

108-PAGE F1 2022 PREVIEW SPECIAL

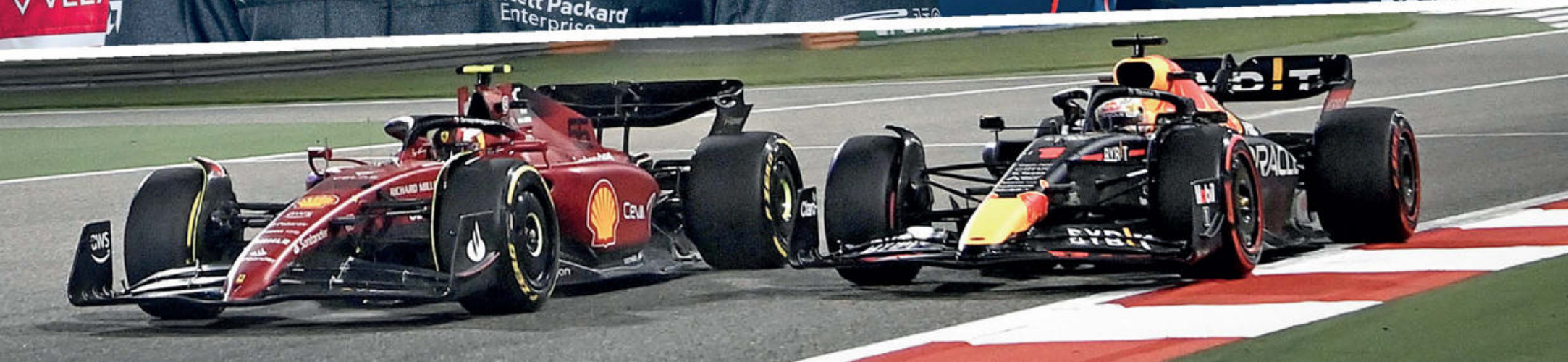
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ESSENTIAL GUIDE

17 MARCH 2022

F1 2022

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Who's hot and who's not as the new-look Formula 1 kicks off

The wait is finally over and we'll get to see the cars of Formula 1's new era battling it out in anger in Bahrain this weekend. There are lots of questions about the 2022 season – ranging from how good will the racing be in this new ground-effect age to who will set the pace – and we tackle many of them in this week's preview special from page 18.

Mercedes appears to be on the back foot, thanks to severe porpoising issues, but Max Verstappen and Red Bull *could* still have a fight on their hands if Ferrari's strong testing form continues into the racing.

McLaren didn't look as impressive in the Bahrain test as it did at Barcelona (p40), but there are still reasons to think it should be capable of occasionally jumping out of the tightly bunched midfield pack to take the fight to the leading players, just as it did at Monza last year.

The abrasive Bahrain surface also offers some unusual challenges and teams are still learning their machines. As Alex Kalinauckas argues (p14), the winner this Sunday won't necessarily be the team to beat.

F2, F3 and the World Endurance Championship also all kick off this weekend. Megan White talks to reigning F3 champion Dennis Hauger about his chances of repeating Oscar Piastrri's feat of taking the F2 title as a rookie (p66), as well as three Brits hoping for success in F3 this year (p70). Gary Watkins takes a look at Penske's LMP2 challenge as it gears up to run Porsche's WEC and IMSA programmes (p74).

We'll have full reports on all the season openers next week.



Kevin Turner

Kevin Turner
Chief Editor

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NEXT WEEK
24 MARCH

Bahrain GP report
All the action as Formula 1's
new era kicks off, plus
sportscars at Sebring



COVER IMAGES

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PIT & Paddock

- 4 Magnussen makes shock F1 return
- 6 Audi cancels its Le Mans comeback
- 8 Changes for Hyundai, BMW BTCC teams
- 10 Toyota off pace with WEC BoP hit
- 13 Bahrain Grand Prix preview
- 14 Opinion: Alex Kalinauckas
- 15 Tribute: Brian Redman on Vic Elford

F1 2022 PREVIEW

- 20 Who topped the Bahrain test
- 25 The key stats from Bahrain
- 26 Tech: surprising challenges of the rules
- 32 Autosport's trackside verdict
- 36 The threats Hamilton faces in 2022
- 40 McLaren: dark horse or in the dark?
- 44 How Vettel is writing his final F1 chapter
- 48 Politics: the drama behind the scenes
- 53 Tim Wright's team by team
- 65 Calendar and essential info

INSIGHT

- 66 Hauger's big Formula 2 challenge
- 70 The Brits taking on F3 in 2022
- 74 WEC preview: Penske in LMP2

CLUB AUTOSPORT

- 89 Inquest: marshal's death an accident
- 90 Walter Hayes victor White to Carrera Cup
- 92 Tarling stars in Phillip Island Classic
- 95 Opinion: Stephen Lickorish
- 96 National report: Silverstone
- 98 Very Special Saloons hit the track

FINISHING STRAIGHT

- 102 What's on this week
- 104 From the archive: 1954 Belgian GP
- 106 My favourite track: Lucas di Grassi

SUBSCRIPTION OFFER

- 88 Special deals for Autosport

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Magnussen makes surprise return as sanctions imposed on Mazepins

FORMULA 1

Kevin Magnussen has made a shock return to Formula 1 by rejoining Haas on a multi-year deal following the exit from the squad of Nikita Mazepin.

Magnussen raced for Haas between 2017 and 2020, before moving across to the IMSA SportsCar Championship last year with Chip Ganassi Racing. He had signed to race with Peugeot as part of its new Le Mans Hypercar programme in the World Endurance Championship from this year. But after Mazepin's contract and Uralkali's title sponsorship were terminated in the wake of Russia's invasion of Ukraine late last month, Haas turned to Magnussen

to lure him back to F1.

"Walking into the paddock, I feel like I never left," Magnussen said at last week's Bahrain test, less than 24 hours after signing his contract. "It's funny that when I think about the year that I have had: I've had a kid, moved back to Denmark, a lot of things have happened and it feels like 10 years have passed outside of the paddock. Then I walked in and it feels like I never left. It's funny how time can mess with you."

It was team owner Gene Haas who suggested contacting Magnussen about making a return to his eponymous F1 squad. Magnussen felt very surprised to receive a call from team principal Gunther Steiner offering him an F1 drive, but said yes immediately: "Then I thought, 'Was that clever?' And then quickly after that, I was like, 'I've got to do it.'"

It represents Magnussen's third stint in F1 and second unexpected comeback. After being dropped by McLaren at the end of his rookie season in 2014, he returned in 2016 with Renault after Pastor Maldonado's funding fell through weeks before the new campaign started. "It's crazy," Magnussen said. "The last time was also some crazy circumstances, so it shows that life is full of surprises, and this was certainly one of those big ones."

The deal also brings greater experience to Haas after the team spent 2021 struggling

with an undeveloped car and two rookie drivers – Mazepin and 2020 Formula 2 champion Mick Schumacher.

Magnussen was the only driver Haas contacted about the seat. "We said, 'Hey, let's see about Kevin, there are a few advantages having him,'" said Steiner. "We have got only a week before the first race actually. He knows the team, he's well respected. He knows his way around."

"But at that time, I didn't know if he was available or if he wanted to drive, and even if he wanted to drive, I didn't know if he could drive, because he had contracts in place and I didn't know the details of his contracts. But then it went pretty smooth."

Recent Alfa Romeo driver Antonio Giovinazzi and current Haas reserve Pietro Fittipaldi were also linked with the drive, although Fittipaldi has not raced full-time since 2019. The Brazilian admitted it "hurt" not to land the seat, but drove the Haas VF-22 on the opening day of the Bahrain test.

Speaking for the first time since being dropped, Mazepin took aim at Haas, saying he would not work with the team again as he had "lost trust" and that he was keeping his legal options open. "There has been no legal reason that could enable the team to terminate my contract on legal terms," he said, revealing that he found out his contract had been terminated just 15 minutes before it was publicly announced. Mazepin also



BINGHAM

Steiner says that
Magnussen was the
only driver contacted



BINGHAM



BINGHAM

Magnussen has
spent the past 12
months in sportscars

said he would look to set up a new foundation called 'We Compete As One' to help athletes excluded by rulings taken by sporting federations around the world.

Uralkali issued a statement just before Mazepin's press conference confirming that it would be seeking repayment from Haas for the 2022 season. But both Mazepin and his father, Uralkali director Dmitry, have now been added to the European Union's list of people of interest subject to sanctions. The EU's explanation of the decision revealed that Mazepin Sr met with President Vladimir Putin one day before the invasion of Ukraine began.

The EU said that Mazepin Jr was "a natural person associated with a leading businessperson [his father] involved in economic sectors providing a substantial source of revenue to the Government of the Russian Federation, which is responsible for the annexation of Crimea and the destabilisation of Ukraine".

LUKE SMITH

McLAREN GETS ACCESS TO PIASTRI AS RESERVE

FORMULA 1

Reigning Formula 2 champion Oscar Piastri will be available to McLaren as a reserve this year after the team struck an agreement with Alpine.

Piastri will spend this year focusing on his reserve role at Alpine, putting him first in line to step in if either Esteban Ocon or Fernando Alonso are unavailable.

Now the Australian will also be on call for McLaren if required. The team does not have its own dedicated reserve, instead sharing with Mercedes. Stoffel



SUTTON

Vandoorne and Nyck de Vries are options, with ex-Force India driver and Sky Sports F1 pundit Paul di Resta another back-up.

"In the spirit of offering maximum racing opportunities to our stable of young talent, we have agreed that McLaren may call upon Alpine reserve Oscar Piastri in the event one of their drivers is unable to race," a statement from Alpine read. "Oscar will remain

fully contracted to Alpine, and we will retain first option on his services."

McLaren's Daniel Ricciardo was forced to miss last week's Bahrain test after a positive COVID-19 test, but the team is confident he will return for the Bahrain GP this weekend. Vandoorne and di Resta are racing at Sebring, while Mercedes has first call on de Vries as a substitute.

LUKE SMITH



GALSTAD

Herta was fourth in IndyCar
opener in St Petersburg

Herta lines up his first F1 test

FORMULA 1

IndyCar star Colton Herta will get his first Formula 1 test this year with McLaren in its 2021 MCL35M.

The 21-year-old American races for Andretti Autosport in IndyCar, and became the youngest winner in the series' history in 2019 with victory at the Circuit of The Americas.

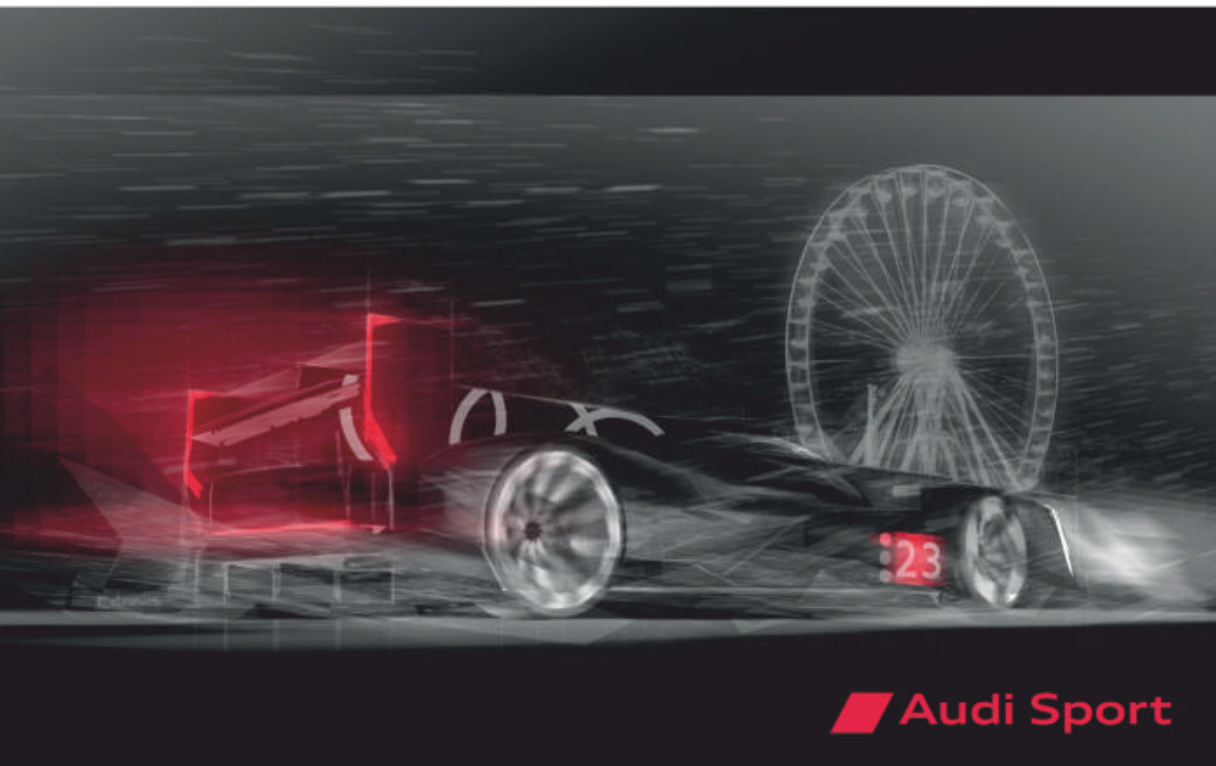
The American was in line to land an F1 drive at Alfa Romeo for 2022 if Andretti completed its plans to acquire a majority stake, only for that to fall through at the eleventh hour. Team boss Michael Andretti has already confirmed that Herta would get a seat should his bid to

get an F1 squad on the grid in the coming years be successful.

Herta will build some experience with McLaren thanks to the new sporting regulations for this year, which mean any previous car can be used for private testing.

"I want to thank McLaren for the opportunity to get my first laps in a Formula 1 car, which has always been on my racing bucket list," said Herta, who is fourth in the IndyCar standings. "This will be a great opportunity for me to gain some valuable experience in a new form of motorsport and learn from such an established team like McLaren F1."

LUKE SMITH



Audi cancels sportscar return – but it's not admitting it

WEC

Audi has cancelled its LMDh programme. The German manufacturer hasn't confirmed the move, only that the project has been put on hold. But take it as read that the 13-time winner of the Le Mans 24 Hours won't be ending a six-season absence from top-flight sportscar racing in the World Endurance Championship and IMSA SportsCar Championship next year.

The axe fell on Audi's LMDh hybrid prototype, the sister car to the Porsche that is already up and running, in the past two or three weeks. Multiple sources have confirmed that the project has come to a permanent end rather than the temporary one the manufacturer is insisting.

"We are now taking a break of two or three months on the project," said a spokesman for Audi Sport. "The capacities are being used differently and more sensibly at the moment."

Why the programme has fallen over is far from clear. Initial speculation about the future of the Audi LMDh started late last year amid rumours about the marque entering Formula 1 at the start of the next rules cycle in 2026. Yet at that stage the project was at full steam, and key players in the programme were privately pointing out that the return to prototype racing would fill the void left by its Formula E exit.

The official line about "capacities" being diverted points to a need to put more resources, technical and financial, into its RS Q e-tron SUV hybrid

rally-raid contender. That project was announced in November 2020 along with the LMDh at the same time as Audi revealed it would be quitting FE.

There is also the possibility that the move is linked to the aspirations of a third marque in the Volkswagen group to enter the LMDh arena. Lamborghini has been working to piggyback on a project led by Porsche, though its graduation to the prototype ranks has been talked about for 2024 rather than next year.

The Audi had been delayed, although it was always behind Porsche in the development queue at Multimatic Motorsports in Canada, which is developing the spine of the car around its next-generation LMP2 design. A first test early this year had been planned, but an updated schedule to run for the first time in the first quarter of this year looked like it was going to be hit. It is understood that a car that also shares the Porsche twin-turbo V8 engine was just weeks away from turning a wheel.

The Belgian WRT squad looked a shoo-in to run the factory Audis in the WEC next year, though it was far from clear if Audi would have been represented in IMSA. WRT, which has won all the big prizes in the GT3 arena with the marque, and then took the WEC and Le Mans LMP2 crowns on its graduation to prototypes last year, is understood to have signed a multi-year deal. Team boss Vincent Vosse insisted that he still has aspirations to move up to Hypercar whether or not the Audi project goes ahead.

GARY WATKINS

Minardi veteran in NASCAR debut

NASCAR

Ex-Minardi Formula 1 driver Tarso Marques is set to make his NASCAR Cup Series bow this season in an eight-race campaign with a Team Stange Racing Ford.

Marques, who made 24 starts in F1 between 1996 and 2001, is due to make his debut at Road America on 3 July. The Chicago-based Stange team, owned by entrepreneur John Stange Jr, has mostly competed in the fourth-tier ARCA series, and was a partner on an Indianapolis 500 entry for Oriol Servia in 2019.

Marques will also be entered into races at the Indianapolis road course, Watkins Glen, Daytona, the Charlotte 'roval', Las Vegas, Homestead and the Phoenix championship decider.

His third stint with Minardi came in 2001, when he scored his best F1 finishes with two ninth places. That meant he finished ahead of rookie team-mate Fernando Alonso in the standings. In between, he raced in Indycars, replacing the injured Al Unser Jr at Team Penske in 1999 and contesting the majority of the 2000 season with Dale Coyne Racing.

Marques, who has more recently competed in Brazil's Stock Car Series, was put into intensive care after being diagnosed with COVID-19 in 2020, but has since made a full recovery.

Meanwhile, the Cup Series regulars moved on to Phoenix for the fourth round of the 2022 season last weekend, and it was three drivers all battling for their maiden win who fought it out at the finish. Chase Briscoe (Stewart-Haas Racing Ford, below) was the man to break his duck, beating Ross Chastain (TrackHouse Chevrolet) and Tyler Reddick (Childress Chevy). Ryan Blaney dominated much of the race in his Penske Ford, but Briscoe's team got him off pitroad first in the final two pitstops and allowed him to control the restarts.

JAMES NEWBOLD & JIM UTTER



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Algarve Pro steps in to fill ex-Russian Le Mans slots

LE MANS 24 HOURS

The Anglo-Portuguese Algarve Pro Racing squad will field two ORECA LMP2s at the Le Mans 24 Hours with multiple drivers earmarked to race for the G-Drive squad's aborted 2022 campaign. The Russian entrant was pulled out of international sportscar racing, and its technical partner has effectively taken over its LMP2 entries.

Two APR ORECA-Gibson 07s were on a full 62-car entry list for the World Endurance Championship blue riband in June when it was belatedly published last Thursday. The reopening of entries for a 48-hour period at the start of last week can now be interpreted as a move by race organiser the Automobile Club de l'Ouest to facilitate a new arrangement that also encompasses the WEC and

the European Le Mans Series.

Rene Binder and James Allen, who were originally due to share with Daniil Kvyat in the WEC, will drive one car (right) with Steven Thomas, runner-up in LMP2 in the IMSA SportsCar Championship last year with WIN Autosport. They will also contest the full WEC together.

