desire "to make similar driving style pairings I guess".

"There is so much respect between each other that this ego part was never a case," he says. "I always knew he was plenty fast, and when he wasn't then something wasn't right and we figured it out, and the other way. That kind of mentality I think is the one besides the very similar driving styles which made us super-strong."

Müller hasn't raced with Hand since the Ford GT programme's culmination but, with the new Multimatic Mustang GT3 set to come on stream next year, don't rule out another reunion.

JAMES NEWBOLD



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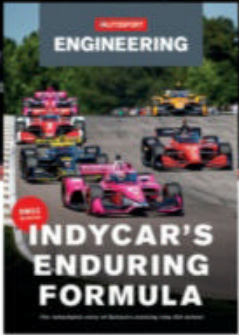


So long as racing remains close and engineers are challenged, the DW12 will remain in business

INDYCAR IS STAYING FAITHFUL TO ITS MUCH-CHANGED STALWART

Over a decade has now passed since the 2012 launch of IndyCar's DW12 chassis. A year that was dominated by Gangnam Style entering into the public's consciousness as it became the first video to crack a billion YouTube views, while the infamous efforts of an octogenarian amateur painter at restoring a fresco of Jesus achieved worldwide attention. The DW12 by comparison has been a slow-burner. But after 11 years and a fair few reboots, including a dalliance with manufacturer-specific aerokits before the cars adopted their current look for 2018 plus the 2020 addition of the aeroscreen, Dallara's creation is still going strong. And just like Cecilia Gimenez's widely mocked makeover of *Ecce Homo*, which proved such a tourist hit that it funded a local carehome and gave the works of original artist Emilio Garcia Martinez

a new lease of life, IndyCar's reboot has proven a win-win for the series and its teams – who have built up an inventory of parts, are satisfied with its safety and have just enough technical freedom to explore without it being cost-prohibitive. As IndyCar's competition and race engineering boss Bill Pappas tells David Malsher-Lopez in the cover feature on page 10, the series is well-served by its current mount for the foreseeable future as it gears up for its hybrid-powered era that begins in earnest next year. Ahead of IndyCar's set piece event, the Indianapolis 500, we've handed our regular Engineer's View column over to Chip Ganassi Racing's sporting director Chris Simmons (p9) to explore the vagaries of set-up for the Brickyard, and also hear from AJ Foyt Racing's highly respected engineering lead Michael Cannon (p26) about his career to date.



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Galstad/
Motorsport Images

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LIGIER, BOSCH TO REVEAL NEW HYDROGEN CAR

Covers will come off the JS2 RH2 at the Le Mans 24 Hours next month

Sportscar constructor Ligier Automotive will reveal a new hydrogen demonstration vehicle at next month's Le Mans 24 Hours after embarking on a joint venture with Bosch Engineering.

The French manufacturer of LMP2 and LMP3 chassis announced last week that it will take the covers off a machine based on its Ligier JS2 R racer after joining forces with Bosch, which provides the motor generator unit, inverter and vehicle control unit for the LMDh hybrid system. A Ligier statement said the cooperation's aim is "to build a high-performance vehicle with a hydrogen engine that delivers drive dynamics equivalent to those of conventional gasoline-powered sports cars".

Bosch has been charged with overseeing the overall vehicle concept of the JS2 RH2, which takes its name from the Ligier JS2 that finished second at Le Mans in 1975. This will cover the converted V6 combustion engine, three integrated hydrogen storage tanks and the car's safety concept, while Ligier will manage the vehicle architecture, H2 system integration and cooling.

Ligier Automotive boss Jacques Nicolet, whose company is collaborating with Lamborghini on its LMDh project, explained that the hydrogen move was part of the company's "strategy to become a preferred partner of automotive manufacturers for integrating new energies and new technologies".

Bosch Engineering GmbH president Dr Johannes-Jorg Ruger added that "hydrogen propulsion has great potential, especially in motorsports and high-performance sports cars".

This is a view shared by Le Mans organiser the Automobile Club de l'Ouest, which is targeting the introduction of a zero emissions class at the famous endurance race. Its planned launch in 2025 is now set to be postponed further as discussions continue over what the class will look like.

A likely participant is Toyota, which built a H2-powered Corolla for the Japanese Super Taikyu Series, and fielded a H2 GR Yaris as the safety car on select stages of last year's WRC Rally Ypres.



MICHELIN ANNOUNCES DEPARTURE FROM TOP CLASS OF SUPER GT

Michelin will end its tyre supply in Super GT's top GT500 class at the end of 2023 season, signalling the culmination of its relationship with Nissan and the works NISMO team it has supplied since 2013.

A brief statement issued last week said that the decision was taken as a result of Michelin "reconsidering its race support structure". Its surprise withdrawal has wide-ranging ramifications for both Nissan and Super GT as a whole. Nissan has the headache of trying to reach an agreement with one of the three remaining GT500 suppliers, while the tyre

war that has long been a core element of the premier category now faces an uncertain future.

Michelin's departure, which is not anticipated to impact the GT300 class in which it currently supplies the Team Studie BMW M4 GT3, leaves Super GT's top class with only Bridgestone, Yokohama and Dunlop. That marks its smallest pool of suppliers since 2008, the year prior to Michelin's entry.

Yokohama, like Michelin, currently has two customers – the Racing Project Bandoh Toyota GR Supra and the Kondo Racing



Nissan – while Dunlop only supplies the Nakajima Racing Honda NSX-GT. Bridgestone is numerically dominant, with 10 of the 15 GT500 cars in the field.

Michelin has won four GT500 titles, two with the MOLA Nissan squad in 2011-12 and then two more in 2014-15 with NISMO.

JAMIE KLEIN



New construction will arrive from British Grand Prix

MAUGER/MOTORSPORT IMAGES

PIRELLI TO INTRODUCE TOUGHER NEW F1 TYRE CONSTRUCTION

Formula 1 supplier Pirelli will introduce a tougher tyre construction from July's British Grand Prix in response to a rapid escalation in car performance. The move is not being made because of safety concerns, but in a bid to limit problems at circuits that are traditionally demanding on tyres such as Silverstone, Spa and Zandvoort. Sources suggest that downforce levels are on par with what was projected for the end of 2023, with cars only set to get faster as upgrades arrive. Compounds of the new tyres will be identical to those currently used. Approval from teams has now been given, with

plans in place to test the new construction at next month's Spanish GP. Pirelli's head of car racing and F1 Mario Isola said its simulation work "has always been aimed at not only supplying a product that hits the performance targets specified by stakeholders, but also anticipating any potential problems and reacting to them quickly". He added that the new specification contains materials already developed for 2024 that would make the tyres more resistant without impacting their behaviour on track. **JONATHAN NOBLE & FRANCO NUGNES**

IN BRIEF



MARK FAGELSON PHOTOGRAPHY

BENTLEY V8 PARTS ON SHOW

A valve from the V8 engine of Bentley's 2003 Le Mans 24 Hours winning #7 Speed 8 will be displayed within all 48 of the limited edition Continental GT and GTC cars from its newly announced Le Mans Collection. The Crewe manufacturer bisected 24 of the 32 valves from the four-litre twin-turbo V8 engine, which will be displayed in place of the standard central dial. The cars will also carry visual styling cues to the Speed 8, including a #7 painted on the grille.

NEW HQ FOR CATERHAM

Caterham Cars says a move to new 54,000 square foot premises near to its current HQ in Dartford will enable an increase of its annual production capacity by 50%. This will equate to around 750 new Sevens per year. Completion is anticipated by the end of this year, its 50th in business and the second following a buyout from Japanese owner VT Holdings in 2021.

FORMULA STUDENT GRANT

Formula Student teams using sustainable fuel in this year's 25th anniversary competition will receive a grant from Motorsport UK. In total 13 teams, including three overseas universities, will use fuel derived from second-generation biofuels produced by Coryton. The supplier says it offers an 80% reduction in greenhouse gas emissions compared to a fossil fuel equivalent.

MOUNTUNE IN OZ EXPANSION

British Touring Car Championship engine builder Mountune has established a new service and logistics facility in Tasmania. Headed up by Tom Wallace, Mountune Australia will offer a full suite of Ford and VAG performance upgrades. Founder David Mountain said the expansion "represents a new chapter" for the business, which celebrated its 40th anniversary in 2020.



JEP/MOTORSPORT IMAGES

ALPINE SHOWS OFF PIKES PEAK SPECIAL

Alpine has revealed the first images of its new Pikes Peak challenger, built in collaboration with the Signatech squad that fields its LMP2 programme in the World Endurance Championship. The one-off A110 Pikes Peak edition, which includes significant aerodynamic modifications to the rear wing, diffuser and splitter, will be the first works-entered Alpine to take on the 12.42-mile Colorado hillclimb on 25 June. Raphael Astier, who won the 2022 FIA R-GT Cup with the A110 Rally edition, will be its driver. Signatech technical director Lionel Chevalier and project manager Francois Letort worked closely with Alpine's design office on the 950kg car, which completed its first test runs last month at Lurcy-Levis with a Le Mans-inspired shark fin mounted to the rear window. Chief designer Raphael Linari said the project "was completed in a decidedly short timeframe, thanks to the close collaboration with Signatech's technical teams".



ALPINE



FOTOSPEEDY

EUROFORMULA OPEN IN TYRE SWITCH AFTER FACTORY FIRE

The EuroFormula Open championship will switch from Hankook to Pirelli tyres for the remainder of the 2023 season. The Korean manufacturer had faced supply problems caused by a factory fire that decimated its stocks and hampered its production capacity. A short statement from the Spanish-based series last week said there was "a shared intention to expand the agreement" with Pirelli "into a partnership for the years beyond". EFO had only run on Hankook rubber for one round, last month's Portimao season opener, after switching from long-time supplier Michelin over the winter. Sister GT Sport-run series GT Open is unaffected as it continued its deal with Michelin. Series boss Jesus Pareja, who had to cancel EFO's planned Pau round last weekend due to the promoter's requirement to run engines on biofuel, praised Pirelli for its "quick response" after Hankook's unforeseen problems. He said: "The common wish is to expand it for the years to come and we see this technical partnership as one of the assets that will allow us to craft the future of the Euroformula Open."

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DRIVING CHANGE LUCAS DI GRASSI

THE BIG QUESTIONS OVER A FUTURE WITH SYNTHETIC FUELS

Momentum is building behind eFuels, but does it offer a viable future for the motorsport and automotive industries?



IndyCar has switched to renewable fuel – will it be adopted by regular consumers?

The topic of eFuels has been pushed more into the spotlight by Formula 1's drive to utilise a 100% sustainable drop-in fuel for its next generation of engines in 2026. This follows the World Rally Championship in 2022 introducing a blend of synthetic and biofuel, which it claims is 100% renewable, and for this season IndyCar introduced its own blend that uses second-generation ethanol derived from Brazilian sugarcane.

Huge investment is going into eFuels to keep internal combustion engines alive for longer, with the sale of new ICE cars due to be banned by the EU from 2035 unless they are running on synthetic fuels, and to reduce the carbon output of existing cars. Efforts to limit fossil fuel use is welcome, but are eFuels really the best way of doing this in motorsport?

First, let's consider how eFuels are made. It's a very energy-intensive process, which involves capturing carbon dioxide from the air and binding it together with hydrogen extracted from water. It's not magic; you need to put in the energy first to be able to extract it afterwards in a combustion cycle. A fuel that has a lot of energy in it needs a lot to produce in the first place.

Then you need to transport this fuel from its source to a filling station, pump it into a car, and finally burn it. Even if you make

the argument that 2026 F1 engines burning eFuels are carbon neutral, because they only release the carbon that is used to make the fuel, there's still the question of making the entire chain renewable and cost-effective.

Generating carbon to produce eFuel is clearly counterproductive. So to be fully carbon neutral, the electricity needs to come from renewable sources. That means using wind and solar power, as the average grid of US or Europe is very carbon-dependent. But these energy sources are very expensive and there isn't an abundant supply. As a result, for the general public, eFuels are not a commercially viable option.

It's simply not the case that because F1

Bosch in 2020 predicted that renewable synthetic fuels would not be €1.20 per litre until 2030 at the earliest. The International Council on Clean Transportation views this as an optimistic estimate.

There's not enough energy in the world to produce eFuels at a quantity that can replace oil entirely. The campaign group Transport & Environment projects that only five million out of the 287 million cars on the road can fully run on eFuels by 2035, which equates to 2% of the cars used in the EU.

Even if there was an excessive surplus of the very cheap renewable energy needed for eFuels to be viable, it would be badly purposed for the creation of synthetic fuels

“Energy loss from producing, transporting and burning eFuels is far greater than with BEVs”

will run eFuel, the market will follow because the energy to produce it is so expensive. Unless it's for a niche classic car that you want to drive at the weekends and hear the engine while still being carbon neutral, it doesn't make sense.

Carbon capture is still in its early stages, so technology will evolve and it will get cheaper. But again, this is some way off.

due to its inefficiency. The energy loss from producing, transporting and burning eFuels is far greater than with battery electric vehicles; T&E states that eFuels yield on average only 16% efficiency, compared to 77% for BEVs.

It's a different story with planes, as the electrification of the aviation industry is some way off. But in road cars and on the track, where an EV option exists, it's just not possible to generate the same amount of motion from the same amount of energy with eFuels as you can using electric motors. You can make the process better, but there is a limitation on the laws of physics. To me, it makes more sense to skip all these processes and use this electricity to charge up a battery.

Can eFuels save motorsport? If its main purpose is for marketing and image, we could argue that it has some logic. It's a good way of keeping F1 sponsors happy. But saying average customers will use this in their road cars – and that it's a reason for F1 to pursue it – to me makes no sense at all. ■

Vettel has reconfigured his ex-Mansell 1992 Williams FW14B to run on carbon neutral fuel





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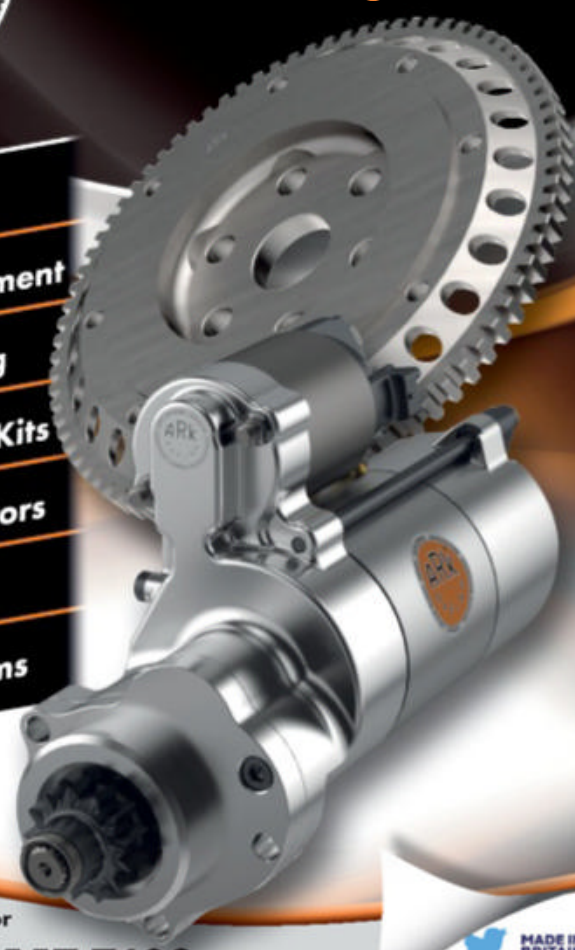
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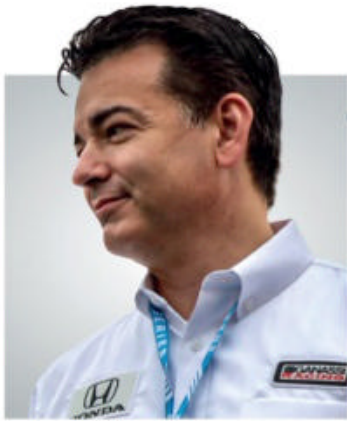
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ENGINEER'S VIEW CHRIS SIMMONS

THE INTRICACIES OF CAR SET-UP AT THE BRICKYARD

Chip Ganassi Racing has been the team to beat at the Indianapolis 500 during recent years. The squad's performance director reveals his approach for the Speedway



CGR's Dixon shared pole for the 500 in 2022, but new parts mean set-ups won't carry over

When you start with a new car, or with a new specification – like the manufacturer aerokits in 2015 or when we went back to a universal aerokit in 2018 – your focus is on driver comfort initially, and then you determine which are the areas for improving performance.

Obviously we've had this car for a while so, unloading at the Speedway, we already have a good idea of where to start in terms of set-up, where we might find extra pace, and also how to dial each car into a driver's particular preferences. Last year at Indy, there wasn't a ton of variance across our six cars, but there's always three or four things that Scott Dixon likes different from Marcus Ericsson, and that Marcus likes different from Alex Palou.

And things change every year. We can't go back to Indy with the same set-ups we ran last May. There have been aero changes to the cars via the regulations for 2023, ways to unlock more downforce – possibly more for race set-up than qualifying.

Wind and weather changes are notorious for having a big effect at Indy. Partly that's because you have so much practice time compared with other races, you can get your car closer to the edge, and partly

it's because small changes make such a massive difference at those speeds. It's important to use practice time to figure out all the details for making minor changes according to track conditions and still keep the car in the window in terms of handling and speed.