Sophia Florsch, who was due to drive with team principal Roman Rusinov in the ELMS, is listed in the second APR car at Le Mans along with John Falb, who is scheduled to race one of two APR cars in the ELMS. A third driver has yet to be nominated.

Glickenhause has received a grid slot for an additional Pipo-engined 007 LMH to run alongside its full WEC entry and bring the Hypercar entry to five in Peugeot's absence, but it was unable to put together plans to



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add a third car in just two days.

The GTE Pro field is bolstered by a Ferrari 488 GTE Evo run by Riley Motorsports, which gained an automatic entry by winning the IMSA SportsCar Championship LMP3 title last year. The car will be driven by Sam Bird, Shane van Gisbergen and Felipe Fraga.

Six reserves include two High Class Racing P2 ORECAs, one with father-and-son Jan and Kevin Magnussen listed against it. Magnussen's availability, however, disappeared with his return to Formula 1 with Haas: Le Mans clashes with the Azerbaijan Grand Prix.

GARY WATKINS

Jurgen Lassig 1943-2022

OBITUARY

Jurgen Lassig was an amateur sportscar driver regarded as a safe pair of hands, who achieved successes that would be unthinkable today. The German, who has died aged 79, finished second at the Le Mans 24 Hours in 1987 and triumphed at the Daytona 24 Hours eight years later.

Lassig, whose wealth was founded on his property interests, was a fixture at Le Mans for the majority of the 1980s and deep into the 1990s, starting the race no fewer than 16 times. Ten of those came with the Obermaier Porsche squad he helped found, and it was while driving Porsches under the direction of Hans Obermaier that he notched up six of his



MURENBEELD

motorsport IMAGES

seven top-10 finishes, the 1987 runner-up spot in a 962C shared with Bernard de Dryver and Pierre Yver included.

His allegiances switched in 1993 to Kremer Racing, with which he scored his biggest success sharing the winning 962-based K8 with Christophe Bouchut, Marco Werner and Giovanni Lavaggi at Daytona in 1995. He was more than a

bit-part player in that victory, remembers long-time Kremer team manager Achim Stroth.

"He did more laps than Bouchut and Werner," says Stroth. "Jurgen was very consistent and very reliable. He was humble and very team-orientated. A good guy."

GARY WATKINS

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Changes for BMW and Hyundai teams



BTCC

The British Touring Car Championship season build-up has continued to bubble along nicely over the past few days. Hyundai team Excelr8 Motorsport has finally admitted what was long-expected, that it has pressed the green light on using bespoke engines for 2022; official BMW squad West Surrey Racing has unveiled a livery that represents a return to traditional BMW white; and two drivers have been announced.

Excelr8's engine confirmation came in the wake of two days of testing with the Hyundai powerplant at Snetterton, with team leader Tom Ingram taking the wheel on one day and new signing Tom Chilton on the other. The powerplant has been

built by Swindon Powertrain, meaning that the company remains in the BTCC despite losing its deal to supply the TOCA customer engine to M-Sport for 2022.

"After the development work that has been ongoing in recent months, the first test on track was a key milestone for the Hyundai engine programme," said Swindon MD Raphael Caille. "The engineers at Excelr8 have done a superb job in integrating the new engine into the car as there were no issues at all, and from our perspective the test went exceptionally well."

The BMW livery will be sported by four-time champion Colin Turkington and Stephen Jelley, with the third car of Jake Hill sporting the colours of his own backers. Turkington will carry the #50 this year to

represent half a century of BMW M.

As far as driver line-ups are concerned, Team Hard confirmed a BTCC return for Bobby Thompson — last seen walking away from an Audi he had just barrel-rolled at Croft in October 2020 — in one of its Cupras. Excelr8 has filled its final seat with Jack Butel, who therefore stays at the team.

It means that Chris Smiley, an Excelr8 driver in 2020-21, is out in the cold for now. Plans by his long-time helper, BTC Racing founder Bert Taylor, to acquire a TBL entrants' licence to run Smiley under the Restart Racing banner are on ice for now. Taylor, who split with current BTC owner Steve Dudman at the end of 2020, says he is seeking another seat to keep Smiley racing.

MARCUS SIMMONS

DTM support champ Green gets GT3 ride



ADAC GT MASTERS

Reigning DTM Trophy champion Ben Green is stepping up to Germany's fiercely contested ADAC GT Masters series this season with leading BMW squad Schubert Motorsport.

The 24-year-old from Essex won the GT4-based series on the DTM undercard last season at the wheel of a BMW M4 GT4, and now steps into the

Munich marque's new GT3 version of the M4 model. He will partner German teenager Niklas Krutten, who in his first season out of single-seaters claimed runner-up in the LMP3 class of the European Le Mans Series in 2021.

It represents a return to GT3 for Green, who raced an M6 in the top class of the British GT Championship in 2019 before switching his career focus to Germany.

"We want to give these talented young drivers the opportunity to establish themselves in a professional environment on the GT3 scene," said Schubert team manager Marcel Schmidt.

The team's sister M4 will be raced by long-time BMW leading lights Nicky Catsburg and Jesse Krohn, but they will have to miss the first round at Oschersleben on 23-24 April due to delays with the car's delivery.



RALLY RAIDS Audi's electric RS Q e-tron may be the current scourge of sportscar racing aficionados (see p6), but it took its first victory last week. Following a promising debut on the Dakar Rally, Stephane Peterhansel and co-driver Edouard Boulanger won the Abu Dhabi Desert Challenge by almost half an hour. The only setback was a puncture on the second day. "It wasn't easy to find the right rhythm on the sometimes very treacherous broken dunes," said Peterhansel. "Our pace was right and we didn't take too many risks." **Image by Audi**

Hitech cuts ties with Uralkali

FORMULA 2/3

FIA Formula 2 and Formula 3 team Hitech Grand Prix has terminated its sponsorship deal with Russian chemical company Uralkali "with immediate effect" amid the ongoing conflict in Ukraine.

The Silverstone-based squad has carried the logos of Uralkali since 2016. That was the year when it entered its first full season in the Formula 3 European Championship with Nikita Mazepin (who last week was placed on the list of Russians sanctioned by the European Union alongside his father, Uralkali director Dmitry), George Russell and Ben Barnicoat.

Hitech ran without Uralkali branding during the recent pre-season F2/F3 testing in Bahrain, as the Russian invasion of Ukraine continued. The team then

announced last week that its agreement with Uralkali had been terminated, adding that it was "shocked and saddened" by the war and wished for a "swift and peaceful end" to the conflict.

In a statement, the team said: "Hitech Grand Prix has elected to terminate, with immediate effect, the sponsorship agreement of Uralkali. As with the rest of the motorsport community, the team are shocked and saddened by the invasion of Ukraine and wish for a swift and peaceful end to the ongoing conflict."

Mazepin spent two seasons in European F3 with Hitech. In 2016 he incurred a one-race ban for punching Callum Ilott in the Hungaroring paddock, but improved to finish 10th in 2017. He returned to Hitech for the 2020 F2 season, taking fifth place.

MEGAN WHITE

LAMBO SEASON FOR PORSCHE SPECIALISTS

GT WORLD CHALLENGE

Long-time World Endurance Championship Porsche racer Ben Barker is teaming up with 2020 Porsche Cayman Sprint Challenge champion James Dorlin for an attack on the GT World Challenge Europe.

The two Britons will campaign a Barwell Motorsport Lamborghini Huracan GT3 Evo in the Endurance Cup segment of the GTWCE together with Dorlin's bronze-rated fellow Cayman graduate Alex Malykhin in the Gold class. Dorlin (below) and Malykhin will also team up for the Sprint Cup rounds at Brands Hatch and Silverstone.

Porsche Carrera Cup GB race winner Barker, who continues his long association with the GR Racing Porsche squad in the WEC this season, got his first taste of the Lambo in a recent two-day test at Paul Ricard. For Dorlin, who has been announced as racing a Redline Racing Lambo with Malykhin in British GT, it represents a first step onto the international GT3 ladder.

"I'm excited for this season," said Barker. "For me to drive something other than a Porsche brings a new challenge I'm totally ready for." Dorlin added: "I'm new to GT3 but absolutely ready and can't wait to compete against top drivers on some of the best circuits in Europe!"



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IN THE HEADLINES

JANI IN FOR MAGNUSSEN

Porsche factory driver Neel Jani will drive the #02 Chip Ganassi Racing Cadillac DPi-V.R in this weekend's Sebring 12 Hours alongside full-season drivers Alex Lynn and Earl Bamber. The Swiss, winner of the Le Mans 24 Hours in 2016, has replaced Kevin Magnussen after his return to Formula 1 with Haas.

SMOLYAR PULLS OUT OF F3

MP Motorsport had not confirmed a replacement for Russian Alexander Smolyar for this weekend's FIA Formula 3 opener in Bahrain as we went to press. Smolyar's long-time backer SMP Racing, founded by sanctioned banking oligarch Boris Rotenberg, has pulled out of international motorsport.

ALPINE'S JUNIOR JUNIORS

Alpine has added an Affiliate programme to its Academy for up-and-coming drivers. Formula Regional European ace Hadrien David and British F4/W Series contender Abbi Pulling are among the five recruits announced by the team.

HILDEBRAND'S FOYT GIG

IndyCar veteran JR Hildebrand has been named by AJ Foyt Racing as the replacement for Tatiana Calderon in the five oval races on this year's schedule. Hildebrand, most famous for losing the 2011 Indy 500 to Dan Wheldon on the run to the finish, takes the cockpit of the #11 Foyt car for the first time this weekend at Texas Motor Speedway.

FIA NAMES NEW RALLY CHIEF

World Rally Championship category manager Andrew Wheatley has been promoted by the FIA to replace Yves Matton as its new rally director. Before joining the FIA in 2019, he was a key figure at M-Sport.

JURGEN NEUHAUS 1941-2022

Sportscar driver Jurgen Neuhaus, who has died aged 80, took his place in history as the first title winner in the pan-European Interserie in 1970. He graduated from the GT and tin-top ranks to a Porsche 917K when his sponsor, the Gesipa rivet company, asked him what he wanted to do next. He said he wanted to race one of the new 917 Group 5 cars, and he was promptly bought one to drive. Neuhaus scored wins at Norisring and Thruxton on his way to the crown.



Toyota hammered by BoP

WEC

Toyota failed to trouble the frontrunners at the official pre-season World Endurance Championship test at Sebring last weekend after receiving a massive Balance of Performance hit. Key among the changes under the BoP was an increase in the speed at which the GR010 HYBRID Le Mans Hypercar can deploy hybrid power through the front axle.

Last year, the GR010s could go into four-wheel-drive mode at 120km/h (75mph), the limit laid down in the technical regulations, when on slick tyres. The so-called '120 Rule', which set the deployment speed at 150km/h when the car was on grooved rubber, has now moved in the BoP and was set at 190km/h in all conditions ahead of the test leading in to Friday (tomorrow)'s Sebring 1000 Miles WEC season-opener.

Toyota Gazoo Racing Europe technical director Pascal Vasselon said: "It is true that at 190 the functionality of four-wheel drive is obviously hurting. It is a big hit in terms of performance, it has a big effect." He confirmed that the only corners where the GR010 now deploys hybrid power through its front axle are the fast Turn 1 and Turn 17 left and right-handers at the beginning and end of the Sebring lap.

Vasselon would not say how much the increase in hybrid deployment speed was costing the Toyotas around the 3.74-mile Sebring International Raceway. "If I start to give figures then I am being drawn into commenting on the BoP, which

I would like to avoid," he said.

He gave a similar response when asked if the BoP published in the lead-up to the prologue could change for the race meeting, which began on Wednesday with two sessions of free practice. "The current BoP system is beyond lobbying because it is fully objective: I consider there is no point in talking about it," he added.

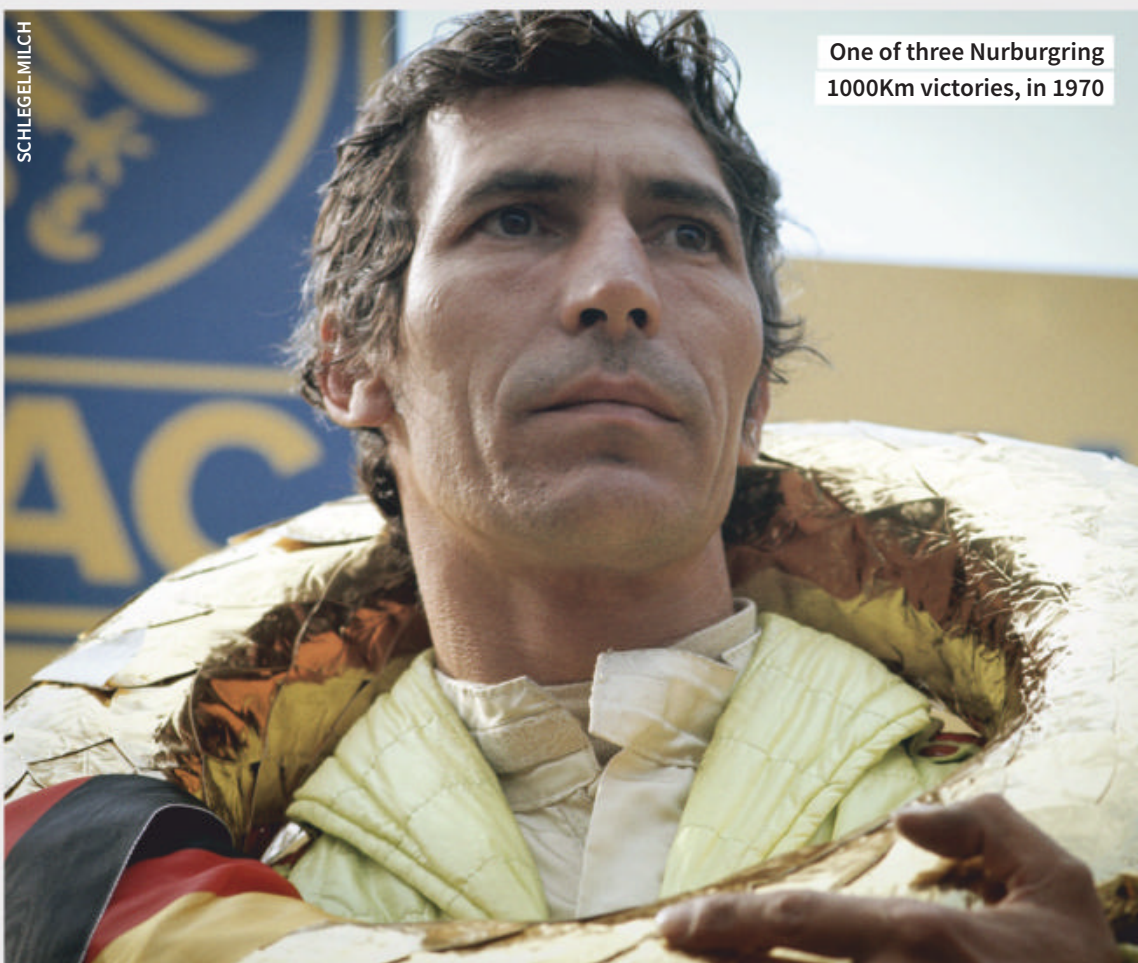
The two GR010s ended up ninth and 15th in the combined times of the four Sebring test sessions on Saturday and Sunday. Brendon Hartley's best for Toyota in the #8 car was just over a second off the ultimate pace set by an LMP2, and 0.6s shy of the Alpine-Gibson A480 grandfathered LMP1 that led the way in the Hypercar class.

Quickest overall was Ferdinand Habsburg in the Realteam by WRT ORECA-Gibson 07 with a time set on Sunday morning when conditions were at their best. He was nearly 0.3s up on Rene Rast's time in the sister WRT car. Filipe Albuquerque (United Autosports) was third fastest with a time set late on the second afternoon, while Nicolas Lapierre set the Alpine mark to take fourth overall. Porsche led the way in GTE Pro with Michael Christensen, who set a series of quick laps on Sunday morning to end up a second clear of the pack aboard the #92 911 RSR. Tommy Milner took second in class in the solo Chevrolet Corvette C8.R. WEC debutant Seb Priaulx was quickest in GTE Am in his Dempsey Proton Porsche.

GARY WATKINS

[P74 WEC PREVIEW](#)

SCHLEGELMILCH



One of three Nurburgring
1000Km victories, in 1970

Vic Elford 1935-2022

OBITUARY

Vic Elford, who has lost his battle with cancer at the age of 86, was one of the finest sportscar racers never to win the Le Mans 24 Hours. He was also one of the key figures in the Porsche 917 project.

Elford made his name in rallying, largely in Triumph and Ford machinery, and then joined Porsche. He won the 1967 European Rally Championship before an incredible run of success in early 1968. Elford won the Monte Carlo Rally with co-driver David Stone in a 911T and then, just a week later, took the Daytona 24 Hours, one of five drivers to share the victorious long-tailed 907.

In May he drove what he would later select as the race of his life. After losing around 18 minutes thanks to a lost wheel and a puncture, Elford pulverised the lap record to win the Targa Florio, sharing a 907 with Umberto Maglioli. "You could have blindfolded me, put me into a helicopter and dropped me anywhere on the Targa and I'd have known where I was," said Elford of the 45-mile Sicilian circuit. "Real tracks like the Targa Florio and Nurburgring Nordschleife were the best."

Two months later, he took a fine fourth on his world championship Formula 1 debut at the wet French Grand Prix in a Cooper-BRM. Despite doing a good job with the fading team for the rest of the season, Elford's single-seater

career never took off. He started just 13 championship GPs, with that fourth his best result, but Elford was one of the world's leading endurance racers.

His victory in the 1968 Nurburgring 1000Km, with Jo Siffert, was the first of three successes in one of the toughest events, each scored with various versions of Porsche's 908. It was perhaps no surprise that his incredible memory, combined with experience gleaned from contesting (and in 1967 winning) the epic 84-hour Marathon de la Route, made Elford one of the true Nurburgring masters.

He also formed a strong relationship with Porsche development and motorsport boss Ferdinand Piech, the chief architect behind the 917. Elford became a fan of the legendary monster, proclaiming to have loved even the aerodynamically wayward 1969 version.

Elford and Richard Attwood almost won the 1969 Le Mans 24 Hours against all expectations on the car's debut. "The 1969 917 was so horrendous and he said he liked all of them," said Attwood. "I thought it couldn't be true because it was terrible. Every other car I drove there was flat through the Mulsanne kink, but that wasn't – because it was virtually coming off the ground. Vic was the sort of hero I don't want to be!"