With the new pieces IndyCar has allowed us this year, based on the aero testing that we've seen, we think we have a pretty good idea how we want to run the car and where we think maximum performance will be, but on-track results can always be a little different from wind tunnel data. So as a team, we will divide

“For race set-ups, you are always looking ahead to the last couple of stints”

the tasks among our four entries – one works on variables in this area, another works on variables in another area – and then we will debrief together at the end of first practice, revisit the things we've discovered, and move forward in what we hope will be a productive way the next day.

The thing is, we can't stay still. Even

without the new aero pieces, we would have worked just as hard as this off-season on Indy set-ups because any advantage you have doesn't last long. So getting all the areas covered in practice by four really experienced drivers – three of them Indy 500 winners already – is hugely important.

Come qualifying, the order in which each entry makes its first run is decided by draw on Friday evening. So we could have one of our drivers running first in line, and one of them making his run 34th: that means their runs could be two and a half or three hours apart, so what worked for the first guy is nothing like what might work

for the last guy. We have predictive data for ambient and track temperatures, and it's that, rather than driver preferences, that will cause the biggest differences in set-ups for those first runs.

Then once all 34 cars have got their first runs out of the way, if you want to make further runs – and you usually do, especially if your first run was a bit conservative – you get the chance to adjust for track conditions with each.

For race set-ups, you are always looking ahead to the last couple of stints, what the track temp is going to be, predicting how the balance of the car is going to change, and keep ahead of that. Sometimes that can mean you run a set-up that makes the car a bit of a handful in the first stint but will get better as more rubber goes down. Other times, if the predicted track temperatures are high from the beginning of the race, you might start with more downforce, then if grip levels come up later, you may be able to trim out for the final stints and hopefully push for the win. ■



Ericsson gave CGR its fifth Indy 500 victory in 2022 as Simmons's methods paid off

PENSKE ENTERTAINMENT: JOE SKIBINSKI

THE SAME BUT

2012



DIFFERENT

THE LONG EVOLUTION OF AN INDYCAR WARHORSE

Originally known as the Dallara DW12, IndyCar's single-make chassis is virtually unrecognisable over a decade on from its 2012 introduction

BY DAVID MALSHER-LOPEZ

PHOTOGRAPHY  motorsport
IMAGES

2023

IndyCar looked stale at the start of 2010, barely staggering through the economic recession and dwarfed by NASCAR. The excitement surrounding the 2008 unification of the Indy Racing League and the Champ Car World Series, to form the new IndyCar Series, had dissipated. The schedule comprised nine road/street courses, eight ovals, and spectator numbers at most venues were falling.

The cars reflected this stasis. The Indy Racing League's spec Dallara IR-05 was never accused of elegance even when it emerged in 2003, but it had been developed for a largely oval series, whereas the Panoz DP01 used by Champ Car in 2007 had never seen an oval. Thus when the series merged, the attractive turbocharged Panoz-Cosworth was rendered obsolete after just a year of competition, and the obsolete-looking Dallara complete with raucous 3.5-litre normally aspirated V8 Honda became 'the IndyCar'.

The arrival of Randy Bernard as IndyCar CEO in February of 2010 was seen as exciting by those who had moaned about the series' lethargy and lack of ideas in recent years. Over the course of the previous 15 years he had turned Professional Bull Riders Inc from making barely half a million into a \$26m brand, and if he knew nothing about motorsport, that wasn't necessarily a bad thing. He wouldn't have his hands tied by tradition and his head fogged by others' agendas. And in a rare display of unity, the majority of the series' competition department members, team owners and drivers informed him that one of his priorities should be new cars and as soon as possible. But from whom?

"I'm going to create an advisory board that will combine some of the greatest minds in the sport," Bernard told this writer, one month into the job. "A chassis engineer, an engine expert, a team owner, a track and event promoter, a safety expert, etc." It sounded like a boring version of the Village People, but Bernard went on: "Whatever their decision, someone will be upset but the important things are for fans to love our car, be happy that the competition is better, and recognise that we went through the right process to decide which car got the verdict."

'Car' in the singular?

"Open source or sole source is a sticking point with me," Bernard explained. "I've seen what built the Indianapolis 500, and so if there's a way



The IR-05 Dallara was long in the tooth by 2011

ABBOTT

to keep prices down, then it will be open-source."

Five companies submitted serious proposals — Dallara, Lola, Swift, BAT, and Chip Ganassi-backed DeltaWing. The latter's car, penned by Ben Bowlby, was innovative but truly extreme; the Lola looked like a gussied up B2K with aftermarket addenda; the Dallara proposals were sane but slightly staid; the BAT concepts from Bruce Ashmore, Alan Mertens and Tim Wardrop looked clever but ugly. A couple of Swift's proposals seemed to hit the right blend of innovative, lithe and distinctive.

However, this was a time for heads, not hearts, and Bernard assembled a diverse team under retired US Air Force General William Looney: former F1 and Indycar engineer Tony Purnell, ex-Ford motorsport head honcho Neil Ressler, former Indycar engine-builder Rick Long, DP01 deviser Tony Cotman, president of Texas Motor Speedway Eddie Gossage, IndyCar's then-president of competition Brian Barnhart, and two-time CART champion and 2003 Indy 500 winner Gil de Ferran.

The cheesy acronym for the project was ICONIC — Innovative, Competitive, Open-wheel, New, Industry-relevant, Cost-effective — but its purpose was worthy. So too was the idea of multiple manufacturers, but each advised that without a monopoly, cost per unit would soar from \$385,000 to almost \$700,000. So Purnell



KUHN





Bernard's arrival was the trigger for a new car chosen by committee

came up with the idea of getting one manufacturer to build the chassis, wings, sidepods and engine covers, and leave the remaining aero surfaces open to other manufacturers, who could charge no more than \$70,000 per kit. This carrot, he hoped, would entice race car manufacturers, automotive giants and even aerospace companies.

No one bit. Dallara got the chassis-construction gig – the ICONIC committee was impressed by the Italian manufacturer's pledge to build a factory in Indianapolis – and by April 2011, teams had also voted unanimously to keep costs in check by running all-Dallara bodywork for at least the first year of the new car. The following month, Dallara's two bodywork variants – one for road/street courses, one for ovals – were unveiled to mixed reactions. Many thought the car looked bulky or overly contrived and some complained that the rear 'bumper' pods made it no longer an open-wheel car. Yet they acknowledged that the wide floor, large sidepods and bumpers would increase driver protection.

Bill Pappas, IndyCar's current VP of competition and engineering, was back then still a race engineer, and one of great repute. He recalls: "Dallara and Tony Cotman had come up with a race car that didn't look like what we had been campaigning over the last several years, which was good, but I saw some serious

flaws. The radiators sat behind the driver's hips, but the floor in front of the sidepods had been extended to the outer edges of the tyres, so this could act like a ramp, leaving the driver exposed. That's why shark fins were introduced ahead of the sidepods."

The original plan had been for the IR12 to run 2.4-litre turbocharged engines, but this maximum capacity was reduced to 2.2, some speculated to reduce weight. Dan Wheldon – without a full-time ride since the end of 2010, but having just earned a second Indy 500 victory with Bryan Herta's little team – first tested the new car with Honda's 2.2 at Mid-Ohio in August, before moving

“Criticism of supposedly clunky-looking safety measures on the car unsurprisingly dissipated”