Once the JW Automotive Gulf team had taken over Porsche's factory world sportscar programme from the start of 1970, Elford proved a constant thorn in the team's side in Porsche Salzburg and later Martini (both works-supported) entries. Often, Elford would take the latest developments discarded by JWA. He took pole at Le Mans in 1970 with the latest long-tailed car and could have won alongside Kurt Ahrens Jr but for engine failure. It was typical of Elford's luck, his first big 917 win not coming until the 1971 Sebring 12 Hours alongside Gerard Larrousse. "Vic wanted the fastest car," added Attwood. "He was a speed man and had a fantastic career. He was quick but he wasn't a car breaker."

Though outright Le Mans success eluded him, Elford twice won his class in the 24 Hours. He was also awarded the French National Order of Merit for his efforts to help the drivers involved in the 1972 Le Mans accident that claimed the life of Jo Bonnier. After a year with Alfa Romeo, he reduced his outings, but raced and rallied sporadically into the 1980s.

One of motorsport's versatile greats, Elford was also a winner in Trans-Am at the series' height, and won the inaugural rallycross event at Lydden Hill in 1967.

"Sure it grates, because there were a couple of times I should have had it," said Elford of his lack of a Le Mans win. But it is as one of the few drivers capable of taming the mighty 917 that he will always be remembered.

KEVIN TURNER

[P15 REDMAN'S TRIBUTE](#)



'Race of his life' was
1968 Targa Florio

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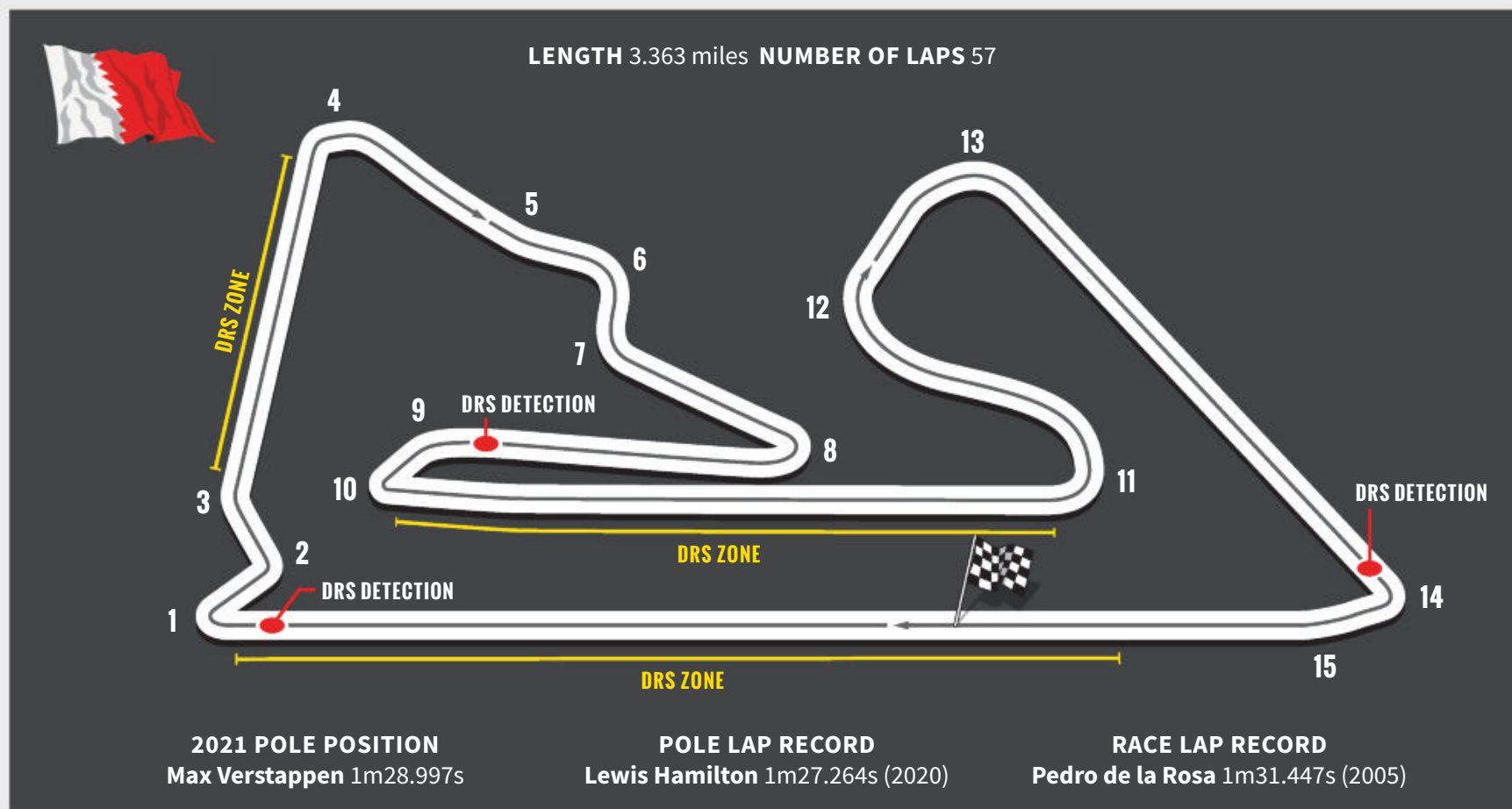
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F1 BAHRAIN GRAND PRIX PREVIEW



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FP3 1200

QUALIFYING 1500

Sunday 20 March

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CHAMPIONSHIP - FINAL 2021 POSITIONS

Drivers

1	Verstappen	395.5
2	Hamilton	387.5
3	Bottas	226
4	Perez	190
5	Sainz Jr	164.5

Constructors

1	Mercedes	613.5
2	Red Bull	585.5
3	Ferrari	323.5
4	McLaren	275
5	Alpine	155



VENUE STATS

Previous Sakhir winners

2021	Lewis Hamilton	Mercedes
2020	Sergio Perez	Racing Point
2020	Lewis Hamilton	Mercedes
2019	Lewis Hamilton	Mercedes
2018	Sebastian Vettel	Ferrari
2017	Sebastian Vettel	Ferrari
2016	Nico Rosberg	Mercedes
2015	Lewis Hamilton	Mercedes
2014	Lewis Hamilton	Mercedes
2013	Sebastian Vettel	Red Bull



Sakhir points tallies

Hamilton	215
Vettel	148
Bottas	93
Alonso	71
Perez	69
Ricciardo	64
Verstappen	57
Norris	33
Sainz	26
Albon & Leclerc	25



A surprising trend of F1 openers

First-race winners often become champions, but not always. Dig through the stats and unexpected findings can emerge to make F1 harder to predict than we thought

ALEX KALINAUCKAS

Looking back on the Bahrain Grand Prix that opened the 2021 Formula 1 season, it really set the tone for the campaign to come: Max Verstappen's stunning speed; Lewis Hamilton's tenacity in a slower car; Red Bull and Mercedes falling out over a minor rules gripe. It had comfortably more and greater real drama than the Christian Horner Netflix soap opera *Drive to Survive*.

Now 2022's first race is upon us. And where last year's event attracted intrigue because of Mercedes' testing struggles, that is a secondary factor this time as the new era F1 owner Liberty Media has been planning since 2019 is finally about to get under way.

But the result of the 2021 Bahrain race was actually an anomaly in recent F1 history. For the only time since 2000, the winning driver from the curtain raiser did not go on to claim the drivers' championship in a title battle with a rival from another squad (so it was a different scenario to Giancarlo Fisichella, Nico Rosberg and Valtteri Bottas winning the openers in 2005, 2014 and 2019-20, when their team-mates subsequently clinched the crown), but his team *did* take the constructors' crown.

This sets 2021 apart from the Ferrari/McLaren split during Hamilton's first title year in 2008. Now, there is a very specific reason for this – the Abu Dhabi debacle that stole Hamilton's eighth crown. But with so much interest in how the F1 pecking order might have been reshaped with the rules overhaul, it's worth

“Come Sunday, F1 will know which of the leading teams has been telling the truth”

noting how often a first-race winner has gone on to secure the title.

Since the world championship started in 1950, the driver who has won the season opener has taken the crown 47% of the time. This naturally rises to 61% for the constructors' equivalent (since 1958) given each pacesetter team has generally had more than one driver to call upon, and it's 52% for teams taking title doubles if they've won the first race.

But using the 2000 season as a handy watermark, we can see that in the 22 championships that have been completed since, the team that won the first race went on to clinch the title double 14 times. That's a higher strike rate of 64%, which emphasises how all-conquering the modern superteams (Ferrari, Red Bull and Mercedes, which has one bonus title double in its DNA from Brawn in 2009) have been. When we consider how many teams' titles

those squads have won, this rises to 15 (68%), with Mercedes' ultimately painful victory last year, an overlooked accolade.

A similarly high strike rate for first-race team winners continues when looking at the turbo-hybrid era in isolation. Since 2014, the team that won the first race went on to secure a title double five times (63%), and took six constructors' crowns (with the same 2021 anomaly as above). All went to Mercedes.

But the mini-era just gone, which married the V6 engines to an ultra-high-downforce aerodynamic formula, surprisingly bucked the trend. Since 2017, only twice has the team that won a season's first race gone on to take the constructors' championship. Again, both of these were doubles and went to Mercedes, although neither of those wins were Hamilton's – they were Bottas's triumphs in Melbourne and Austria in 2019 and 2020 respectively.

But one year ago, Hamilton returned to win the season opener for the first time since 2015, with the other seasons where the initial winner lost the title being 2017 and 2018 and Sebastian Vettel's false dawns at Ferrari.

So, while looking ahead to the 2022 season and the new era with these stats and trends in mind, we can reflect on two key elements. Based on its testing form, Ferrari may finally be in a place to better its underachievement under the last ruleset. The team is thought to be in a good place in relation to the car weight issue that has struck all the teams as some of the standardised parts on the new machines – such as the wheel covers – have arrived unexpectedly heavy on cost grounds. Alfa Romeo is understood to be the only team close to hitting the 798kg limit, but Ferrari is thought to be lighter than Mercedes, for example, and could be gaining considerable lap time as a result. How Ferrari matches up to test pacesetter Red Bull should become clear this weekend.

The other important takeaway concerns the 2021 anomaly and how Hamilton's win ahead of Verstappen in Bahrain heralded a fantastically close campaign, with the Abu Dhabi controversy leading to the first split drivers' and teams' titles since 2008.

Come the chequered flag on Sunday, F1 will know exactly which of the three leading teams that says another is the true pacesetter has been telling the truth. But, as these stats show, there's still a healthy chance of a good, multi-team title fight developing. Back in 1998 after a major car rules change, the McLaren drivers lapped the field in the opener before Michael Schumacher and Ferrari engaged them in a championship battle that went down to the wire.

As 2022 goes on we will understand if the new era will return the championship to the rather regular consistency of opening-race winners going on to take the title, or if the surprising trend from 2017-21 continues. ❧



P18 F1 2022 PREVIEW

YOUR SAY

It was better for your psyche in those dangerous days, not to become too friendly with a fellow driver, but Vic and I were as friendly as it's possible for two competitors to be

BRIAN REDMAN



Elford and Redman shared a 917 at Brands Hatch in 1971

Remembering Vic Elford

I first heard of Vic in 1962 through my world-class rally navigator friend, also from Burnley, Mike Wood, when he declared “this fellow Elford’s pretty quick”! In 1967 I followed his progress with Porsche, both in racing and of course rallying, where he became European champion.

In 1968 Vic was driving for Porsche and I for JWAE in the GT40 with Jacky Ickx. At the same time, I was in F1 with Cooper where, following suspension failure and a broken arm at Spa, Vic was fortunate — or unfortunate, depending how you look at it — to take over the driving duties. I understand however, that I came out slightly ahead on the compensation side, £250 to Vic’s £200!

Towards the end of 1968, Vic asked if I could be his co-driver at the 1969 Daytona 24 Hours, and this is how I joined Porsche for a great two years in the 908/1, 908/2, 908/3 and 917K.

It was better for your psyche in those dangerous days, not to become too friendly with a fellow driver as there was a good chance something unpleasant might happen to them, but Vic and I were as friendly as it’s possible for two competitors to be.

In later years we would, of course, indulge in little friendly verbal sparring when speaking at the same dinner. Vic, after repeating several times: “I won six times at the Nurburgring.”

Brian: “Vic, we’re both getting old but perhaps you could remind me, when you won the 1000 Ks in 1970 with Kurt Ahrens, wasn’t it after Jo Siffert and I broke down? When you won the 500 Ks also in 1970, driving the factory Chevron B16, wasn’t that after I’d caught fire in the B16/S?”

Vic’s superb victories at the Monte Carlo Rally, Daytona 24 Hours and Targa Florio in 1968, his love of the Porsche 917 right from the start because, as he said, “it’s 20 miles an hour faster than anything on the Mulsanne”, his success in the Trans-Am and ability with the Chaparral 2J ‘sucker’ car... Vic’s multiple race and rally victories, not to mention his Chevalier de l’Ordre National du Merite awarded for bravery at Le Mans in 1972, trying to rescue Jo Bonnier, are all a superb testament to his character, his driving abilities and his stature as one of the greatest and most versatile drivers of all time.

Brave and smiling as always, in the early hours of 13 March Vic lost his final battle, this time with an unbeatable foe, cancer. Throughout this long and painful struggle, his much loved wife, Anita, fought by his side.

Rest In Peace Vic. In the not too distant future, I look forward to one day race again with you in that great Race Track in the Sky.

Brian Redman
Vero Beach, Florida

Have your say, get in touch

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Historic Dubai Grand Prix Revival

❖ 2022 NOV 25-27  Powered by Gulf Historic

The second edition of the Historic Dubai Grand Prix Revival, powered by Gulf Historic, will bring some of the world's finest historic racing cars to the magnificent Dubai Autodrome in November.

Building on the outstanding success of the inaugural event, the expanded 2022 edition will feature more than 100 grand prix and Le Mans cars racing on the 5.4km track over the weekend of 25-27 November. This year's timetable has expanded to include two separate Formula 1 categories and two grids for endurance sports-prototype and GT cars.

The event will start just five days after the nearby Formula 1 Abu Dhabi Grand Prix and run at the same time as the football World Cup in Qatar as the Middle East becomes a mecca for international sports fans.

The first F1 grid will celebrate the era of Ford Cosworth DFV engine, featuring cars from 1970 to 1985. This is the era of great drivers such as Jackie Stewart, James Hunt, Niki Lauda and Nelson Piquet. While these famous cars will race, the second F1 session will be for cars from 1988 to 1994 running in high-speed demonstrations. The fabulous cars from the era of Ayrton Senna, Nigel Mansell and Michael Schumacher ran with V10 and V12 engines and the noise made by these cars is extraordinary. In both cases, the grids will be full of genuine cars running in their period liveries.

The sportscar grids will recreate international endurance racing across nearly 40 years, from 1982 to 2010. The first grid will be for the cars from

1982 to 1993 and will include Group C, IMSA and GTP cars from Europe and North America. The Group C era was one of the finest in sportscar racing history as machines from Porsche, Jaguar, Mercedes and Nissan battled for Le Mans glory. The second grid features GT and Prototypes from 1994 to 2010, including 200mph monsters from Le Mans and IMSA.

Both the Formula 1 and sportscar grids will be packed with the cars that made history across half a century and, though incredibly rare and valuable, they will be driven with great commitment by talented racers.

"Everything at the HDGPR is turned towards the public," says Romain Dumas, twice winners of the Le Mans 24 Hours. "The circuit is fantastic and the crowds provide great energy. It's a really wonderful meeting which I hope to attend again in 2022."

The Dubai Autodrome has been a mecca for motorsport in the region since its construction in 2004 and the 24 Hours of Dubai has become an important date on the international sportscar racing calendar.

Away from the spectacular on-track action there will be a wonderful range of attractions and activities to make this an event for the whole family. The weekend will include a 1970s-themed dress code, traditional music, dancing and marching bands, classic car concours, a bicycle race around the track for competing drivers and a gala dinner that promises to be a highlight of Dubai's winter social diary.

"Enthusiasm for track-based motor racing in the Middle East has been steadily building in recent years, notably thanks to the region's growing influence on the Formula 1 calendar," says Pierre-Brice Mena, Managing Director of event organiser GP Extreme. "The HDGPR – powered by Gulf Historic – taps into the spirit of the first Dubai Grand Prix, which was held in 1981 and was ahead of its time." ❖



Historic Dubai Grand Prix Revival



Powered by Gulf Historic

ESSENTIAL GUIDE

F1 2022



F1 season preview

The countdown to the start of the Formula 1 season is almost over. Here's Autosport's essential guide



SUTTON
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IMAGES

P20 Biggest takeaways from second test
P25 Bahrain stats: how the field stacks up
P26 F1 2022 technical analysis
P32 The verdict from trackside
P36 Hamilton's battles for 2022

P40 McLaren: testing's unknown quantity
P44 How will Vettel write final F1 chapter?
P48 Political fights and wider global issues
P53 Tim Wright's team by team
P65 Calendar and essential info



Testing analysis

Is Red Bull ready to dethrone Mercedes?

A technical upgrade helped catapult Max Verstappen to the top of the Bahrain test. It's looking good for his team, in contrast to a bobbling state of play at Mercedes

ALEX KALINAUCKAS

PHOTOGRAPHY MARK SUTTON



He exits the final corner poised to show exactly what he can do on the softest tyres Pirelli has produced for the coming campaign. He's treated them carefully through the warm-up lap around the abrasive 3.36 miles of the Bahrain International Circuit. It's close to the same conditions he will face in qualifying for the season opener next Saturday. He is the Formula 1 world champion; the rest must chase. Then comes sudden, unexpected disaster. The rears light up suddenly, and around he goes.

This was Lewis Hamilton at the very end of pre-season testing in 2021, and exactly the same thing happened to Max Verstappen

in the dress rehearsal at the same circuit last Saturday.

But this is where the uncanny similarity ended. After going through a full 360-degree spin and trundling around to prepare for another run on the damaged rubber, Verstappen did something remarkable. He *still* drove his Red Bull to the top of the times. And then he did it again, deposing Charles Leclerc, just when it looked like Ferrari's excellent pre-season would be rewarded with the headline lap time one week ahead of the 2022 race campaign getting under way. Plus, even though Mercedes' handling appears to be all over the place and it's off the pace, as it was in Bahrain testing in 2021, it is for very different reasons this time around. Any expectation that it will simply close the clear gap to Red Bull is seemingly non-existent.



Max Verstappen had reason to be satisfied with Red Bull's testing form. But Lando Norris, flying solo for McLaren, was feeling the heat



AlphaTauri was quick in Bahrain and Tsunoda ended up seventh

How the leading trio moved clear

The three-day test in Barcelona last month had painted a crowded overall formbook picture, with Mercedes, Red Bull, Ferrari and McLaren in the leading mix, and the event dominated by the unexpected porpoising challenge. The first of three days in Bahrain was about the teams working their way up to the limit with the new cars at a track that is a much harder challenge overall than Barcelona's near-laboratory conditions.

On Thursday morning, the focus was on Mercedes' massive upgrade and particularly its new sidepods. Pierre Gasly's AlphaTauri led the way on a very blustery day, which Haas missed half of due to its freight arriving late (the team was somewhat contentiously allocated an extra hour past the 7pm end point on

Thursday, then allowed to run for an hour earlier than everyone on Saturday and for two more that evening). On day two the teams paid more attention to the softer rubber, which had a difficult time in the sweltering conditions, and Ferrari's Carlos Sainz Jr led the way.

As the third day began, attention turned to Red Bull's final testing upgrades and how these would influence the performance of the RB18, which to that point had yet to do any dedicated performance running or anything other than perfunctory laps on the softer tyres. After spending the first two hours working to understand the impact of the newly dimpled sidepods, Sergio Perez moved to the head of the times with a run on the C4 tyres. Although the typical testing caveats regarding fuel loads and engine modes applied as relentlessly as they always do, this progress from Red Bull rather >>



Perez adjusted to updates on sidepods on a C4 tyre run

took it to another level and helped establish a clearer picture of the likely pecking order at the front of the pack.

As night drew in, with conditions the best of the test – low wind and comparatively cool temperatures – a performance-run duel took place. First Leclerc popped in a 1m32.415s on the C4s to go top, then George Russell slotted in 0.344s behind with a wild-looking lap as Mercedes' major porpoising problem appeared in the corners too. After some front-wing adjustments, he put in a better run with a more pointed balance, but still ended up 1.039s slower than Verstappen's best effort, which came an hour later on the same compound of tyre (the softest, C5). Other squads went for their own qualifying simulation runs, Fernando Alonso shuffling Alpine in front of Mercedes by 0.061s, but the picture at the head of the pack now *appears* to be set.

The following summary explains how we think that order lies and is arranged using a combination of the headline best times, insight from paddock sources, an assessment of how the cars looked to be handling from trackside at Sakhir, plus crunching the numbers from the various logged race simulations.

Red Bull seems to lead the way, although it appears to be pretty close with Ferrari. It must be placed ahead though, simply because it ended up with the best time of the test and because it does not seem to be having an ongoing issue with porpoising. Although the final day's upgrades didn't take the RB18 to what Red Bull team boss Christian Horner described as the "extreme" design of the Mercedes W13, they did go a long way to making the car look rapid and, crucially, consistently poised as Perez and later Verstappen pounded around.

Ferrari can end testing very pleased with its six days of work and quietly confident in the F1-75. It's clear that Maranello is in significantly better shape than it has been for the past two seasons.

There is, of course, a note of caution needed at this point.

Back in 2019, Ferrari was conclusively the testing victor, but was soundly beaten when the season got under way when Mercedes' development took it clear. We can't know just yet if something similar will happen, but what we can pass on from our understanding is that Ferrari has historically run a lighter fuel load during testing and race weekend practice sessions.

The Ferrari is also still bouncing at the end of the straights in a way the Red Bull does not. But the car is definitely reliable. Ferrari ended up with the third-highest lap total, behind Mercedes and AlphaTauri, building well on Barcelona, where it was the mileage leader. Plus, it handles consistently and smoothly, other than the porpoising, which is all Leclerc could criticise on the final day.

It's only right to say that there is every chance that Ferrari has been hiding more speed than its rivals, and Leclerc's best time was done on a compound one step harder than Verstappen's. There's a caveat here though: the C4-C5 delta was essentially non-existent due to the C5 "not working with a real performance", according to Pirelli motorsport boss Mario Isola. This comes down to the rough Bahrain track surface.

But Ferrari did show fantastic pace in one key area: race simulation running. Red Bull did not conduct anything comparable as it concentrated on shorter efforts with set fuel loads, as is typically the case in FP2 sessions on race weekends, and it did so mainly during the afternoon on the blustery opening day. But during the final hours of the second day, Leclerc and Russell ran very similar long-run programmes.

During a 13-lap opening C3 stint, Leclerc averaged 1m42.167s, while Russell's 14-lap stint was 0.894s slower. On the next 13-versus-14-lap comparison on the same compound after both had been through the pits, the gap was 0.79s in the Ferrari's favour. Leclerc's final stint on the C2s was cut short by a red flag thrown so the FIA could test its race restart systems (which also happened before the lunchbreak on the final day), but he had started off averaging 0.64s slower than the 1m40.943s Russell managed to end his 'race' run on the same compound. Nevertheless, and with the previous understanding of fuel load practices in mind, that is really encouraging for Ferrari.

“It's clear that Ferrari is in significantly better shape than the team has been for the past two seasons”



Alonso pipped Russell, but will that still be the case this weekend?

**Ferrari was consistent
on pace, but porpoising
remains a concern**



Mercedes can probably take heart from knowing that the fuel and engine-mode caveats will likely lower the overall performance gaps versus Red Bull and Ferrari on the long-run data. It was also clocked significantly down in the top-speed trap throughout the second test (although intriguingly Leclerc's best figure there on the final day was only a fraction slower than Russell's, at 0.4km/h down, albeit 5.5km/h adrift of Verstappen's). But the gaps are really there for Mercedes, and the team is in a tough spot.

It's all down to the porpoising. Autosport understands that the W13's novel sidepod approach and overall aerodynamic concept generates a very impressive amount of downforce. It's just that in this new formula, when it comes to the huge floors flexing at top speed and bouncing as a result, this exacerbates the porpoising. The team even tried sawing the innermost underfloor strake at the front of the venturi tunnels ahead of its late-test performance running, with the W13 also coated in flow-viz paint, in a bid to change the airflow loads to reduce the bouncing.

It seems that Mercedes is much better when it alters its ride to address the issue, but it loses significant performance as a result. And so, when Russell ran low to the ground in what might be regarded as the ideal approach for his qualifying simulation on the C5s, he had to cope with severe porpoising even through corners. It was quite a sight.

Mercedes believes that Red Bull and Ferrari are ahead and, while there is clearly a certain amount of gamesmanship going on with such suggestions, the thinking behind this concerns how it might fully solve the porpoising. What's tricky is that Mercedes seemingly can't get out of the issue with windtunnel work, as has previously been the case. It's why all the teams were suddenly shocked to be faced with the ground-effect headache during their shakedown and early Barcelona running – the simulations and scale modelling can only do so much.

The fix, it seems, must come mechanically. Mercedes is resolute that it will find a way, but it may be some time in coming. This is why Hamilton said "we have far bigger challenges this time, and they are not one-week turnarounds", and "from what I'm told we have a considerable amount of pace to find".

But the Mercedes is very reliable – it topped the lap count in Bahrain by 14 over AlphaTauri on 385. Also, Bahrain has seemed to represent something of a stumbling block for the team of late – particularly in 2021, when its gap to Red Bull was exacerbated by the track surface overheating the tyres, and the race's early place in the schedule meant the team's factory status might could not yet be fully brought to bear.

The jumbled picture in the pack

Alpine snuck in ahead of Mercedes in the overall times, but the general understanding is that there is still a class-like divide between the leading squads and the rest, and so we have grouped the currently pink-liveried squad together with what appear to be its 'midfield' rivals at this stage. Even that is something of a misnomer, since there seems to be no clear backmarker group based on what was witnessed across testing.

As the Bahrain event finished, Alpine still looked to be struggling badly with porpoising, but paddock sources suggest it was making changes to accentuate the issue, so it knows where to work back to on its set-up. Alonso's late lap time leap is understood not to have come on a low-fuel glory run, and Alpine is confident that it's in the mix with its rivals behind the leading trio.

Alfa Romeo bounced back from its tough test at Barcelona, where reliability dramas had mounted up. It ended up with the fifth quickest time thanks to Valtteri Bottas's efforts before a late stoppage on Saturday. This was set on the C3s, a short while after he'd set another competitive run on the same medium compound. But the gain was so pronounced that it had the whiff of a low-fuel effort. That said, Alfa is thought to be the closest to the 2022 weight limit, and therefore will be correspondingly stronger. Alfa's big problem is still running without breakages, with the car stopping on track repeatedly in Bahrain – Bottas's opening session on the second day came to an end at the same point as his final night running did (the Turn 8 hairpin) with transmission trouble.

AlphaTauri's test was inevitably much smoother than its running in Spain because this time Red Bull's sister squad did not lose a huge amount of running to a crash. Yuki Tsunoda got AlphaTauri to the seventh-fastest lap of the test using the C5s during the final night qualifying sims, but reckoned "there was lots more potential there but unfortunately, I just couldn't put it together" – a late slide wide out of the final corners was symptomatic of his frustrations. The understanding is that AlphaTauri ended up satisfied with its overall progress in Bahrain, but just lacked final set-up tweaks to get fully dialled in and therefore climb higher up the order.

Haas is next in the overall 'official' times. It actually set the second quickest time of the Bahrain test overall, but Schumacher's 1m32.241s on the C4s came during the extra hours the team had been allocated to run after the rest had finished on Saturday night. Therefore, we're setting the team where it finished when the others stopped, which was seventh (putting AlphaTauri sixth).

Haas insiders are convinced that the VF-22 is a competitive package but, as was the case in Barcelona, reliability blighted its >>



**Reliability still looks
to be a bugbear for
Bottas and Alfa Romeo**

running this time around. The worst run came early on the second day, when an oil leak, cooling problem and a separate exhaust issue confined Mick Schumacher to just 23 laps. Then there was a fuel-system issue late in the first session on the final day. But Schumacher's best time during flying lap efforts in the late final night running came on the C3s, which at just 0.736s off Leclerc's time is encouraging. With Kevin Magnussen now back in place of the ousted Nikita Mazepin, Haas has gained a major asset in driving capabilities and is therefore in a much stronger place. Magnussen is understood to have told Haas that its overall package and potential is very much better than when he departed the squad in 2020.

McLaren finished with the eighth-fastest time overall, but the story of its test was very much elsewhere. Daniel Ricciardo missed it all due to catching COVID, leaving Lando Norris to complete all the running in MCL36. But the front-brake-duct cooling problem that cost McLaren major running on the first day was what really held it back in this test. One major positive for McLaren is that it appears not to have a porpoising issue – it runs slickly and even better than Red Bull in this regard on the straights – and can run lower to the ground as a result (see page 32).

Aston Martin is next up in ninth in the overall times thanks to Sebastian Vettel's best effort on the C4s during the final afternoon. Aston did not show its hand during the late qualifying simulations as others appeared to do, but the green team did have a very solid test overall. Other than a reliability scare on day two, which was understood to be a precautionary stoppage when Vettel felt a vibration the team could find no glaring cause for, Aston ran

consistently. It ended up just 46 laps short of Mercedes, compared to 143 adrift of the top tally at Barcelona. The team is confident that it is competitive in the midfield.

Williams finished with the slowest time, more than 3s behind Red Bull, but was another not to engage in the late performance shootout. The big story of its Bahrain running was the huge brake fire that meant it lost over half of the second day. Team boss Jost Capito would not be drawn on the exact reason for the dramatic incident, other than calling it "stupid", which suggests a minor procedural problem occurred, presumably even before Nicholas Latifi left the pits on the run that ended in flames. But Williams's conviction on its potential from Barcelona still shines through, and it surely does not seem set to repeat its 2019-20 horror at the back.

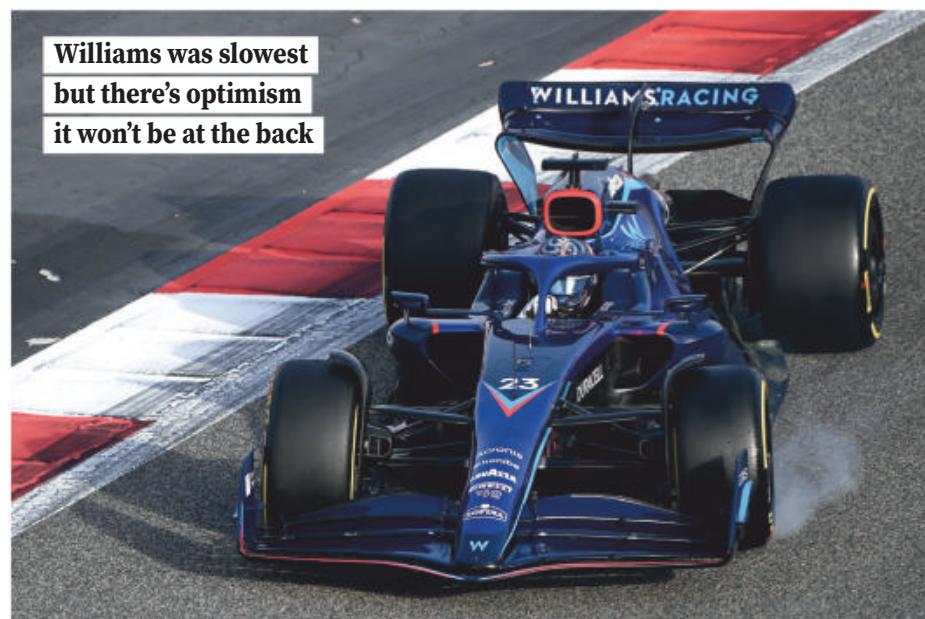
Testing's final conclusions in 2022

One reason why so many teams are predicting that they are in good shape is that the field behind the leading trio appears to be pretty compressed as testing ends.

At the front, Red Bull insists that Mercedes is holding something back in a big way, with Verstappen witheringly saying, "it's always like this". Mercedes' Bahrain speed-trap figures do suggest there is more to come when the full engine modes are deployed for the first time in qualifying on Saturday. But the porpoising is just so severe and, with it expected to take time for Mercedes to really address this, lap time seems to be there for Red Bull and Ferrari to take advantage. Mercedes is confident it will eventually get things sorted – the question is when.

McLaren may have had a pretty disastrous second test after being so strongly alongside Ferrari in Spain, but its Barcelona potential surely suggests its true form would place it closer to Mercedes (and therefore much closer to the front) than the Bahrain one-lap times suggest. Other deductions put Haas's form at anywhere from McLaren's level to being at the rear, but its various issues have held it back. It's a similar story for Alfa and AlphaTauri, except the latter isn't likely to swing right to the back of the order, with one Autosport paddock source instead suggesting it could instead bother Mercedes in the Bahrain Grand Prix – which would be doubly delightful for Red Bull...

Reality will play out very soon when the season starts this weekend, but it seems as if Red Bull leads the way as testing ends – just as it did 12 months ago. The leading teams from 2021 were always expected to retain certain advantages over the previous midfielders, but this time around Red Bull appears to have different company at the front of the new 'favourites'. ❧



**Williams was slowest
but there's optimism
it won't be at the back**

Testing data, Bahrain, 10-12 March

Bahrain test times

POS	DRIVER	CAR	DAY ONE	DAY TWO	DAY THREE	TYRES FOR FASTEST LAP
1	Max Verstappen	Red Bull-Honda RB18	-	1m34.011s	1m31.720s	C5
2	Mick Schumacher	Haas-Ferrari VF-22	-	1m37.846s	1m32.241s	C4
3	Charles Leclerc	Ferrari F1-75	1m34.531s	1m34.366s	1m32.415s	C4
4	Fernando Alonso	Alpine-Renault A522	1m36.745s	-	1m32.698s	C4
5	George Russell	Mercedes W13	1m35.941s	1m38.585s	1m32.759s	C5
6	Valtteri Bottas	Alfa Romeo-Ferrari C42	1m35.495s	1m36.987s	1m32.985s	C3
7	Yuki Tsunoda	AlphaTauri-Honda AT03	-	1m36.802s	1m33.002s	C5
8	Sergio Perez	Red Bull-Honda RB18	1m35.977s	-	1m33.105s	C4
9	Lando Norris	McLaren-Mercedes MCL36	1m35.356s	1m34.609s	1m33.191s	C3
10	Kevin Magnussen	Haas-Ferrari VF-22	-	1m33.207s	1m38.616s	C4
11	Carlos Sainz Jr	Ferrari F1-75	1m34.359s	1m33.532s	1m34.905s	C4
12	Sebastian Vettel	Aston Martin-Mercedes AMR22	1m35.706s	1m36.020s	1m33.821s	C4
13	Pierre Gasly	AlphaTauri-Honda AT03	1m33.902s	-	1m34.865s	C5
14	Guanyu Zhou	Alfa Romeo-Ferrari C42	1m37.164s	1m39.984s	1m33.959s	C4
15	Lance Stroll	Aston Martin-Mercedes AMR22	1m34.736s	1m34.064s	1m36.029s	C4
16	Lewis Hamilton	Mercedes W13	1m36.365s	1m34.141s	1m36.217s	C5
17	Esteban Ocon	Alpine-Renault A522	1m36.768s	1m34.276s	-	C4
18	Alexander Albon	Williams-Mercedes FW44	1m35.070s	-	1m35.171s	C4
19	Nicholas Latifi	Williams-Mercedes FW44	-	1m39.845s	1m35.634s	C3
20	Pietro Fittipaldi	Haas-Ferrari VF-22	1m37.422s	-	-	Proto

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

Laps completed

POS	TEAM	LAPS COMPLETED	POS	DRIVER	LAPS COMPLETED
1	Mercedes	385	1	Norris	200
2	AlphaTauri	371	2	Russell	198
3	Ferrari	349	3	Gasly	194
4	Alfa Romeo	343	4	Hamilton	187
5	Aston Martin	339	5	Zhou	184
6	Red Bull	320	6	Perez	181
7	Alpine	299	7	Sainz	180
8	Williams	258	8	Tsunoda	177
9	Haas	253	9	Stroll	173
10	McLaren	200	10	Leclerc	169
			11	Vettel	166
			12	Bottas	159
			13	Ocon	153
			14	Alonso	146
			15	Verstappen	139
			16	Latifi	136
			17	Albon	122
			18	Schumacher	108
			19	Magnussen	98
			20	Fittipaldi	47

POS	ENGINE	LAPS COMPLETED
1	Mercedes	1182
2	Ferrari	945
3	Red Bull	691
4	Renault	299

TOTAL LAPS
COMPLETED
BY ALL CARS

3117

RED FLAGS

14

g p13 Track stats and tyre guide





GIORGIO
PIOLA 

The surprising tech challenges of the new rules

Pleasing variety is a happy by-product of F1's new chassis regulations

JAKE BOXALL-LEGGE

PHOTOGRAPHY



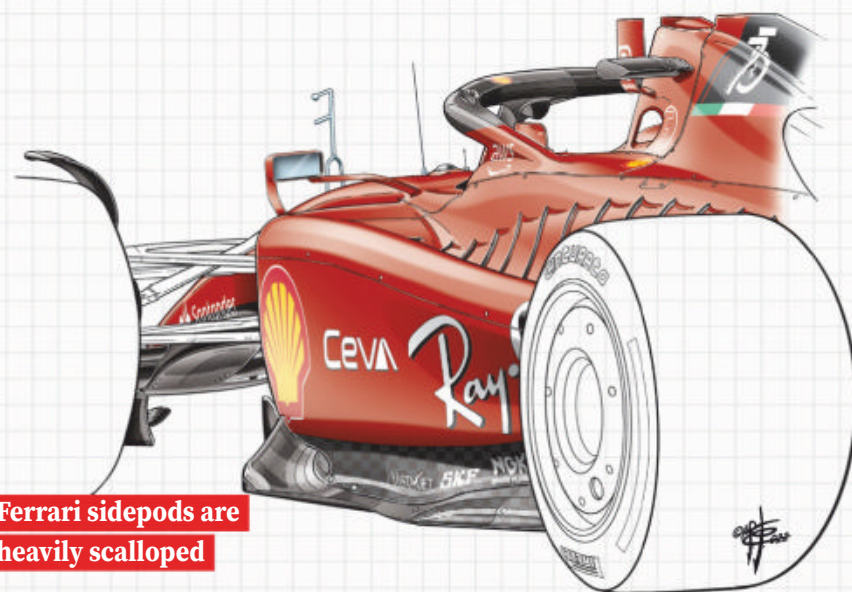
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s it turned out, the 2022 Formula 1 regulations weren't that restrictive. Constraints can often encourage creativity, and the brightest minds in the design offices have had to exploit every single letter placed in the reams of regulations to which teams have to design their cars. Fundamentally, the rules pose standard design problems – to which the engineers must develop the best solution.