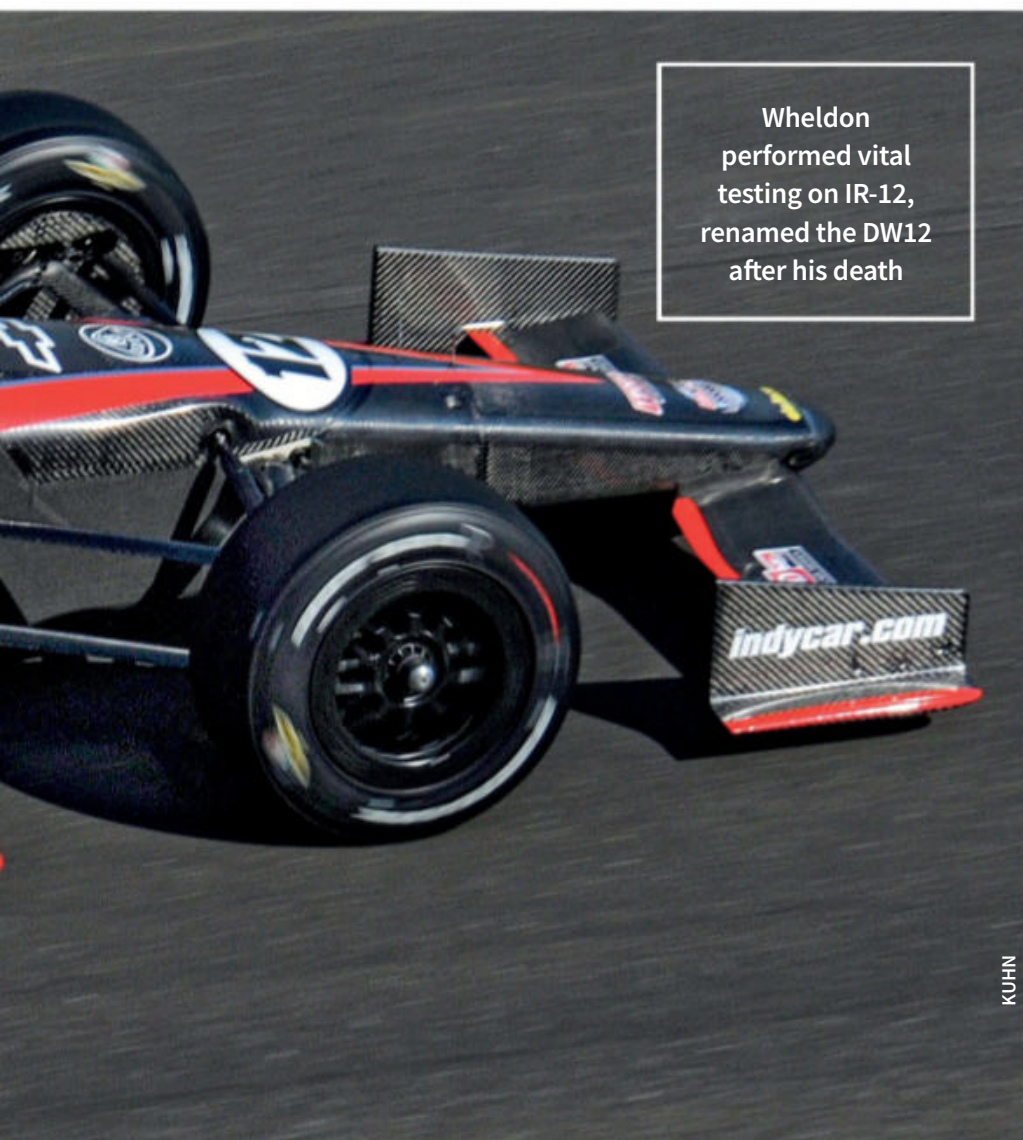
on to Barber Motorsports Park, Indy road course, Iowa Speedway and then Indianapolis Motor Speedway.

That's where the test team encountered a significant aero flaw. The oval kit produced a lot of drag, and Wheldon admitted to this author he was also unimpressed with the car's stability under lateral load. Even taking into account that the test car was running a very early iteration of the 2.2-litre V6 turbo, its lap speeds of 210mph were over 13mph off the fastest race laps by its predecessor in May's Indy 500. By the time the new cars returned to IMS the following May, there had been a huge reduction in vertical surfaces on the superspeedway rear wing.

The new engine regulations (and Roger Penske) had lured Chevrolet back to IndyCar, while Lotus had also declared its intention to hit the US trail. The new Chevy- and Honda-powered cars, which had now also been tested by Will Power and Scott Dixon respectively, were demonstrated in public at Las Vegas Motor Speedway by Ryan Hunter-Reay and Graham Rahal the day before the 2011 season finale, the final race for the old Dallara IR-05. Tragically it would also prove to be the final start for Wheldon, who was killed in a horrific multi-car crash, and in that context, criticism of supposedly clunky-looking safety measures on the new car – renamed DW12 in Wheldon's honour – unsurprisingly dissipated.

Focus returned to performance testing, although that was a loose term in the case of Lotus. Hitting the track in mid-January it became clear that the Judd-built units were way off the performance of the single-turbo Honda and twin-turbo Chevy. By the Indy 500, the British brand's only full-time representative was Simona De Silvestro of HVM Racing, and the legendary marque founded by Colin Chapman was gone at the end of the year.

Hunter-Reay, Dixon and Power won championships with the original DW12s from 2012 to 2014, and through this period there were subtle but significant improvements made, including new ▶



Wheldon performed vital testing on IR-12, renamed the DW12 after his death



Hunter-Reay was the first driver to win a title with the new car in 2012

anti-intrusion panels to reinforce the cockpit sides. But to the untrained eye, a 2014 car was indistinguishable from a 2012. This wasn't the case for the 2015 cars.

Despite Bernard's departure at the end of 2012, the series had remained open to the idea of enticing outside aero specialists to apply their expertise with a supply of kits, but there were still no takers. Then-president of operations and competition Derrick Walker, however, did respond to the strong movement within the series to improve brand identity by allowing Chevrolet and Honda to produce their own aerokits.

There were two downsides: 1) the cost of building a 2.2-litre V6 engine and an aerokit reduced the likelihood of a third OEM joining the fray, and 2) relatively unfettered aero efficiency ain't always pretty. Chevy's effort, devised by Pratt & Miller appeared heavy, while Honda's kit from Wirth Research looked wonderfully mad, particularly the comically flexible multi-plane front wings. Watching a Honda IndyCar pull away from standstill in 2015 reminded one of the 'unusual' crafts that emerged during humanity's early attempts to fly.

"The series left the boxes too open," says Pappas, "and suddenly the cars had huge downforce on road and street courses and short ovals, and were very efficient at the Speedway."

"It was the opposite of what the series needed," concurs IndyCar

"The cars did what we needed – reduced downforce, reduced dirty air so the cars could follow"

legend Rick Mears. "Too much downforce for the power. On the road courses, braking distances were reduced, and on short ovals, drivers were flat all the way around. Then suddenly the string would snap, the car was in the fence and, because minimum speeds were so high, impacts were harder. On speedways, it was like a bomb exploded, and because of the aerokits, there was more debris."

This took its ultimate toll when Sage Karam crashed out of the lead at Pocono in 2015, his car randomly scattering parts including the nose section, which struck Justin Wilson with fatal consequences. By this time, too, there had been three blower shunts at Indy while cars were in qualifying trim, with 200mph-plus airflow catching the underside of the cars when in a high state of yaw. Without a proven fix, Walker had insisted Indy qualifying was run with cars at race levels of downforce. By the following year, the domed underwing had been introduced, which greatly reduced threat of flips.

Dixon of Ganassi, Penske's Simon Pagenaud and his newest team-mate Josef Newgarden clinched the titles in this high-downforce era of 2015 to 2017, all using the Chevy engines and kit. That was karma, given that Honda had been allowed to



rehomologate far more of its aero pieces for 2016 when the Wirth design failed to match Pratt & Miller's.

Jay Frye replaced Walker at the end of 2015 and was quickly made aware that manufacturer aerokits were an expensive dead end and the series needed new spec bodywork for 2018.

Says Pappas: "I told Jay [now IndyCar president] how unlikely it was that any OEM would want to design a new engine and an aerokit at the same time, so we and Tino [Belli, IndyCar's director of aero development] went off to Dallara to brainstorm with the designers some basic concepts. I told them what I thought a basic IndyCar should look like and what we were trying to achieve performance-wise. Chris Beatty then got the rough concepts and ideas, refined some things and came up with curves and shapes that worked aero-wise and aesthetically. He did a nice job on both the oval and roadcourse kit, I felt.

"And the cars [tested by Juan Pablo Montoya and Oriol Servià] did what we needed – reduced downforce, reduced dirty air so the car behind could follow closely, provided more feel and looked good. It met our targets."

Two years later, after testing with alternative frontal impact solutions, the Red Bull Advanced Technologies aeroscreen was introduced for the start of the 2020 season. There was bitching about how it hurt the car's centre of gravity – an extra 60lb, high up – and altered the handling, and greatly increased in-cockpit heat. But its safety benefits were undeniable, its introduction unstoppable. And of course the usual teams and drivers remained at the top.

The evolution of the DW12 – or IR12 or IR18, whichever is preferred – isn't over yet: from next season it will house a hybrid unit hooked to the 2.2-litre engines (the proposed and tested 2.4s have sadly been delayed indefinitely), and will gain a magnesium gearbox to offset the extra weight of the MGU. For now, it has no expiration date.

"The team owners seem 50/50 about replacing this car," says Pappas. "You ask, 'What do you think about a new car?' and their response is, 'Why? We have all this inventory built up. Do we have safety issues with this car that we need to address?' And I see their point; that there's no reason to change until the next step



in safety makes a compelling case to update.

"You look at the 2012 car and the 2023 car and you'll see a resemblance but there's very little that's the same. Front wings are completely different, the aero package in both road/street course and in oval format are completely different, the airbox has gone, there's different sidepods, radiators, underwing, gearbox, bellhousing..."

"And if you started with a clean sheet now, you wouldn't get something where the spine looks radically different from the current car because of safety constraints. It has to pass certain FIA standards – x amount of crush in the nosecone, sidepods, etc – and it has to deal with a wider variety of tracks than any other series."