In response to that problem, 10 different solutions have been dreamed up, developed and built for 2022. There are slots and ripples and cuts, and sidepods and fins and struts – but without wishing to descend into a Dr Seuss-esque poem about the various appendages on the 2022 F1 cars, there's a plethora of different options that each team has explored ready for this weekend's Bahrain season-opener.

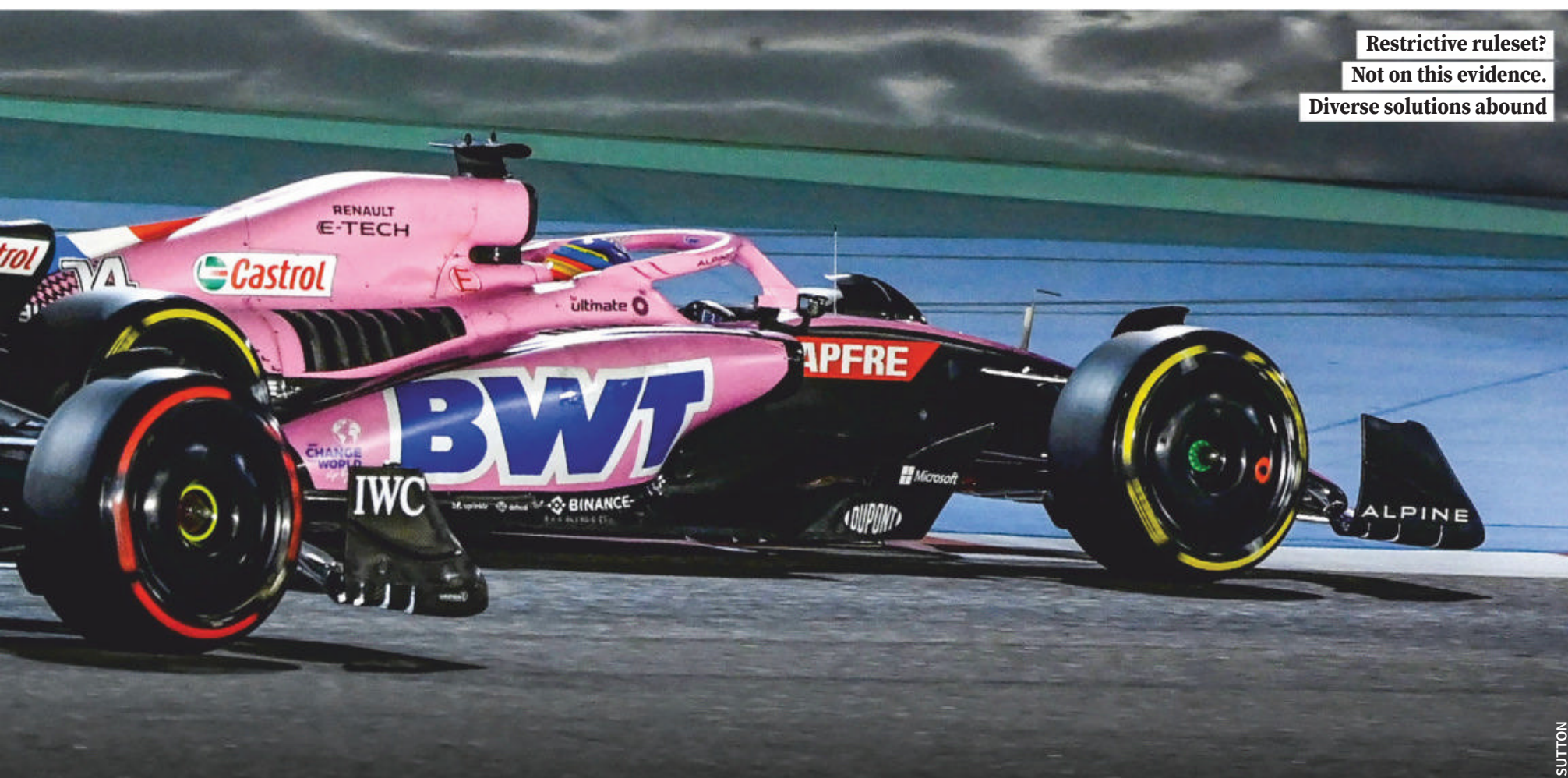
The result has been a series of very different cars that the drivers have had to get used to. The cars are stiffer altogether, not helped by the change in tyre diameter, and the aerodynamic properties have made the cars monstrous in the higher-speed corners but more clunky in the numerous tight corners on



Ferrari sidepods are heavily scalloped

display at the Bahrain International Circuit.

The second test also afforded a few teams an opportunity to introduce new updates in the pipeline for the start of the season – or simply to get more mileage on the clock for those who struggled in the first test in Spain. Naturally, there were plenty of technical talking points across Bahrain, and the general run into the season. Without further ado, let's recap.



Restrictive ruleset?
Not on this evidence.
Diverse solutions abound

SUTTON

Mercedes goes podless

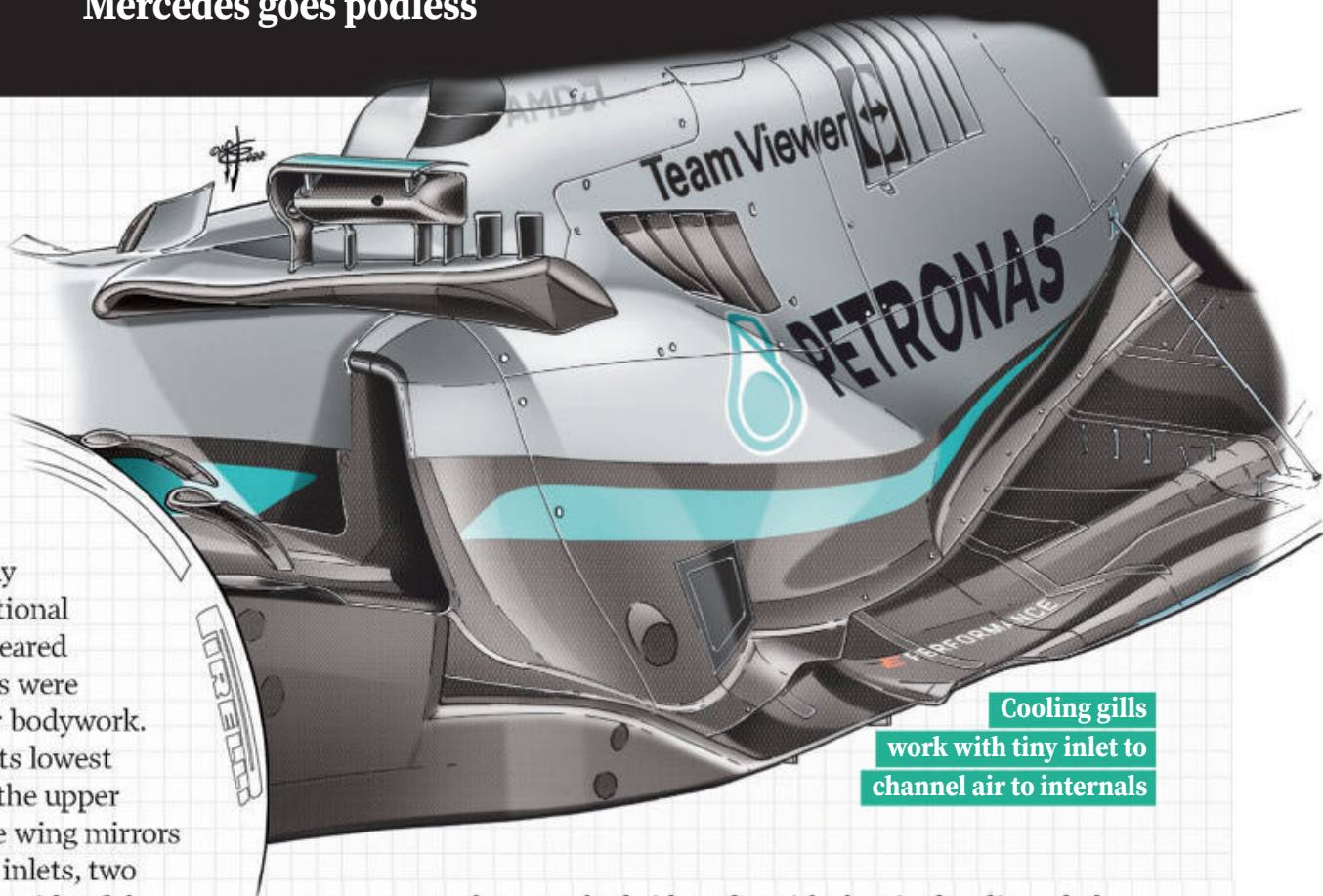
This is no longer pod-racing for Mercedes. In a dramatic change from Barcelona to Bahrain, Mercedes' W13 emerged at the Sakhir circuit for the first day of testing with distinctly minimal sidepod bodywork. Think of Lamborghini's 291 F1 car from 1991, but more radical; the two inlets look like letterboxes, such is their tiny size, albeit enlarged on top to create the slightly triangular shape when viewed from the front.

The revised sidepods were something already in the pipeline for Mercedes; the more conventional design seen at the launch and at Barcelona appeared to be largely a smokescreen, as the car internals were pre-packaged to take the considerably slimmer bodywork.

To fit the regulations, Mercedes has placed its lowest impact spar to a lower position in the car, and the upper structure has been placed higher up to host the wing mirrors and a series of vortex generators. Ahead of the inlets, two little downwashing fins have been placed on the side of the chassis to encourage the airflow downwards towards the inlet.

Without the bargeboards playing a factor in the 2022 rules, and the cars stripped of all the aero devices that used to cling onto the sidepod, working with the front tyre wake has had to change. One option that some teams have adopted is creating flatter sides to the car and using the sidepod itself to channel the wake away, but Mercedes has opted for the opposite direction. Now, the sidepods are largely kept away from the wake and work with the outer strake attached to the floor.

Airflow is then able to wash down the car and follow the bodywork along the floor, helping to build up downforce from the floor through the difference in pressure. The floor has changed in



Cooling gills
work with tiny inlet to
channel air to internals

response to the reworked sidepods, with the ripples discarded and small triangular protrusions replacing them. This will build vortices along the floor's edge to help provide more of a seal.

The real question is one of cooling: can the sidepods produce enough cool air for all the internals? One of the areas that Mercedes has paid a lot of attention to is in its heat exchanger technology and, by installing the cooling gills on top of the bodywork, the components inside the car should be able to breathe adequately enough and not overheat.

While Mercedes' large-scale upgrade has turned many heads, the W13 is proving a tricky beast to tame. That's partly down to the porpoising phenomenon that has resurfaced following the switch to ground-effect aerodynamics...

A sense of porpoise

Porpoising courted the column inches during the first week of pre-season testing at Barcelona. As the cars dropped down to the first corner, they began to shake up and down visibly, pacified only by the application of DRS or by the driver lifting off.

The appearance of porpoising appeared to catch many by surprise – even the teams, who had not encountered the sudden onset of an oscillating heave motion during their simulations. And although a few teams such as McLaren and Ferrari weren't quite so afflicted by it in Bahrain, there was still a noticeable vertical shake along the straights from the majority of cars, especially the Mercedes.

Former F1 aerodynamicist Jean-Claude Migeot, who worked with Renault in the original ground-effects era in the 1980s, believes porpoising occurs when the ground-effect aerodynamics accelerate the airflow enough to induce the car's natural heave frequency. This leaves the car susceptible to resonance, where the car is in a position where it is effectively undamped, particularly with the long chord length of the floor.

"When the car is shaking up and down quickly it can generate other forces," says Migeot. "It's the same for an aeroplane when it's climbing. When the pilot is pulling the stick there is an oscillation of incidence and there is a first link to the speed of pitch. But this coefficient is stabilising so in fact, the movement of the aeroplane is completely stable.

"For an F1 car it's destabilising because it increases the downforce when the car goes down and it's diminishing it when the car is moving up. That's the first step. The second step is these forces are big only in certain circumstances. Up to last year, they



were ridiculous; they were so low, that it was not even worth measuring them because they had no influence. But when you have a system which is almost a closed channel, which used to be the case with skirts and which looks like the case now when the perimeter of the floor is very close to the ground, the amplitude [of the forces] start to be annoying, really annoying. And this happens because there is an interaction.

"This starts because we're talking about a long chord [floor] – a length of several metres, which is in the same frequency range as the natural frequency of the car. The car has two natural frequencies (actually, there are four, but let's put the wheels bouncing outside of the picture because that's where they're controlled by the dampers): the heave frequency, which is the



Increasing the rideheight helps – at a heavy cost



movement you see [in porpoising], and the pitch frequency.

“If the floor is on a very short chord like a wing, because the phenomenon could be the same under the front wing, for instance, when it’s very low [to the ground], you don’t get the same effect. But the chord being so short, its ‘exciting’ frequency is much higher than the car frequency. It’s completely filtered.”

Migeot says that the now-banned inerters – or ‘third damper’ – would have helped teams address porpoising in the car but, with limited suspension parameters, gains will have to be found in the windtunnel. For now, teams are having to raise rideheights to mitigate the effect of porpoising in the car, but at the hefty cost of underbody performance from the venturi tunnels underneath.

Red Bull introduces final-day developments

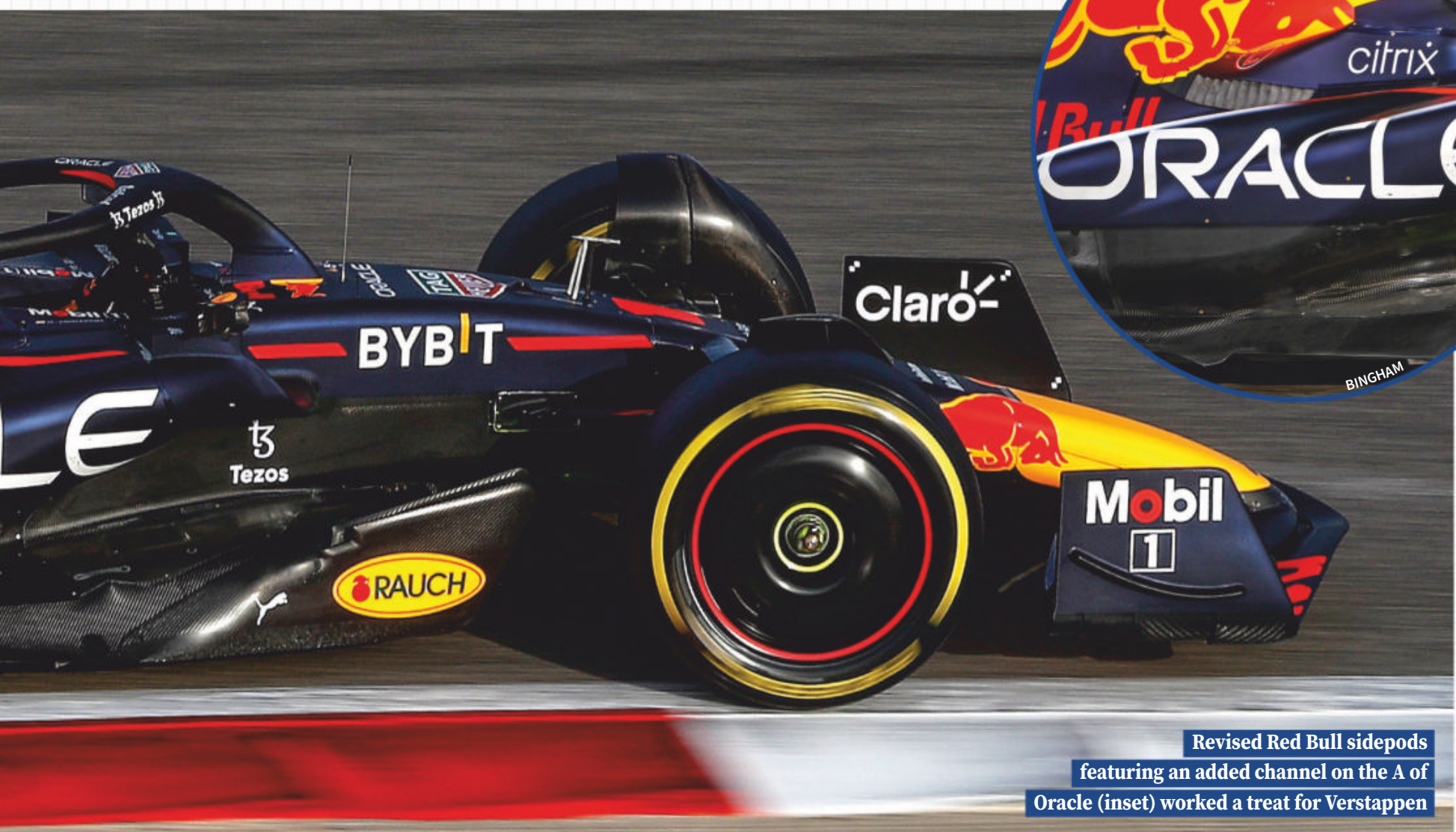
At Barcelona, Red Bull’s sidepod concept was finally unveiled after a ‘secretive’ launch of its RB18, featuring a distinct undercut burrowing underneath the front inlet to yield more open floor space on top of the entry port.

Red Bull was once again reticent to show off its developments for the second round of testing, but revealed a new sidepod package on the final day of Bahrain’s pre-season event, introducing a more pronounced undercut and also adding a small channel over the top of the sidepod area to help channel airflow downwards at an earlier point. The team has also stuck with the line of gills that it trialled in Barcelona testing, increasing the level of internal cooling on offer.