If it's hard to predict when the next-gen Dallara IndyCar will emerge, it's harder yet to imagine the day will ever come when Dallara has a rival and IndyCar becomes a multi-chassis series. Whereas the IRO5 was introduced as competition for the Panoz/G-Force chassis of the time, and rules were loose enough for teams to customise them with flicks, flaps and flourishes, one of the DW12's prime purposes was to reduce costs, and IndyCar ensured the boxes in which teams could work became much more confined. But Pappas bristles at the idea that engineers no longer have enough room to

flex their intellect. He states: "People say we have a spec car, but at any given race you won't find two cars among the 27 that are running the same combination of geometries, rocker ratios, spring rates, wheel rates, ride rates... There are multiple tuning options."

"When I was hired [February 2016], I was told to look at things from an economical standpoint and an entertainment standpoint. When I worked at Ganassi, we'd get a 'tweak of the week' from Lola – a widget here, a turning vane there – and that was cool. From this side of the fence, though, that did nothing for the racing, for the series as a whole. If we allowed a team to spend big money on a new underwing but it was beyond the budget of several other teams, suddenly the field is more spread out."

"So, for example, the aero options that we've introduced for Texas and Indy this year are a way of allowing teams to experiment and apply engineering expertise within parameters that don't financially ruin the smaller teams, while also improving the racing. From that point of view, I think this car has been a success, and just what the series needed; we've been able to govern its evolution for the good of the teams and drivers, while still maintaining a demanding and competitive environment for the engineers." ■





DO FULL EVs HAVE A FUTURE IN RALLYING?

Technology is moving at pace, allowing electric cars to contend

BY TOM HOWARD

Rallying is heading towards a crossroads as the FIA ascertains the long-term method of propulsion that will ensure a prosperous and sustainable future for the discipline.

Top level rallying has already taken its first steps in electrification through the introduction of the Rally1 hybrid regulations to the World Rally Championship last year. The FIA is currently devising its next set of WRC regulations, with hybrid power expected to continue from 2025 before a more seismic change in 2028. Multiple options are under consideration – as FIA rally director Andrew Wheatley says, “we’re not ruling anything out”. A new demonstration class is in development that will allow manufacturers and teams to pursue alternative propulsion methods.

One of these could be fully electric, which is becoming increasingly prevalent in the rally world – a point reflected by



FIA's Andrew Wheatley is keeping a watching brief

the FIA adding new Rally5e regulations to its pyramid last year. This development, following positive manufacturer feedback on the first all-electric one-make rally series introduced by the ADAC in 2021, suggests an EV-powered future is no pipe dream.

Based around the 100kW two-wheel-drive Opel Corsa-e Rally car, the ADAC Opel Electric Rally Cup embarked on its third season earlier this month and has

an eight-round calendar that includes the WRC's Central European Rally in October. The events feature approximately 130km (80 miles) of competitive stages, and this year the field has grown to 14 entries. Last year's champion Laurent Pellier was propelled into the Junior WRC for 2023, and last month Opel underlined its commitment by extending its deal with the ADAC until the end of 2024.

Opel is among a group of marques keen to explore EV rallying. The FIA expects several manufacturers to produce cars that can be adopted for Rally5e regulations, split into two divisions, above and below the 60kW battery capacity. The cars largely based on the production spec derivatives will feature a stock motor, inverter and battery. The category is expected to mirror the performance of the current Rally5 combustion two-wheel-drive class. The first hot hatch vehicles eligible for this tier are not expected to come online until 2024.

While the category is initially “aimed at



Next generation of WRC rules are up for discussion



The ADAC's Opel Electric Rally Cup is starting to take off in year three

national and regional competition", Wheatley hopes that the category can become a testbed for the WRC and potentially integrate into future events.

"Rally5 is effectively a 90% standard road car and Rally5e does include some of the parts that are included in Rally4 to make the cars a little bit more reliable," he explains. "In theory it can be part of the existing pyramid. There's no question, in the future we will have battery electric vehicles more regularly part of international rallies.

"In the short term it will require decent facilities from the organiser, and that is quite a commitment, but part of the plan as we go forward is how we can make that simpler. If you look at the Malcolm Wilson Rally, for example, with a bit of a bigger lunch break that could be within the scope of this type of car."

In addition to Rally5e, the FIA remains firmly behind its Eco Rally Cup concept, created in 2006 and now backed by tyre

manufacturer Bridgestone. This regularity competition run on open roads is devoted to production-based electric cars. The only modification is a special box, fitted to calculate energy used, to determine energy efficiency, which is factored into the overall result. This year competitors will tackle a nine-round championship all over Europe.

Wheatley regards it as "one of the lowest hanging fruit we have in terms of getting involved in a competitive championship", as a stopwatch and app that calculates the regularity speed are all that is required.

Beside these initiatives, the development of electric rally cars continues at pace in adapting the technology to rallying's unique challenges. Austrian firm Kreisel, responsible for the World Rallycross Championship's 500kW

four-wheel-drive powertrain kit introduced in 2022, has produced an all-electric Skoda Fabia rally car with support from the Czech marque. Based around the combustion Fabia Rally2 car, it delivers peak power of 260kW and finished third on its debut in the second round of the 2021 Austrian Rally Championship with driver Raimund Baumschlager.

Perhaps one of the most exciting developments in electric rally cars is headed up by 2016 Rally Argentina winner and former Hyundai factory WRC driver Hayden Paddon. With support from Hyundai New Zealand, the Kiwi began developing an all-electric Hyundai Kona rally car in 2019.

Paddon says the EV concept was born of a desire to "stand out from the crowd" and believes by pursuing alternative propulsion, rallying can grow its appeal to automotive manufacturers.

"Whether it is hydrogen or whatever there has to be an alternative energy method that can work in rallying," he says. "The reality is tech is changing so much anyway and I think people often get caught up judging it all based on what we know now. If you take an EV race or rally car it will be completely different in five years' time in terms of range, performance and even sound."

Paddon's Kona is far from a finished product and is awaiting its next stage of development to keep pace with battery technology advances. But it has already turned heads by setting a pace on par with the current Rally1 cars in selected stage outings on the WRC's Rally New Zealand last year, and its progress is being monitored by Wheatley.

"I'm in regular contact with Hayden and what he is doing down there is fantastic," he says. "We have to ensure we cover all of those bases to understand how and when we can start to integrate that technology into competition." ■





HYUNDAI KONA EV

INSIDE THE ELECTRIC HYUNDAI RALLY WEAPON

The Paddon Racing Group, with support from Hyundai New Zealand, has developed the head-turning Kona EV that could point to the future of rallying. World Rally Championship event winner Hayden Paddon is your guide

BY TOM HOWARD

POWERTRAIN AND TRANSMISSION

The Kona has a flexible configuration where up to four Brusa BLDC Motors can be used, producing a top end output of 800kW (four motors), generating up to 1100Nm of torque. In rally spec, two motors are deployed producing 400kW with a continuous power of 260kW-280kW.

“If you take range out of the question and wind the power up on it then it’s equivalent to a Rally1 car,” Paddon explains. “To make it work over a longer distance, you can’t have the power wound up that high.

“What we’re trying to do is to have a Rally2 equivalence. Performance-wise, we know it’s faster. We’re talking about a second a kilometre compared to an equivalent Rally2 car. But we’ve got to get the range out of it.”

The Kona has a straight-cut gearbox in the front and rear, connected to a paddleshift. Differentials are computer-controlled, but a traditional limited slip diff is still in use.

STATS

Drivetrain Four-wheel drive, can run up to four electric motors
Peak power 800kW with four motors, 400kW in rally spec (two motors)
Battery 23kWh prototype battery, due to be upgraded to 54kWh
Weight 1500kg

SUSPENSION AND TYRES

Dampers have undergone changes, although the base design is similar to contemporary rally cars. But the balance front-to-rear is different as the car’s weight distribution is almost 50:50, which impacts rear damper set-up.

“The geometry is different and it is almost set up the opposite way to what we would normally do,” Paddon says. “It’s all a bit back to front!”

The four-piston caliper air cooled brakes have been carried over from the i20 Rally2 without modification, along with Pirelli’s current tyre range.

“Eventually tyres will evolve,” he says. “We find that we’re not using the sidewall so much or leaning, because of the low centre of gravity, so you could maybe run a softer tyre and get more grip.”



SOUND

One of the criticisms of electric power among motorsport fans is its distinct lack of sound compared to a combustion engine rally car. To combat this, Paddon's team is developing a sound module to mimic a far more traditional noise.

"We have a mechanical system that's working pretty good," he says. "It's not the right sound yet, but we have volume and reliability. We did a demonstration in Australia and we had people come up to us and ask if it was a combustion car. They didn't believe it was a full electric car!"

STYLING

To help ease the stigma around EV cars, Paddon and his team purposely set about trying to create an attractive rally car. Working with Canterbury University in New Zealand, a challenging compromise on aero has been devised to produce the significant downforce required but limiting drag – "as ultimately it takes efficiency away from the battery" – was also a priority, Paddon explains.

"We've stuck our neck out a bit with this car," he says. "There are some people that don't want to like EVs, so we wanted it to look good."



BATTERY

A prototype 23kWh battery currently powers the Kona, which will be replaced this year by a 54kWh version developed by STARD. It's expected to produce a range of 50km (30 miles) in rally mode, a distance equivalent to most WRC stage loops.

"Once we get that battery in the car, we are starting to look at a range comparable to the combustion rally car," Paddon explains. "Generally between refuels you wouldn't find too many loops that are more than 50km. If we can hit that target and be within Rally2 performance, then it becomes a question of charging."

The car has been designed so a battery change could be completed in eight minutes. Paddon believes this "might be the easiest and most practical way to do a full rally" until the point that battery range and charging speeds improve.

WEIGHT

Paddon admits that budget constraints meant the Kona has been built to be durable. Body panels are a mixture of steel and composite fibre, fitted to a steel bodyshell based on the Kona road car. At 1500kg, it weighs in 250kg above a Rally1 car.

"With a bigger budget you could design stuff to be more lightweight and stronger, but we're not in a position to break a whole lot of stuff," says Paddon, who reckons a 100kg weight saving is "pretty easily" achievable. "We represent Hyundai New Zealand, so we had to come out with something that was strong and reliable. Everything is probably over-engineered."




DRIVING EXPERIENCE

While Paddon has driven myriad rally cars over the years, he believes the Kona is perhaps the most exciting.

"It's phenomenal, it's the best car I've ever driven in that respect," he adds. "Even though it is quite big and heavy, the drive is nimble and agile. It responds so well not just on the throttle but, because the centre of gravity is so low in the car, it feels absolutely planted. Because of all that, you can carry more speed and throw the car around more."

"For me, it is more exciting. Elements of sound and entertainment are missing from the outside, but there's a lot of potential there."





Whopping 0.741s pole margin for Hockenheim debut served notice of its potential despite gremlins in the race

THE 128-DAY MIRACLE

It's 25 years since the Mercedes CLK-GTR took its final competition win at Silverstone's FIA GT round in 1998. Time to look back at an era-defining car

BY JAMES NEWBOLD

A cursory look at the standings three rounds into the inaugural FIA GT Championship would give little indication of what was to come over the remainder of the 1997 season. An 18-point advantage for Schnitzer McLaren-BMW drivers JJ Lehto and Steve Soper over Mercedes CLK-GTR pairing Bernd Schneider and Alex Wurz didn't tell the true story either.

The new Mercedes run by the works AMG operation was clearly the quicker car and, once its teething troubles were ironed out for round four at the Nurburgring, it would be beaten only twice more that year. By the time it was replaced by the CLK-LM for the third round of the 1998 campaign, it had earned eight wins including five 1-2 finishes (from 13 attempts), eight pole positions (including four top-three lockouts) and truly moved the goalposts in GT racing. Not bad for a car that was conceived, built and given its race debut within the space of 128 days. "The biggest surprise was that we got the car in the good way in that short time," says 1997 champion Schneider.

The CLK-GTR's brief lead time was the result of Mercedes motorsport boss Norbert Haug being caught on the hop by the collapse of the International Touring Car Championship for the

highly complex (and expensive) Class 1 machinery. When Opel and Alfa Romeo both announced their withdrawal at Mugello in late September 1996, Haug faced a dawning realisation that "we had no activity for the year after".

Feeling it was important to retain a motorsport presence outside its Formula 1 engine supply deal with McLaren to bolster the image of sporting Mercedes cars, Haug began to explore an entry into the new-for-1997 FIA championship that had effectively annexed the Global Endurance GT Series. AMG technical director Gerhard Ungar was tasked with leading the project, but time was a precious commodity with the new season due to kick off in April at Hockenheim. "You cannot take the world upside down in 128 days, this is not possible," states Haug, who credits HWA boss Hans Werner Aufrecht for taking on the risk of producing the required 25 road-going models, without which the programme "would not have been possible at all".

How much its finely honed technical insights from the ITC aided the new GT project is difficult to determine, given the machines bore little resemblance, with stripped back control systems and limited driver aids. But AMG's pedigree was not in doubt. It had



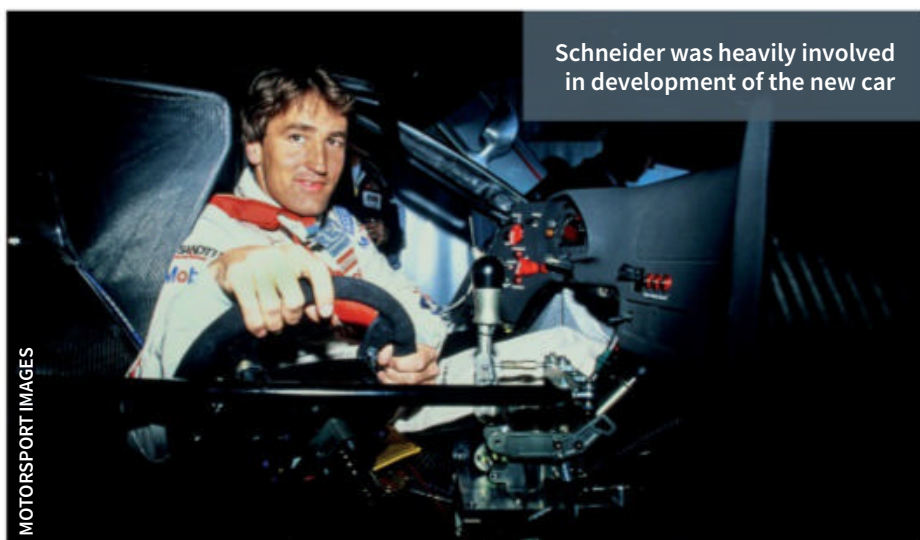
McLaren test hack helped iron out engine, gearbox issues

SUTTON/MOTORSPORT IMAGES



Schneider was heavily involved in development of the new car

MOTORSPORT IMAGES



“The pick-ups went out and the car went on the floor”

A potential stumbling block was the requirement to homologate the road-going CLK-GTR pre-season. But this rule was changed for 1997, allowing Mercedes to enter what was a purpose-built racer without facing the same hurdles of its disgruntled chief rivals, and focus attention on optimising a car that could take on McLaren’s revised long-tail GTR and Porsche’s factory-entered 911 GT1 Evo. “We made the promise in writing that we would build a [road] car, but it was short-notice,” Haug asserts.

He maintains that Mercedes had no “special treatment” from the organisers, and it is true that the Reynard-built

Panoz was also a beneficiary. But paddock rumour that the first photographed example of the road-going CLK was actually a mocked up race chassis is confirmed by Hayes. “We got the first test/race car and we put registration plates on with double-sided sticky-tape,” he chuckles. “We changed the wheels to road-car wheels and took photographs of that car in the workshop with road-car wheels on, then took the plates off again and prepared the car for testing.”

This got off to an inauspicious start with the rollout at Jerez. On Schneider’s first flying lap, as he braked at the end of the start/finish straight, “the front wishbones came out of the chassis” to give the driver a heart-in-mouth moment and delay testing by a day.

“The guys who made the carbon fibre monocoque made a mistake,” he recalls. “The pick-ups went out and the car went on the floor. I just went into the run-off and stopped right in front of the barriers. I was a bit scared! Then we put some plates behind the



McKLEIN

AMG arrived in FIA GT series after the ITC’s collapse in 1996

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been a winner against four-wheel-drive opposition in 1996 with the rear-drive C-Class, although lost out on the title to Opel. And its preparations were astute too.

A McLaren F1 GTR, which had won the previous two Global GT titles with David Price Racing and GTC Competition, was acquired and converted into a test hack for Mercedes’ six-litre V12 engine and gearbox. It spent four days testing at Jarama, which Schneider reckons “was the reason we were from the gearbox and engine side pretty well prepared”.

“We had put in different types of rear wing mounts and all sorts of things to that car to make the engine fit,” remembers AMG engineer Owen Hayes, who ran Alessandro Nannini and Marcel Tiemann in 1997. “But when working on that car, you were going, ‘It’s nice, but it’s not the way you would really do a no-compromise race car’. It was still a road car made into a race car.”

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pick-ups inside the monocoque and it was really stable, we never had an issue again.”

Once the fixes were initiated, Schneider was quickly impressed with the CLK-GTR’s downforce, which was “another big step compared to the McLaren”. Also singling out the V12’s torque for praise, Schneider found the car was “suited perfectly” to his driving style. But its chief flaw was quickly apparent too. “Our biggest problem with that car was already the bouncing in the front,” he says. “This was also a big issue when we came to Hockenheim for the first test, when we went first time over 300km/h, to get the bounce under control. Nannini came out of the car and said he can’t drive, and Gerhard Ungar said, ‘Schneider, go in the car and drive.’ And I couldn’t see the first corner!”