Across the test, Red Bull also experimented with a range of front wings with different upper flap profiles, looking to get a glimpse of how their designs affect the airflow further down the car and home in on which design will work best for the opening race. On the final day, the team also seemed to find something a little extra over the other teams with the ride of the RB18, finding enough compliance to give Max Verstappen a final surge up the times at the close of the test. *Plus ça change.*

But as ever, testing is one big charade. Red Bull looked keen to send Verstappen out on some hot laps at the end of the final day, but is the Milton Keynes squad simply doing a better job than the others, or did its rival teams elect not to join in with the hot laps right at the end?

Thankfully, nobody needs to wait very long to view the true picture.



Revised Red Bull sidepods featuring an added channel on the A of Oracle (inset) worked a treat for Verstappen



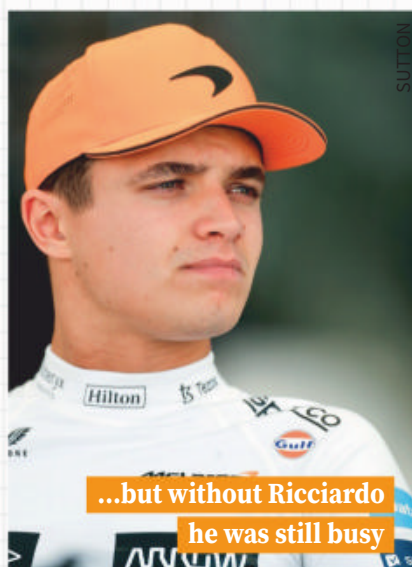
McLaren struggles with front brakes

After a strong run at the Circuit de Barcelona-Catalunya, McLaren endured a much more difficult second batch of running in Bahrain. Overheating issues with the brakes severely limited the long running that Lando Norris – on sole test duties owing to Daniel Ricciardo’s positive COVID-19 test – could do as McLaren sought to find a fix.

With the change to the front wheels, McLaren has found it difficult to get the right level of airflow into the wheel assembly and provide adequate cooling within. And across a full race distance, it will decrease the effectiveness of braking at the front and severely hamper their lifespan. McLaren has to fix that for the opening round of the season.

“The test definitely didn’t go to plan,” Andreas Seidl told F1 TV. “We had an unexpected problem on the front axle with the brakes, which limited our running quite a bit, especially when it came to long runs. So it puts us definitely a bit on the back foot.

“I think there was still a lot of positive runs we could do as well, we still could work on the car to extract more performance from it. We still could bring further upgrades to the car as well. So that was positive. But we have this issue, and we simply are up against the time in order to bring upgrades to the car to solve the issue, which we could do [on Saturday] to a certain degree, but not to the full extent. And now simply hope that with the upgrades we get for [the Bahrain GP] that the problem is finally solved, and we can try to come back.”



F1 puts on more weight

Over the Bahrain test, the FIA agreed to a 3kg minimum weight increase following concerns from multiple teams that their 2022 cars were considerably overweight. That’s largely down to the introduction of the 18-inch tyres, along with changes to the safety systems and structures on board

the car, but the FIA has also conceded that some of the standardised parts have tipped the scales higher than expected.

With the increased number of standard parts, which are aimed to help the teams cut costs to meet the budget cap, it has been a struggle to bring cars down to the 795kg minimum limit. That, allied to the need for some teams to strengthen their floors to limit flex, has resulted in a slight weight increase to help sweeten the pill.

“The issue with the weight is that certain standard components turned out to be a bit heavier than anticipated, and that was not in the team control,” said FIA head of single-seater matters Nikolas Tombazis. “So we wanted to compensate for that, or not penalise teams as a result. Obviously a lot of teams have been struggling with weight this year, more than normal. As part of the whole package, let’s say, there was an agreement on a 3kg proposed increase. That is awaiting F1 Commission approval, so it’s not a guarantee at the moment.

“Tyres were only a small amount heavier, I think 100g [more in total] compared to the prediction, quite a small number. The wheel rims were about equal weight to the predictions, maybe a smidgen less. And then wheel covers turned out to be a bit more heavy than expected. That was the bulk. There’s been quite a lot of effort to make them cheap, because they’re quite expendable. And we didn’t want to have to make [them expensive]; we could have made them lighter, out of carbon or something.”



Old vs new: bigger Pirellis have greater heft too



Further developments across the grid

Don't fence me in:
Hamilton struggled
with front-left lock-up

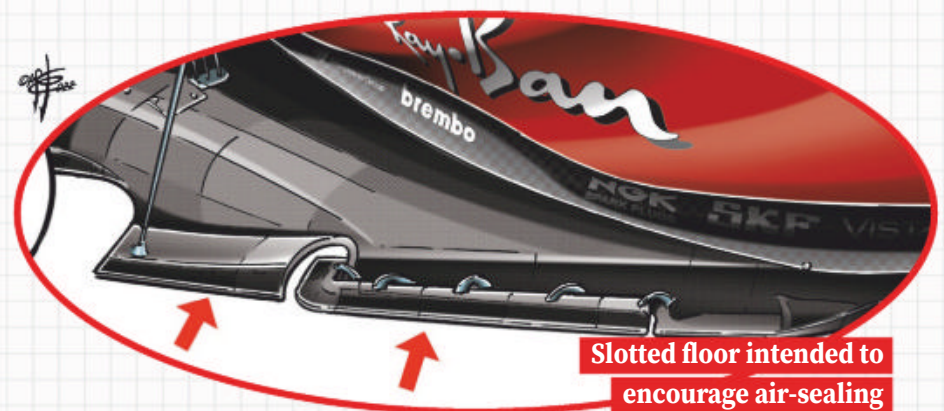


Ferrari's reliability and pace has marked it as one of the favourites for the early part of 2022 among some of the teams, even though the Italian squad avoided making wholesale changes to its F1-75 for the second week of testing in search of optimising what it already has. That said, it made a few tweaks to its floor, introducing a slotted addition to promote further sealing along the floor. Behind that, a smaller flap features, with a slight tunnel to it to build and tighten any floor-sealing vortices.

McLaren introduced an overwhelmingly similar configuration to its floor, albeit with the slotted element ending in a point that will also help with vortex placement ahead of the curved flap.

"It has been a positive six days," said Ferrari principal Mattia Binotto, "because we're running consistently, learning a lot from the car, getting a lot of data, cross-correlating back at Maranello, windtunnel and simulator. That was the first objective and I think that we achieved it. Then in terms of performance it's very difficult to judge."

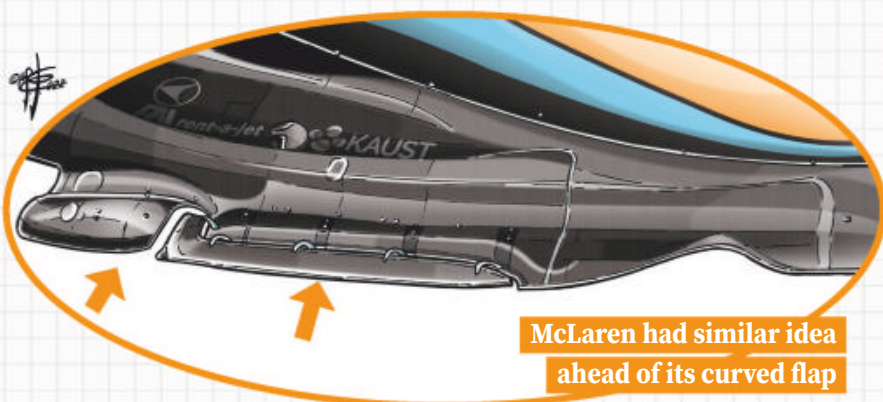
Pirelli's new tyres are also throwing the F1 teams a few curveballs with regards to set-up, as the cars looked difficult to navigate around the difficult Turns 9/10 hairpin. The stiffer



profile has been unable to find enough purchase to prevent the unloaded left-front tyre from locking. The slip angles generated by the tyres have also proved unforgiving, resulting in a lot of understeer characteristics in the cars.

Overall, the tyres do seem more durable as a result, but don't yield the same level of grip, which Lewis Hamilton drew attention to. "Everyone is sliding around," Hamilton said. "We all seem to have got less grip than before, the tyres are worse this year. On the long run, it's physically a lot easier, what I found just there."

He did, however, offer some encouragement about one of the main targets of the new rules: to encourage closer racing. "But the positive, so far following behind another car looks a lot better, which is I think hopefully the right direction. I hope we can maybe get some better tyres at some stage, or maybe they will work better in places it's not so hot."



Keep up with our technical experts' insight on the latest developments at [autosport.com](https://www.autosport.com)



Trackside verdict

New heavyweights are easy on the eye

That's our verdict on F1's new breed when it comes to looks. But which teams have nailed the new rules? Autosport went trackside to find out

MATT KEW

PHOTOGRAPHY  **motorsport**
IMAGES

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ubjectively, this new breed of ground-effect Formula 1 racer is a smash hit. For one, design diversity is well and truly back. Paint all the cars white, line them up side-by-side, and Ferrari's concave sidepods are instantly distinct from the minimalist Mercedes and again from the Red Bull, which has seemingly

had its savage inlets milled by a meat cleaver.

What's more, this is a good-looking grid. The new front wings, which in photos can look ungainly for how high they sit in a bid to channel air to the floor, are far less objectionable out on track. The wheel covers don't draw attention any more than a conventional alloy – it's all an indecipherable rotating blur at these speeds.

Objectively, however, the class of 2022 has its foibles. At 795kg, these are the heaviest grand prix cars for nine decades. The jump to

18-inch wheels and more substantial safety structures has meant an increase of 43kg from the previous minimum weight limit alone. There's no masking that bulk. The cars are cumbersome at slow speed and wallow when they bounce off kerbs. Already, Monaco isn't being relished quite the same way as usual by drivers.

If the weight gain had an upside, it was anticipated that braking distances would increase, and that in turn would boost chances for overtaking. But that's far from what Autosport clocks on the run to the first corner at the Bahrain International Circuit.

Max Verstappen grabbed pole position here last season, and on his flying lap was stamping on the anchors into Turn 1 with around 115 metres to go. Now, aboard a hefty new Red Bull RB18 that may well have been carrying more than qualifying levels of fuel when he set the fastest time of testing, the reigning champion wasn't hopping on the brakes until 100 metres. A comparison of the onboards from each lap proves that to be the case.

Mercedes missing the sweet spot



New Mercedes looks to be another 'diva' at this early stage

Someone seemingly mislaid the TV remote on the opening morning of the second pre-season test in Bahrain.

The massive trackside screen that stands in the shadow of the Sakhir Tower at Turn 3 was tuned into the wrong channel. Instead of showing the live feed, as it would do over the remaining two days, it was oddly playing stock footage of an aquarium.

Add that to the porpoising phenomenon that has returned to Formula 1 in tandem with ground-effect, due to the limitations of windtunnels and simulator software catching teams off guard, and there's a marine theme in the early part of 2022.

The new size-zero Mercedes sidepods that broke cover at the Gulf venue only added to that. Where the narrow inlet seems to melt completely into the floor, which in turn ripples around the edges, the rear three-quarter angle of the W13 looks not unlike a cuttlefish.

It's indicative of the radical approach taken by the design team in Brackley, but it's a car concept that is struggling to be unlocked. It still appears as though the Silver Arrow is vying with Alpine and Ferrari to be worst affected by porpoising.

Although there's a deceptive bump 250 metres out from Turn 1 that upsets all cars, it's clear that the Mercedes is still jumping

up and down either side of that interference. The leading school of thought is that the W13 is producing almost too much downforce, pushing the floor closer to the ground to initiate the stalling. As the air repeatedly attaches and detaches itself, Lewis Hamilton and George Russell nauseatingly bob up and down ad nauseam.

This appears to be creating trouble away from the straights, too. One solution for the porpoising is to almost weld the car in place by stiffening the suspension as far as possible. But this comes to a head at Turn 10, the downhill cambered left-hander. With no give in the set-up, as the inside wheel goes light under braking, Hamilton is constantly locking

up and understeering. Time and time again he misses the apex and is often abandoning the asphalt altogether to take to the runoff. What's more, the complex floors and ultra-taut configuration mean the drivers appear reluctant to run over the kerbs at the risk of damaging the underfloor aero.

While Mercedes has previous for playing down its credentials in pre-season testing, and the W13 wouldn't be the first machine Toto Wolff might label a "diva", it's not necessarily all smoke and mirrors this time. This Three-Pointed Star looks to enjoy only a narrow operating window and, initially at least, Mercedes would seem to be struggling to find it, never mind open it.



Pirelli tyre lock-ups were a tell-tale of problems for both British drivers

Red Bull wins testing ‘world championship’



Red Bull has come away as the effective winner of testing. Chiefly that's the work of Max Verstappen. The reigning champion guided his RB18, shod with the fastest C5 tyres, to an unrivalled 1m31.720s effort with a little under 10 minutes to go on the final day in Bahrain.

Behind what's thought to be a low-fuel run for second-fastest Mick Schumacher in the Haas, a seven-tenth advantage over Charles Leclerc could be, in part, explained by the Ferrari running the harder C4 Pirellis. You could also suppose that the Red Bull was light on fuel and had its Honda engine turned up to the max to grab the late headlines with a glory run. But the view from behind the barriers backs up the potency of the Milton Keynes creation.

It is not hyperbole with the gift of hindsight to say that the Red Bull had a habit of tricking the eye. On several occasions, it looked as though Verstappen was set to spin – not

actually including when he did lose the car exiting the final corner in the build-up to his late flying laps.

Even though this breed of machinery has jumped in weight, the RB18 appeared to be so responsive to the driver's inputs. It was lithe and showed almost no propensity for washing wide. But it was the rear axle creating the deception. The back end of the car turns so violently that it looks as though it's ready to swap ends and overtake the front. It never does, of course, but epitomises a car that possesses an unrivalled 'wow factor' at this stage of development.

Red Bull seems to have knocked its porpoising problems on the head too. Despite the shift to ground-effect dictating that a car runs as close and flat to the ground as possible, the team appears to have reverted to a previous-gen habit by introducing a touch of rake. That stops the stalling that is blighting its rivals, but doesn't seem to have come at a cost to downforce.



Ferrari set to be in the mix



It's because the Red Bull looks so utterly convincing, somewhat irrespective of how it would fare on the timing screens, that the shine has been ever so slightly taken off an otherwise stellar showing from Ferrari. In isolation the red machine looks unwaveringly well behaved in the hands of Charles Leclerc and Carlos Sainz Jr. But it lacks the panache of the Red Bull.

Throughout our repeat ventures around the circuit – albeit with the majority spent on both the inside and outside of Turn 10 as it proved the greatest differentiator – over the three days in Bahrain, there's no instance of the F1-75 ever really getting it wrong.

Apexes at Turns 1 and the higher-speed T8 are missed sporadically by a foot or so. But it's nothing like the Mercedes and AlphaTauri habit of repeated locking or the Aston Martin's tendency to understeer. Even so, this being

so fleet of foot could be reflective of Ferrari sticking to Maranello convention and running comparatively light fuel loads in testing.

For the second runout of this new breed of cars in Bahrain, the Ferrari sprouted a new carbon rod. It extends from the base of the engine cover to connect to the floor. Mercedes and Alfa Romeo ran something similar from day one in Sakhir, while AlphaTauri adopted a strut of its own 24 hours later. The hope is to tack on some extra stiffness to the floor, meaning it's less likely to deflect, stall and bring about porpoising.

Ultimately, this hasn't worked for Ferrari. It's in the unwelcome company of Mercedes and Alpine for badly bumping its way down the straights – an issue it hadn't resolved from Barcelona. It shows the F1-75 and its bathtub-like sidepods aren't infallible, despite the camp billing this as the smoothest pre-season test for the team in years.

The battle behind



Front-brake cooling cost McLaren some ground



Formula 1 looks set for an ultra-congested midfield in which the competitive order seems poised to evolve on an almost session-by-session basis. But even within that cut and thrust, there are a couple of defining features.

McLaren seems a step ahead with its compliant MCL36. This team looks ready to pick up the pieces should any of the big three have a down day. But following Daniel Ricciardo's positive COVID-19 test and heavily limited mileage in Bahrain after the team sported the wrong brake components for the hotter temperatures, it's no longer breathing down their necks in quite the same way.

The Aston Martin AMR22 serves as a

caricature for the increase in the minimum weight limit. It looks lethargic at low speed, almost as though it was always filled to the brim. Sebastian Vettel notably had to agitate the front axle to get it to answer to him. His hands would dart above the dashboard as he aggressively turned in but, even then, it was hit or miss whether he would clip the apex.

Alfa Romeo's carbon rods appear to have conquered the porpoising that is believed to have worn a hole through the floor when the C42 was first run for its filming day. It now looks unflappable in a straight line, while running the shortest wheelbase gives it an energy through changes of direction.

And then there's the real head-scratcher: Alpine. Fernando Alonso is not known to

Vettel had to work hard in 'lethargic' Aston Martin



mince his words (see "GP2 engine"), and in public he's content with the car. That's backed up by his run to fourth in the times on the final day. Some suggest the A522 is decent but unlikely to set the world alight.

It's far from a doomsday scenario, but the Alpine is also the least-convincing car from the side of the road. Porpoising remains a major headache for the drivers being hurled around in the cockpit, and for the engineers who have so far not resolved the listing motion. It's better when the going gets more twisty but not inspiring. Locking up, aborted corners, mixed apexes – the full set list. Whether painted blue or pink, the Alpine appears unconvincing at a time when Haas, Williams and AlphaTauri might be there to pounce.



Lewis Hamilton

Hamilton's battles from within and without

He's got a hungry young team-mate, a take-no-prisoners arch-rival, and he reckons his car is the fourth best on the grid. Good job he says he'll bounce back like never before

MATT KEW

PHOTOGRAPHY MERCEDES-BENZ GROUP AG AND



Lewis Hamilton is set to match another of Michael Schumacher's records this weekend. When the lights go out to signal the start in Bahrain, he will begin his 179th grand prix with Mercedes. That will equal the longevity of the partnership that Schumacher forged at Ferrari. But moving ahead of the German by claiming a peerless eighth world title will be far less of a formality.

For starters, the W13's potential proved hard to unlock during pre-season testing at Barcelona and Sakhir. While team and driver are no strangers to playing down expectations this early, and the Silver Arrow was never bothering the top of the speed traps (suggesting modest engine modes), there's greater reason than ever to subscribe to the muted expectations. Mercedes, more than most, is struggling with porpoising down the straights and understeer through the corners.

“At the moment, I don't think we'll be competing for wins. But there is potential within our car to get us there...”

Hamilton has almost ruled out his landmark appearance in the Bahrain GP being prosperous as a result. His last words on the competitive order shown in testing were: “At the moment, I don't think we'll be competing for wins. But there is potential within our car to get us there... People keep talking about us talking ourselves down, but it's a bit different this year.”