Schneider admits that it took Mercedes “a little while to understand” its porpoising struggles, which persisted after making some changes in the wind tunnel. “The only downforce in the front you can get is from the front splitter,” he explains. “This was a little issue if you have a V12 at the back, the rear is quite heavy and stable — how do you get front-end grip? The secret is driving very low and this is what we did. For my driving style, it was really good to have a stable back and I could turn the car with the torque. This was like my secret in that year, I was used to it from the 962 Porsche.”

In low-downforce trim at Hockenheim, it was immediately clearly superior to the opposition. Without any incentive to withhold the true extent of its advantage in this pre-Balance of Performance age,

“You could see that this was going to be a proper racing car. It was simple, but fantastically executed”

Schneider took pole by 0.741 seconds. Although his race was ended prematurely by a freak brake problem, and the sister car was halted by a starter motor issue, notice had been served.

While Hayes admits that with hindsight he’s surprised that Mercedes was willing to show its hand early and blow the opposition away in qualifying, he maintains “there was no question that the car was going to be better”. He reckons the CLK-GTR “was just light years ahead” of the opposition in 1997. “You could see that this was going to be a proper racing car,” he declares. “It was simple, but fantastically executed. Just look at the suspension on it. We had these Penske four-way dampers, it was really nicely done. The splitter was huge and the rear wing was as well, with a very efficient bodywork.”

Second at Silverstone in mixed conditions for Schneider and Wurz could have been a maiden win without an ill-timed red flag, and after an incident-plagued Helsinki the breakthrough win arrived at the Nurburgring, where Schneider was joined by Klaus Ludwig — Wurz was unavailable on Benetton F1 duty. The Austrian was back in the car for Spa, where only a superb drive in the wet from Lehto limited the Mercedes to second.

Collaborating with McLaren in F1 one weekend, then racing against it in FIA GT meant more than a few awkward moments for Haug, who acknowledges that “not everyone was happy in the McLaren camp”. “I’m sure that they thought they could beat us,” he mulls, before adding: “We had the better engine.”

At both the A1-Ring and Suzuka, Schneider jumped into ►

HOW CULPABLE WAS MERCEDES IN FIA GT’S DECLINE?

Despite Mercedes’ total domination of the FIA GT Championship in 1998 – it won every race before the GT1 class collapsed at season’s end – it wouldn’t be correct to say that it was to blame for what transpired.

Instead, the sliding-doors moment can be found in 1996 when Porsche’s 911 GT1 demolished the opposition in its selected outings in the BPR-run Global Endurance GT Series and blazed the trail for what was to follow. In the eyes of Stephane Ratel, the ‘R’ of BPR, the decision to admit a car that contravened the spirit of the rules was critical.

“The spirit of the rule was to say that GT racing is about road cars going racing and not

about race cars being homologated on the road to take advantage of the regulation,” he told this writer in 2020. “At the time you had to have 25 road cars, which was obviously not enough.” The writing was soon on the wall.

“That triggered the second generation of GT1 car, which was very much mirroring what Porsche had done,” Ratel explained. “And that didn’t last very long, the cost exploded and then the manufacturers had to come almost every year with a new evolution.

“Mercedes after the CLK-GTR came with the CLK-LM, and Porsche came with the new Porsche GT1 in 1998. The category exploded in 18 months and died.”



another Mercedes to rack up maximum points after his own car was hampered by alternator and suspension problems respectively. The ploy proved enormously helpful to his title credentials before Mercedes agreed to a rule change that would ban the tactic. Justifying the decision was simple for Haug. “We were sportsmen,” he offers. For his part, Schneider admits that for sprint races he “was really surprised that this was allowed” in the first place.

Still, at Donington he and Wurz won despite failed power steering, and looked set to win again at Mugello until he was blamelessly embroiled in somebody else’s accident. Lehto and Soper profited after overcoming Nannini and Tiemann.

But a storming wet-weather win at Sebring for Schneider and Ludwig as a fire thwarted the Schnitzer McLaren turned the tables again and, even after being split to double their chances at Laguna Seca, neither Soper nor Lehto were ever in the hunt as Schneider sealed the title by romping to victory with Ludwig once more.

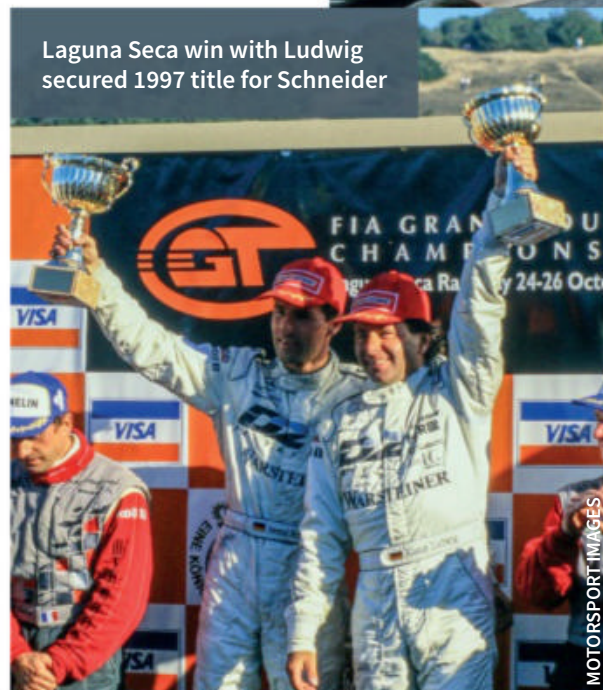
With the passage of time, the significance of car-swapping has faded for Schneider. “I don’t care about it,” he says. “It doesn’t matter which car, I was dominating, and this was the most important thing. Even if I would have lost the championship, I was the guy to beat.”

His run to the 1997 FIA GT title was achieved after Mercedes skipped the non-championship Le Mans 24 Hours, a decision Hayes believes was “critical” to getting the CLK-GTR competitive. Taking in the non-championship round and the necessity of building up a bespoke test team, test car and aero package “would have swamped us”.

“If we would have done on top Le Mans, it would have been a nightmare,” agrees Schneider, “because we have to do 30-hour tests and all these things. The mechanics were already at the limit, I think it was the right decision.”

Le Mans also wasn’t feasible in 1997 because “it was not in the budget”, Haug reveals.

At the end of 1997, BMW withdrew its funding of the McLaren programme and switched its attentions to a Le Mans prototype effort with Williams, while Lotus also canned its low-budget effort, leaving reduced opposition for Mercedes in the 1998 FIA GT Championship. Its new CLK-LM was 50kg lighter, featured a punchy V8 engine that was “a massive step ahead as regards just the whole integration of packaging” according to Hayes, and also



Laguna Seca win with Ludwig secured 1997 title for Schneider

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benefited from improved weight distribution. Schneider was “really confident that this will be the car to beat” and was proven correct when it romped to eight wins on the trot.

But first the CLK-GTR had to be pressed into service for the opening two rounds, where it would go up against a new Porsche that was expected to be a big improvement. “We were not surprised that Porsche was stronger than we were, especially in qualifying,” recalls Schneider.

But the CLK-GTR remained strong in race conditions and won on both its final two outings in the hands of the works squad. At Oschersleben, Ludwig and Ricardo Zonta beat the Persson Motorsport CLK-GTR of Tiemann and Jean-Marc Gounon – which Haug says was the same spec as the works while it waited for the new machines since “technically it’s just not possible to have big differences”.

Then at Silverstone, where Porsche’s Allan McNish led until engine failure and Uwe Alzen was delayed by a penalty for clashing with David Brabham’s Panoz, Schneider and Mark Webber came through for the CLK-GTR’s final win. It would continue for the remainder of the campaign with Persson, but never scored another podium as Panoz picked up the scraps



Schneider and Webber scored CLK-GTR’s final win at Silverstone in 1998

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The weight of the V12 engines required a special driving style Schneider learned in Group C Porsches

THE CONTRIBUTION OF BESPOKE TYRES

For then-Mercedes motorsport boss Norbert Haug, Bridgestone's contribution to Mercedes' 1997 FIA GT Championship success "was not the key factor".

"We would have been competitive with Michelin as well, I'm sure," Haug asserts.

But the fact that Mercedes was the sole team using Bridgestones, while Porsche and McLaren-BMW used Michelins, almost certainly bestowed an advantage. It was a factor in Mercedes' qualifying edge, with Schneider attributing its special qualifying tyres to "at least 1.5-2s" depending on the track surface grip.

On balance, however, Schneider believes "over the full season they were pretty equal". That's despite extensive work to find improvements, including a 3000km three-day test after the A1-Ring round, and Schneider doing the bulk of tyre testing, which he concedes "was a big difference to my colleagues".

Michelin's strong suit, according to Schneider, lay in high-speed corners where the Bridgestones "were always a bit suffering with top speed because the flanks are a bit softer and this makes the car a bit harder to roll". But for Schneider "the Bridgestone was really good because there was a little bit more grip", needed to compensate for the extra weight of the CLK-GTR's V12.

Its wet tyres became a huge asset after the car was defeated at Spa, when Schneider recalls that the tyre performance "was really disappointing". They were significantly improved when called upon at Sebring.

"THIS WAS BRIDGESTONE SAYING, 'WE'RE GOING TO DOMINATE THIS'. IT WAS INCREDIBLE"

"There the competitors were already laughing because it was raining," chuckles Schneider. "But we'd got something special in the pocket and the Bridgestone rain tyre was definitely better than the Michelins at Sebring. The Japanese company, if they feel they are not good enough, they are really pushing like hell and they do everything to get better."

Engineer Owen Hayes says the Bridgestone wet "was just such a strong suit".

"It was mindblowing what they could do," he says. "This was Bridgestone saying, 'We're going to dominate this'. It was incredible. What was in it? No idea!"



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"If you would sit next to me and we have the CLK-LM or GTR, you would enjoy more the GTR"

left by the works Mercedes and Porsche teams.

"We always said qualifying will be hard for us, but we had very strong race pace and we never gave up," opines Schneider. "Of course, we were a bit lucky to win at Silverstone, but on the other hand the CLK was still strong over the distance."

Schneider, Haug and Hayes are all in agreement that, despite the CLK-LM's early bath at Le Mans in 1998, Mercedes would not have been better served by taking the proven CLK-GTR instead. Not least because, as Schneider points out, the CLK-GTR never completed a 24-hour test. "Of course, we know that the CLK [GTR] could do the mileage, but if you do it in one go it's something different," he says. "With the CLK-LM we did two 36-hour tests and the car was much stronger than the GTR over a long distance."

"The problem with the engine we had, this was just a failure from a supplier. It was not technical or a failure from a construction side. This also could happen to the V12."

"On top we have to say the CLK-GTR was really sensitive at the front with taking off. The experience we had in 1999 [when Mark Webber and Peter Dumbreck suffered aerial accidents at Le Mans] — that car [the CLR] felt so much better than the CLK-GTR. Not in terms of driveability, just faster and more settled to the ground and we had never an issue with the front [in testing]. So that means maybe this would happen already in 1997 [if the CLK-GTR had gone to Le Mans]."

While the CLK-LM's superiority is not in doubt, Schneider's preference is for the CLK-GTR. "It's slower," he admits, "but to drive, to make taxi rides... If you would sit next to me and we have the CLK-LM or GTR, you would enjoy more the GTR. The corner speeds it's not maybe that good, especially the turn-in is not that fast because it's heavier. But the torque and the sounds and the braking of that car was awesome."

And Hayes adds: "Although the car was very simple, it was very effective."

Given the time constraints, that was perhaps about all it could ever hope to be. But perhaps the true testament to the Mercedes CLK-GTR is the prized status of its road-legal models. "They are today collector's items, expensive like hell," Haug laughs. "But it was not so easy to get them sold at this time!" ■

HOW TO BE AN ACE ENGINEER

Michael Cannon reflects on his journey to becoming one of IndyCar's top engineers

BY DAVID MALSHER-LOPEZ

Michael Cannon is a protege-turned-mentor, a man you can bring in as an overseer and advisor for young race engineers, or can be slotted into a hands-on race engineer role. He can be strict but is also regarded in IndyCar circles as one of the more empathetic individuals in the role, willing to give the driver what they want rather than refusing to budge from what on paper appears the fastest set-up.

It's assumed that Cannon got hooked on racing through watching his British-born father John Cannon race (under the Canadian flag) to victory after victory in the Formula 5000 Continental Series, culminating in becoming 1970 champion, or when winning the 1968 Can-Am race at Laguna Seca. Yet Cannon insists not.

He recalls: "From when I saw the F5000 finale in 1970 and saw my dad pick up the trophy and cheque, I didn't go to another race until the 1975 F5000 event at Watkins Glen, and then not again until the Formula 1 race at Montreal in 1978. In between times, I was just trying to be a pilot, aiming to go to RAF Cranwell, just like dad.

"In 1983, Jerry Agapiou – he and his brother had run my dad in F5000 and Can-Am – gave me a summer job putting together a Formula Ford team. Driving one of the cars was part of my compensation."

That dream of being a racing driver had died by 1986, and Cannon found he enjoyed "tinkering with race cars" as much as driving them. "I don't think the path that I took exists anymore," he says. "You need a formal education. I'm reading Adrian

Newey's book at the moment and I was struck by the parallels, but the big difference was that he did eventually finish school whereas I got distracted by wanting to be a driver and got into it that way."

He learned the ropes as a mechanic in Formula Ford, Atlantic, Super Vee and Indy Lights, before becoming an early data acquisition engineer in the mid-'80s. Through the '90s, Cannon was one of the founders of Genoa Racing in Atlantic, which sent Jimmy Vasser and Greg Ray on to successful careers at the top level. In Indy Lights he ran Dave DeSilva and the "vastly underrated" Mark Hotchkis.

Joining Forsythe Racing for 1997 was the move that Cannon's talents deserved. As number two to Lee Dykstra, they ran David Empringham and Lee Bentham. Soon he graduated to Forsythe's Indycar team.

"I am so lucky," says 61-year-old Cannon modestly. "I have had the chance to work with Lee Dykstra, Bruce Ashmore, Tony Cicale, Chris Simmons, Craig Hampson, Olivier Boisson... tremendous mentors."

Pointing out that some of those mentioned are very much his juniors, he responds that age does not define mentorship roles: "If you're smart, you learn from them all, you grab their insights and knowledge and add it to your own."

Cannon stayed at Forsythe for several years either side of a stint at Herdez until the end of 2006, then rejoined the former Herdez/HVM team following its Minardi Team USA rebrand to run rookie Robert Doornbos in a strong 2007 campaign.

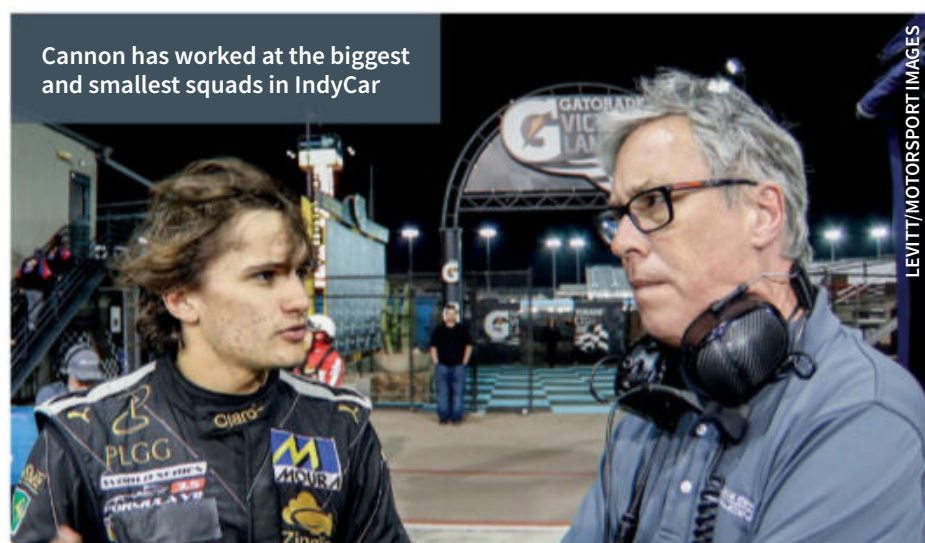
Spells at Ed Carpenter Racing, Andretti Autosport and Dale Coyne Racing followed, yet it wasn't until 2020 that Cannon, newly arrived at Chip Ganassi Racing, engineered a driver to an IndyCar title. That man was Scott Dixon, and Cannon was massively impressed with both the six-time champ and the whole Ganassi operation.

But after three seasons – including three depressing near-misses at the 500 – he elected to depart. Now the lead engineer at AJ Foyt Racing, he's determined to send the legendary team back up the grid. ■



Pole at the 2022 Indy 500 with Dixon was a proud moment for Cannon

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Cannon has worked at the biggest and smallest squads in IndyCar

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TOP TIPS FROM MICHAEL CANNON

- You need to work with a star driver, a real talent, or you aren't going to see the benefit of your efforts, especially in a spec series.
- Help to build up a strong team, supporting the ones who can help take your good ideas and turn them into reality.
- Bury your ego and embrace the next generation. They come out of school so bright, all they lack is experience. You can't afford to stagnate, so listen to them.

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