Although Lando Norris batted the suggestion away immediately, Hamilton went as far as placing Mercedes fourth in the current pecking order behind Red Bull, Ferrari, and McLaren. Should that transpire for a squad that has won eight constructors' titles in succession, it would be the worst return in the points table since the Three-Pointed Star ranked fifth in 2012.

Hamilton must also contend with a new team-mate in 2022, the third time he will have done so during his decade at the squad. The true arrival, proper integration and ultimate graduation of Mercedes junior George Russell presents a new challenge for the elder statesman. Four years alongside Nico Rosberg grew bitter >>



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Hamilton is playing down his prospects in Mercedes' new W13



W13's potential proved hard to unlock during pre-season testing

and draining for both sides of the garage as the childhood karting companions fought for supremacy at the dawn of the 1.6-litre turbo-hybrid era. Valtteri Bottas proved to be a more soothing replacement that, in all but contract, allowed Hamilton to become the absolute number one driver at Brackley.

With Russell, Hamilton must contend with the notion that Mercedes has ultimately signed his replacement — the heir to the Silver Arrows grand prix empire. And in reverse to the way in which Hamilton was never able to fight back against Rosberg after the 2016 champion promptly announced his retirement that winter, Russell will privately want to prove he has the measure of the most-decorated driver of recent times by beating Hamilton within the two years remaining on his contract.

“Honestly, I have no idea what the first time we started working together was,” says Hamilton, 37, of a new stablemate who is 13 years his junior. “I just remember him being in the engineering room with us and feeling very much a part of the team.”

“He’s gelled very easily into the team. He was in the engineering room for plenty of races in the past where he was just sat behind me and watched everything I did, and the same with Valtteri. He knew everyone, so it’s been seamless. We’re

“I’m just putting absolutely every ounce of my energy and time into making sure I’m the best you’ve ever seen”

working together and communicating a lot in terms of set-up direction. It’s working really well.

“I think George is naturally incredibly talented, very focused. So far, he seems very genuine, and is just focused on being the best team player he can be. Of course, he’s had an amazing run, getting to F1. He fits in, and fits the position, like a glove. I think I’ve learned a lot over the years of how to engage with your team-mate, how you work as a team, in helping the team achieve the ultimate goal.”

Hamilton is undoubtedly complimentary about the potential pretender to his throne, but still subtly put Russell in his place as the newcomer who must first learn and bide his time. “I’m excited to engage with him, to collaborate with him,” he said. “I know also what it’s like for him being in the position up against a world champion. I know the pressures that come with it, the expectations, and the internal feelings of what it’s like. I want him to learn as much as he can and grow as much as he can. I have no doubts, he’s going to be a strong competitor. I’ll be focusing also hard to make sure I do the job to the best of my ability.”

Then there’s who Hamilton must compete with in the next bay down the pitlane: Max Verstappen, the reigning champion. It’s fair to say that a major factor in the Red Bull racer coming a narrow second in the Autosport top 10 F1 drivers of last season behind Hamilton was his over-aggression in wheel-to-wheel combat with the Briton. See Monza and Jeddah. But otherwise, his racecraft left him most worthy of the number one spot. That’s what Hamilton must against go up against once more.

“Max did everything a driver would do given the opportunity he was given,” says Hamilton of his Dutch rival. “And he’s a great



There are no grudges with Verstappen, reckons Hamilton

SUTTON



competitor and we will go into another battle like we did last year and hopefully conduct ourselves... we will obviously grow from our races and experiences we had last year all through the season. But no issues with him.

"I don't hold any grudges with anybody – I never think that's ever a good thing to carry around with you. I move forwards, I don't dwell on the past. And, as I said before, I feel fresh, I feel centred, and fully focused. I don't have anything holding over my shoulders holding me back this year. Not that I did last year, but I'm not letting that experience be one of those."

While the inter- and indeed intra-team competition is as tough as any Hamilton has faced in his career, he has also shown over and over that he returns a better, fiercer driver when he's bouncing back from adversity. That is what he must do again following the farce in Abu Dhabi.

Some of his greatest displays arrived immediately after the 2016 title defeat to Rosberg, or winning in Monaco in 2019 after the death of mentor Niki Lauda, or taking the Mercedes to an unexpected victory in Bahrain last season when floor regulation changes hurt his team most of all. For 2022, that will require righting the events at Yas Marina, which Hamilton will likely feel is the biggest wrongdoing he's faced in his career.

In an ominous reply, Hamilton reckons: "I always feel like through these sorts of experiences, you can turn that emotion into strength and into power. That's what I'm doing. I'm putting that into my training. I'm putting that into my work that I have with the men and women here in this team."

"If you think what you saw at the end of last year was my best, wait until you see this year... I'm just putting absolutely every ounce of my energy and time into making sure that I'm the best you've ever seen."

Should Mercedes be playing a bluffing game with the W13 or manage to hone what is actually a tricky car in double quick time, it will avoid a wasted scenario where "the best" Hamilton "ever seen" is only fighting for a podium rather than race wins in the early part of the campaign. If the car does come good, this version of Hamilton has the self-assurance to vanquish Verstappen and indeed Russell. In that sequence of events, he will keep on toppling Schumacher's records. 🏆



Why you should enjoy Hamilton in F1 while you can

"I'm 37, Jeez! I've still got a bit to go." Lewis Hamilton was more polite than he might have been when it was put to him that he'll be well into his forties if he wishes to continue racing against Max Verstappen, who now has a contract at Red Bull until the end of 2028.

But Hamilton dismissed that prospect, quickly adding: "I don't plan on being here close to that age. Hopefully I have some other fun things to get on with." And that's true. Through his activism and participation in the fashion and music industries most notably, Hamilton appreciates more than many that life goes on beyond Formula 1.

A 56-day absence from social media following the deeply controversial end to the 2021 Abu Dhabi Grand Prix came because the race was "the last thing I really wanted to talk to anyone about". But while Hamilton was silent, the immensely partisan world of Twitter went above and beyond to take aim at the two drivers involved in a title fight for the ages.

Hamilton has long faced criticism for how he comes across in the media, for 'mixing sports and politics' and so on. He's an immensely decorated but also divisive figure. While he's seemingly not ready to embrace his approaching forties any time soon, now that he's entering his 16th season as a grand prix driver, there's no escaping that he's in his F1

twilight. Should he not extend his current contract with Mercedes, the 2023 campaign will be his last.

It's thanks to his disparate interests outside of F1 that Hamilton has the biggest social media following and the most global recognition in the sport. But it's also why he's unlikely to hang around when he feels his time to leave has come. A co-commentary role seems completely out of the question. Even a paid ambassadorial position within the remit of F1 or an occasional guest appearance on the grid is unlikely. When Hamilton leaves motorsport,

"He's unlikely to hang around. When Hamilton leaves motorsport, it might well be for good"

it might well be for good.

If the driver we all expect turns up in 2022, one who has the bit between his teeth having felt wronged, it could be the best display from Hamilton to date. But knowing how finite his GP tenure might be, it's time to sit back and objectively consider his prowess behind the wheel rather than get bogged down in a bitter rivalry between Hamilton and Verstappen that plays out between fans – both sets as bad as the other – more viciously than it does between the two drivers.

McLaren

The biggest unknown quantity

McLaren has made good progress in recent seasons, but its testing form was somewhat erratic. So what can we expect from the legendary team in orange?

ALEX KALINAUCKAS

PHOTOGRAPHY



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he track has just gone silent, marker boards suddenly flashing bright red. A car has stopped in the Bahrain pitlane exit, halfway to the turn-in point for the first corner. Its driver stands alone by the side of the stranded machine. Marshals are massing on the narrow infield grass in front of the gigantic BIC tower overlooking the scene.

But a handily placed car recovery crane isn't moving. The driver eventually turns his back towards his car and bows down. He places his hands onto the halo and cockpit edge and strains. The wheels slowly start churning and they're off, heading back down the long slog to the Sakhir pitlane entrance on a day that has earlier reached 39C. Now, as the sun disappears before the final hours of running on day two of the final 2022 Formula 1 pre-season test, it has cooled, but not by much.

It had all been looking so good for McLaren. The team had left

the three days of running at Barcelona buoyed by the MCL36's compliant and predictable handling and overall pace. The most visible problem it had was the car's new livery appearing much more washed out and cluttered when running in real track conditions rather than sitting in a studio. McLaren made tweaks for a filming day in Bahrain ahead of the test, adding significant black decals that made the car appear meaner, cooler, and – really – classier. But the Bahrain test got off to a bad start and got much worse.

Daniel Ricciardo had been set to drive on the opening morning of the event but was said to be feeling too unwell. Rumours abounded regarding the Australian suffering possible COVID-19 symptoms – inflated by his absence alongside Lando Norris in F1's now regular promotional photo and film shoot on the Bahrain pitstraight before the first day of testing began – but he was said to be returning negative results. As Kings of Leon reached the halfway point of their set in the Al Dana Amphitheatre positioned just behind the circuit's Turn 4 last Friday night, McLaren announced that Ricciardo had

now tested positive and was self-isolating. Norris, who had taken his team-mate's place on the opening morning and continued through the rest of the first two days, saw out the test solo.

Ordinarily that would have been a massive boost for Norris's 2022 chances. Twelve years ago, the 2010 F1 season was about to commence after 15 days of pre-season running. But in this era, running is so limited on cost grounds that most of the current crop of racers are heading into this weekend's season opener having completed just three full days across the entire pre-season. Norris's total is raised to 4.5 days, and he topped the individual lap count for the Bahrain test at 200. But both stats are misleading.

On the first day, Norris only completed 50 laps and spent huge swathes of the day out of the car. The problem concerned the MCL36's front brake ducts, which were understood to be just too small to cope with the cooling demands for the major

“It had all been looking so good. The most visible problem was the new livery appearing washed out”

stops at the Sakhir track, as well as work in conditions that were much hotter than at Barcelona.

“It's not going to be an easy fix, so we'll see what we can do,” Norris said at the end of the first day, when only Pietro Fittipaldi, who missed the opening four hours of running due to Haas's late-arriving freight, notched up fewer laps (47 for the American squad's test driver).

McLaren was able to engineer a temporary fix for the problem, but with so little time available even this meant that Norris's longest run of the second day was just eight laps (one short of his lengthiest first-day run). In fact, over all three days in Bahrain, his biggest stint reached just 19 laps and the next highest was 12.

Team principal Andreas Seidl revealed that McLaren was in a “race against time” to get the parts from the permanent solution its Woking factory had been working on over to Bahrain in time for the third day. But with Norris's lap count then only reaching 90 (Alfa

Romeo led the way on 150 and lost the last half hour to a transmission issue stopping Valtteri Bottas on track), the team must wait until this weekend's grand prix before what Seidl calls its “real” fix is in place and it can see where it truly stacks up in 2022's long-run pecking order.

The test wasn't all lost for McLaren, since it deployed Norris to run regular aerodynamic assessments, even if the brake problem prevented him from tackling race simulations and the qualifying-style efforts most other squads put in during the final evening session (although Norris said McLaren did get some “lower-fuel” running in elsewhere). The stoppage near the end of the second day, when Norris decided to push his car back to the pits – he was later joined by several marshals and eventually his mechanics when they reached the pitlane – was oddly reminiscent of a similar incident in Spain that McLaren put down to new car ‘teething’.

“Less than ideal,” Norris said of >>

Norris eventually got some help pushing his car back to the pitlane

Solo status meant he topped lap count, but Norris still spent long periods out of the car



SUTTON

Norris says attacking kerbs is “different” for McLaren, as it can run lower to the ground



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McLaren’s last testing preparations during the final-day press conference, which he had to leave early because he was the only driver required to head out again that afternoon. “We are behind from where we want to be and need to be. It’s not great, but we got through as much as we could. We are definitely making progress, but it’s not the position we want to be in.”

Despite the challenges of the truncated running, he explained that when it came to McLaren’s intention to improve its new package, in “certain areas” it had succeeded, while in others it had not. “Where we were strong is high-speed corners in Barcelona,” he explained. “Similar to the last few years — we’ve always been very strong in high-speed corners, sometimes one of the most competitive. But low-speed corners are where we struggle, and I think at the moment things are very similar here.

“Even looking at Mercedes, Red Bull, Ferrari — they’re quite a long way ahead of us in those types of corners. That’s why in general we looked stronger in Barcelona than we have done here. It’s difficult, because there are always things to improve on, and things you maybe don’t show and so on.

“But I think we’re still in a decent place. It’s just you never know when people are showing their pace and when they’re not, so it’s difficult to work it out. We have a lot of work to do. We’re definitely not in as good a place as we were in Barcelona.”

With the brake solution on its way and Ricciardo set to return for this weekend’s action — he was already said to be feeling better even on the day he tested positive — McLaren will need to hit the ground running. There are only the three one-hour practice sessions before qualifying, but the team can still glean data on its long-run performance ahead of Sunday’s race — it will just have to



“We’re still in a decent place. You just never know when people are showing their pace and when they’re not”

crunch it at the same time as fettling set-ups.

McLaren team members insist that the MCL36 is a pretty potent package and, once it can run to its full potential, things may well not be as bad as they appeared last week. Plus, as Norris, suggests, its Bahrain form may be track specific. But the major positive for McLaren is that it appears not to have the porpoising problem that is still occurring at the other squads. Its car is running slickly and even better than Red Bull in this regard on the straights – and can run lower to the ground as a result.

This is why Norris feels that attacking kerbs is “different” for McLaren compared to rival teams running higher rides, because at this stage those others are able to more confidently run over kerbs in a similar way to previous seasons, and McLaren seemingly cannot for fear of causing damage to the critical ground-effect floor parts.

The combination of McLaren’s Bahrain test headaches following its Barcelona potential, with the lack of porpoising thrown in, leaves the team standing as seemingly the biggest unknown quantity coming into the season opener. Seidl suggests that Red Bull, Ferrari and Mercedes are ahead, but there is still a quiet confidence coming from McLaren, which after all was keen to play down expectations in the pre-season given that its investment in new design facilities at its factory are yet to be completed and therefore pay off.

With form likely to fluctuate between the teams at different track types this season, opportunistic and self-assured squads will surely thrive. For all that it must wish 2022’s pre-season had ended on a brighter note, McLaren heads into the new campaign knowing it remains the slick operation that built up to and seized a famous victory at Monza last year. Perhaps there will still yet be further distinctions to follow. 🏁

Another setback for Ricciardo to overcome

If McLaren’s Bahrain test was rather unhappy, much of that was surely down to the absence of Daniel Ricciardo’s relentless positivity. In its statement announcing Ricciardo’s positive COVID-19 test result ahead of the final day of testing, McLaren said he “will be released [from self-isolation] in time” for this weekend’s Bahrain Grand Prix. But with the country’s COVID rules requiring a seven-day isolation period, it is unclear at the time of writing if this means he will drive in Friday practice or only begin his preparations from FP3 onwards given the timing of his test result.

Should Ricciardo miss the initial two practice sessions, McLaren will be expected to call on two of the reserves at Mercedes and Alpine – Nyck de Vries and Oscar Piastri – now it has agreements in place with both rival squads.

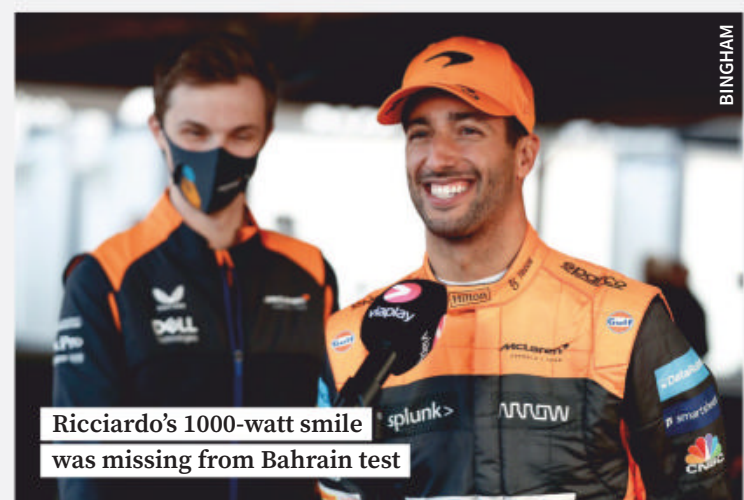
McLaren team principal Andreas Seidl says Ricciardo’s lost second test “definitely puts us and Daniel backwards. But in the end, it is something we couldn’t control and Daniel couldn’t control. With the experience Daniel has, also now going into the second year together with the team, [we’re] still optimistic that [despite] the small disadvantage he will have starting the race weekend, it doesn’t take that long until he is fully back.”

Given his struggles getting up to speed with McLaren’s 2021 car, this is a setback Ricciardo really could have done without. His tweeted reaction to the positive test – “Better this week than next... Big thanks to Lando & McLaren for the heavy lifting, I owe you some beers (milk for Lando)” – reinforces his chipper mentality. At

“It definitely puts us and Daniel backwards. But in the end, it is something we couldn’t control”

McLaren’s 2022 season launch he appeared leaner than ever, which perhaps makes more sense now given the car weight problems most F1 teams are having with the new designs. This is a consequence of new standard parts on the 2022 machines, such as the wheel covers, being heavier than expected, as lighter versions were deemed too expensive.

Having spent three weeks in hotel quarantine over the winter with his trip home to Australia factored in, Ricciardo will no doubt now be raring to get the campaign under way, even if he starts at a serious seat-time disadvantage to his team-mate.



Sebastian Vettel

How will Vettel write his final F1 chapter?

Aston Martin wants to keep its four-time world champion beyond the end of his contract this year. He looked happier in 2021, but will bigger issues make up his mind?

ALEX KALINAUCKAS

PHOTOGRAPHY  **motorsport**
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ifteen years have passed since the 2007 Formula 1 season. Given the thrilling fight the championship enjoyed last year, it's worth reflecting on how many from the past two decades could get

close to matching its sustained drama, and the 2007 campaign is certainly in with a shout.

It had the year-long scrap between Ferrari and McLaren, a rookie sensation in the championship fight, a team-mate war, the spy scandal, plus a title showdown in which the outsider took the prize – and who has only just retired. Of the drivers who took part in what became Kimi Raikkonen's season, three are still on the grid.

Lewis Hamilton is no longer with McLaren, but he's still fighting at the front with Mercedes all these years from his debut. Fernando Alonso continues to covet a third world title – an unthinkable situation viewed from 2007. And then there's Sebastian Vettel.

He only joined F1 partway through that season, but he's since had a career for the ages. Four world titles and domination with Red Bull, living and failing the Ferrari dream, and now representing another legendary motorsport marque, albeit one that 15 years ago was winning the GT1 class at Le Mans, far from the F1 sphere.

Hamilton and Alonso seem determined to race on into F1's new era, although how Mercedes and Alpine are respectively faring when the early pecking order of the championship's new formula is revealed will likely determine how long they wish to do so. Vettel's situation, however, is more enigmatic – and all the more interesting because of it.





Showing that the fire was undimmed with dazzling run to fifth in Monaco

This time last year, Vettel was preparing to make his race bow with a new team for the first time in six seasons. And Aston was grappling with being hit hardest, along with Mercedes, by the rear-floor rule tweaks mandated along with the carryover car requirements from 2020.

Vettel's Aston race results began badly when he clattered into Esteban Ocon during the 2021 Bahrain season opener and, next time out at Imola, pre-race brake overheating problems unleashed many subsequent issues. But his form soon improved.

Monaco was his standout drive. Even though he finished 'just' fifth, he outperformed the title-contending Hamilton. Then in Baku he charged to the podium — Aston's first in F1 — in the chaos that followed Max Verstappen's tyre blowout. In Hungary, he closely pursued Ocon throughout the Frenchman's famous maiden win, but lost his second place when his car could not produce a fuel sample.

Those were the highlights, but perhaps the bigger takeaway was that Vettel appeared to have left behind what had seemed to become — at times — an onerous F1 existence at Ferrari. The Ocon clash in Bahrain proved to one of the few driving errors Vettel made in 2021. He did have solo spins at Silverstone and Zandvoort, but generally the troubles that had littered his later seasons in red seemed not to have followed him through to life in green. He appeared rejuvenated out of the cockpit too.

He is now starting a pretty crucial year. As the 2022 campaign gets under way, Vettel is committed to Aston only to the end of the season. As with Hamilton, but more pertinently with Alonso because the Spaniard



Vettel chased Ocon home in Hungary, then lost his second place

is in a similar contract-ending situation, Vettel's early experiences in F1's new era are set to be key when it comes to considering how his illustrious career might end. For a start, he's spent winter testing at Barcelona and in Bahrain learning "a car that wants to be driven in a different way", adapting to the ground-effect formula. "It's a completely different animal and it wants to be tamed in a different way," he said in Spain. "That's driving the car, but that's also operating, in terms of set-up. I'm playing with driving styles, what I can do."

Most of Vettel's F1 success came during the Pirelli era of fragile tyres and building critical skills to keep the rubber alive. But what really set him apart during his years as the championship's undisputed star was how he adapted to get the best from the exhaust blown-diffuser cars Red Bull produced at the start of the last decade. So, the 34-year-old can handily recall successfully rising to a complex driving challenge — those cars needed drivers to apply power counterintuitively to be fast, hitting the gas to produce extra downforce when encountering oversteer, for example — as he works his way into the subtleties of the ground-effect machines. The danger with these new cars is that they are likely to bite their drivers suddenly if the airflow to the venturi tunnels unexpectedly unseals, which could result in regular random >>

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spins for the unwary. It would be unfortunate for Vettel if the ‘Seb Spin’ were to re-enter the F1 lexicon...

But how the upcoming campaign unfolds for Vettel will, of course, not only be down to his on-track performances. Since the Aston name was brought back to F1 for the first time in 61 years, Lawrence Stroll’s team has eclipsed the results of the original David Brown-owned squad that entered five world championship races in 1959 and 1960. That is except in terms of highest grid spot, with Vettel’s fifth place qualifying at Spa last year still three places short of Roy Salvadori’s front-row start for the 1959 British Grand Prix. But seventh in the constructors’ championship is a long way from the title ambition Stroll has for Aston.

The team stopped developing its 2021 charger after just a quarter of last season had passed, as it devoted its resources towards the new rules. And because of the way in which the COVID-19 pandemic so utterly disrupted normal development cycles and processes for F1 teams in 2020, the former Racing Point squad is still yet to show what it can really do with the added investment Stroll now provides compared to the cash-strapped final Force India days.

Vettel said at the AMR22’s launch that 2022 would therefore be “a true test” for Aston, where “we will see how good we are”. And the team itself is aware that the question of Vettel’s future is correspondingly more complicated as a result. It must also convince him to stay on.

“It’s clear that a guy like Sebastian, a four-time world champion, he does not want to be 15th or 12th or P8,” said new Aston team principal Mike Krack, who was Vettel’s engineer when he sampled BMW Sauber’s car at the 2006 Turkish GP, his first F1 weekend appearance. “It is our task to deliver a performing car. Or let’s say performing structure, because I think Sebastian is a clever guy, he will not be focusing just on this year’s car or whatever, but focusing more on what is happening, and if he sees the potential. So, if we can manage to offer this to him, I think we have a chance to keep him for longer.”



“It’s clear that a guy like Sebastian does not want to be 15th or 12th or P8”

But will Vettel want to stay even if Aston makes major progress on its ambitions? Winning makes sport feel so much better, but in one way Vettel already seems to be even greater than he was when scoring all those titles. And that’s to do with how he approaches life outside the paddock.

Vettel famously spent the hours after the 2021 British GP picking up litter in the grandstands opposite the pits. He’s also completed a farming internship and, before last year’s Austrian GP, he built a habitat for bees with schoolchildren local to the Red Bull Ring. He regularly cycles into races from his accommodation, and is known to make big journeys to races by train if flying can be avoided. But it’s not just concerns for the environment where Vettel is showing committed leadership qualities.

Vettel is one of the most outspoken drivers on many of the topics that modern sport – and F1 in particular – must often address. Only Hamilton is

on a similar level, and there was a feeling in the room at the Barcelona test, when Vettel told the press he “should not go, I will not go” to Russia following that country’s invasion of Ukraine, that his frankness helped others – including Verstappen – to offer similar sentiment. Indeed, after it was announced that F1’s ‘We Race as One’ pre-race ceremony was to be scrapped, Vettel suggested “it was getting a bit too strong and too individual for the business side of things”. This was coming from a driver who wore a rainbow T-shirt during the ceremony in Hungary last year in support of the LGBTQ+ community.

And so, in a year when his F1 future will be much discussed, it’s time to wonder how Vettel the individual squares his off-track views with being an F1 driver. That’s the lifestyle it requires and the compromises that are regularly made in a division where the pursuit of money generally trumps principles. The simple counterpoint is that, by being a high-profile F1 star, Vettel can use his platform to raise awareness for the causes he cares about. But you sense that Vettel isn’t doing what he does for that reason – he’s doing it because that’s who he is. Vettel is secure in himself, his position and reputation, unafraid to be a voice to be counted on at the top of modern sport. If 2022 is to be his last season, then F1 should step back and enjoy it while it lasts. 🏁



Team boss Krack worked with Vettel back in 2006



Will F1’s new era, and Aston’s response to that challenge, keep Vettel interested?

Politics

How F1's political battles raged on through the winter

The fallout from Abu Dhabi kept F1 in the headlines for all the wrong reasons. But wider global events have also brought their own challenges

LUKE SMITH

PHOTOGRAPHY  **motorsport**
IMAGES

At the end of the longest season in Formula 1 history, which finished less than two weeks before Christmas, the paddock felt in need of a real break. December 2021 was always going to bring a big shift for F1's political landscape, with the end of Jean Todt's tenure as FIA president and the start of a new regulations cycle. But few could have predicted how much would change between the last race of 2021 and the first of 2022 as controversy on track, political tension off it, and the outbreak of war resulted in some seismic shifts.

F1's news cycle never really stopped through the winter. Fans eagerly – sometimes too eagerly – wanted updates from the FIA regarding race director Michael Masi's future amid the fallout from the 2021 Abu Dhabi finale. Lewis Hamilton's future even seemed in doubt after the fashion of his title defeat left him “disillusioned” with F1, according to Mercedes chief Toto Wolff. Uncertainty loomed.

It all threatened to overshadow the start of an important new era for F1. So much energy had been put into the 2022 regulations, delayed by a year, and which promised better racing and closer competition. They should have been what F1 could fanfare off the back of one of the closest and most exciting championship battles in recent history – and yet all anyone could focus on was the past.

But action was needed from the FIA before it was possible for

anyone to move on. Hamilton hunkered down with his family, making F1 “the last thing I really wanted to talk to anyone about”. Even when newly elected FIA president Mohammed Ben Sulayem tried to get in contact, Hamilton did not wish to talk immediately. His silence was a message in itself to the governing body's leader.

There was a mix of feelings about Masi's future and whether he could continue in the role. Most accepted that the structure of the FIA's operations had placed too much on the shoulders of one man, suggesting changes could pave the way for him to carry on. But in the end, there was no way for him to continue, leading to the announcement – timed during Ferrari's launch, curiously, although the FIA claimed it was not a bid to bury bad news – that Masi would be replaced by two race directors from 2022: Eduardo Freitas from the WEC and Niels Wittich, formerly of the DTM. Both would enjoy support from Herbie Blash, the late Charlie Whiting's long-serving number two, as a new senior advisor, as well as from a new virtual race control room that was likened to VAR used in football.

The pace of the FIA's action – or lack of – served as a source of frustration for many within the paddock. The withering statement issued in the days after the Abu Dhabi GP, claiming there had been a “misunderstanding” amid the pledge to investigate matters, was not followed up for nearly a month, when it outlined plans to speak to drivers and teams about changes for the year ahead. It took another month for the FIA to announce Masi's exit and the restructure.

“Like everything, it's down to understanding where we've been, so we can move forwards in a positive light”

While there was a need for thoroughness and consultation, the pace at which things moved did little to give closure to those who rightly felt aggrieved. The full report is still yet to be published, and it remains unclear if it will be. “Hopefully everyone will get to see it, and to have perhaps a better understanding of everything,” said Hamilton, who made clear he didn't seriously consider quitting because of Abu Dhabi. “Like everything, it's down to understanding where we've been, so we can move forwards and in a positive light.”

Regaining trust is the sternest challenge the FIA faces heading into the 2022 season and the start of F1's new technical era, which >>





Centre of a storm: Michael Masi paid the price for Abu Dhabi

SUTTON



finally arrives after two and a half years of hype. The changes are a start, and defused some of the tension that had built in the wake of Abu Dhabi. Wolff welcomed the moves, calling them “necessary”, and expressed optimism that they would prevent a recurrence. Many drivers and teams gave thanks to Masi, understanding the task he had faced in the role. He is set to be given a new position within the FIA that is still to be announced.

Red Bull wasn’t looking to let the dust settle. In his first media appearance of the year at pre-season testing, Max Verstappen called the decision to axe Masi “very unfair” and said the Australian had been “thrown under the bus”, while team boss Christian Horner claimed in one interview that Mercedes had been “bullying” with its actions. The friction rumbled on even as the new cars were unveiled and testing got under way, intensifying when Mercedes turned up at the second test with a radical sidepod design.

Horner was quoted questioning their legality or whether they were in the spirit of the regulations, only for him to deny the comments and say the W13 car “looks like it complies with the regulations”. No love has been lost between last year’s title fighters.

Yet a wander around the Bahrain paddock during testing last week led to a sighting of Wolff and Horner chatting together, mere months after Horner had claimed there was “no relationship” between them. “As far as relationships with Toto, whilst there is an intense rivalry, there is still that respect at the end of the day,” Horner said. “We’ll be competing hard again this year. It looks like some of our colleagues will be in that fight as well, and hopefully it could even make it more exciting.”

The debate over the sidepods pointed to the potential for spats between teams over their interpretations of the new regulations, particularly as most have opted for such different concepts, to the surprise of many. Ross Brawn, one of the key architects of the rules, thought there were “bound to be disputes” given F1’s DNA and it would be “naive” to think otherwise. But the general feeling is that the new ruleset won’t offer any silver bullets or grey areas that could spark big rows or upset the competitive balance.

Because that is what the changes in F1 for 2022 are aimed at: greater competition and greater sustainability for the series as a whole. That doesn’t just go for the technical regulations. This will be the second year of F1’s cost cap, which drops from \$145million per team to \$140m for the season, but the first year where it





“It may have been a tricky winter for F1, but the series has not lost sight of the wider global issues at play”

directly impacts the development of the cars given the 2021 models were largely carried over due to COVID-19. The revised governance structure introduced last year under the new Concorde Agreement also sought greater fairness.

But it was this very governance structure that ultimately prevented F1 from going through with its sprint race plans for the new season. The major format change for last year had gone down as a success for F1, which reported it had interest from every single promoter to stage a Saturday race in 2022. An initial plan for six sprints had to be shelved amid a dispute over cost-cap increases, meaning only three – Imola, Red Bull Ring and Interlagos – will happen this year as a compromise.

The push, predictably, came from F1’s biggest operations, for which the cost cap has been an ongoing challenge. It led to a fiery rebuttal from McLaren boss Zak Brown, who accused them of “effectively holding the sport hostage from what’s best for the fans and therefore the sport at large”, as well as hitting out at the support that so-called B-teams were showing their parent squads. Brown said that one team was seeking a \$5million increase to account for the additional sprints, which he called “nonsense”.

The cost cap has naturally remained a sore subject. While all agree on the importance of making F1 sustainable, the current global climate and rising inflation have led to added pressures. “We are not only reducing by \$5m, but we have a situation where you’re not able to really increase the costs and the payroll,” said Wolff. “And on the other side, you have to decide very carefully where you invest your dollar in R&D. In the past, it was a little bit easier because you could follow various avenues in chasing performance. Today you have to decide which one has the highest potential and then embark on it. It’s a totally different way of operating for the big teams.”

Consensus may be hard to find among F1 teams but, when the paddock came together for pre-season testing at Barcelona, a far greater global issue had everyone on the same page. Russia’s



invasion of Ukraine shocked the world, and left F1 with some big issues to tackle. The decision was quickly taken to call off the Russian Grand Prix scheduled for September, with the race’s contract subsequently being terminated, meaning that the planned move from Sochi to St Petersburg next year will now not take place. Sebastian Vettel had already said he would boycott the race if it did go ahead, but the decision was unanimous.

It also had a direct impact on other Russian interests in F1, chiefly concerning Nikita Mazepin and Uralkali, the company co-owned by his father that was the title sponsor of the Haas team. The squad announced ahead of the second test in Bahrain that it had terminated both Mazepin’s contract and the sponsorship agreement, ending a turbulent 15 months of association.

Mazepin hit back by saying his willingness to race under the conditions laid out by the FIA had been ignored. The FIA had gone against the International Olympic Committee’s recommendation to suspend all Russian athletes, instead saying that they could continue to race under a neutral flag, only for national federations to take their own action. Mazepin also made a number of other parting shots at Haas, and said he would be setting up a foundation to help Russian athletes unable to take part in events because of the restrictions, pointedly called ‘We Compete As One’ – a tone-deaf echo of F1’s ‘We Race As One’ programme.

It may have been a tricky winter at times for F1, but the series has not lost sight of the wider global issues at play right now. A show of support for Ukraine came from the Grand Prix Drivers’ Association ahead of the second test in Bahrain when drivers got together for a photoshoot with T-shirts reading “no war”.

Sport can often provide solace in difficult times, and F1’s hope will be that the excitement of 2022 can do precisely that. Big changes have taken place that should set the series up for a more sustainable and efficient future, while learning from the mistakes of last year that still cast shadows entering the series’ new era. ❧



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The background image is a full-page photograph of a racetrack at sunset. A large, bright orange sun is in the upper left, casting a warm glow over the scene. In the center background, the suspension bridge of the Circuit de Monaco is visible, its towers and cables silhouetted against the orange sky. In the foreground, two Formula 1 cars are on the track. The car in the immediate foreground is a dark-colored Mercedes-AMG Petronas F1 car, with the 'INEOS' logo clearly visible on its rear wing. It is positioned on the left side of the frame, angled towards the right. Further back and to the right, another Formula 1 car, a dark-colored Alpine F1 car, is visible. The track surface is dark asphalt, and there are some red and white markings on the right side. The overall atmosphere is dramatic and high-contrast due to the low light of sunset.

Team by team

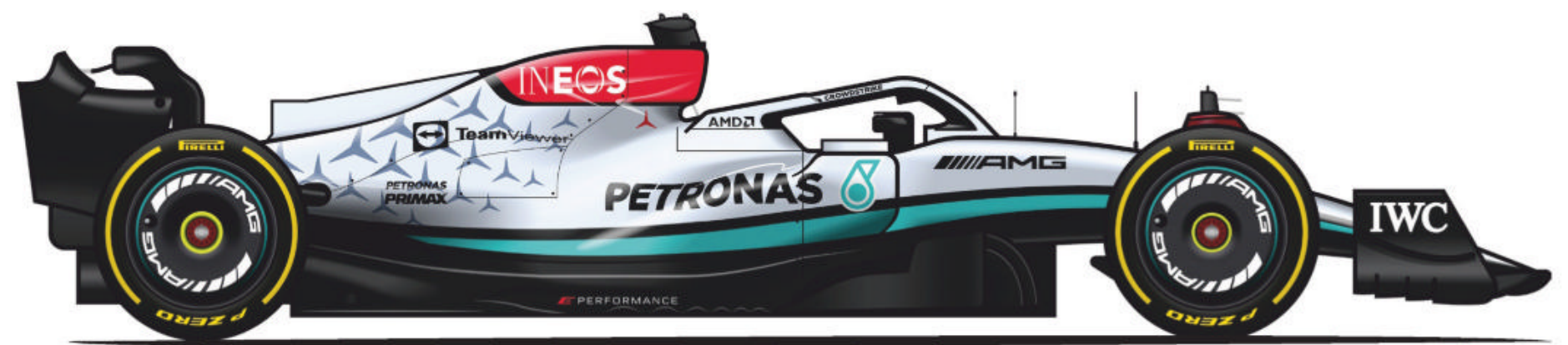
Autosport's title-winning engineer and chief editor are your guides
to the 2022 season's runners and riders as F1 starts a new era

TIM WRIGHT & KEVIN TURNER

ILLUSTRATIONS **CAMILLE DEBASTIANI**

Mercedes

CAR MERCEDES W13 ENGINE MERCEDES M13



STARTS 249 | FIRST GP FRANCE 1954 | WINS 124 | POLES 135 | FASTEST LAPS 94 | 2021 1ST

Well, now that all the ‘will he/won’t he’ Lewis Hamilton shenanigans are over, what can we expect from the team from Brackley? Will George Russell bring a further headache to Hamilton in the way that Nico Rosberg did and deny him that record eighth world championship? After the first round of testing at Barcelona, it did look as though there is not much to choose between them. But, following the Bahrain test, the bigger questions concern the ‘sidepod-less’ W13 and its severe porpoising issues.

At its launch, we finally got to see the Mercedes back in its more familiar silver hue and, as you would expect, bristling with innovative features. Compared to other teams, Mercedes appears to have extended the venturi strakes further ahead of the engine inlet, and the sides of the floor have an interesting,

pleated area to break up the airflow. Maybe the team has been a little too bold with the trick parts and is not controlling the downforce in the right way, as surprisingly it seemed to suffer from porpoising more than others. It was interesting to see the drivers using the softest of the new Pirelli tyres to set their times in the opening test at Barcelona.

Always positive, Russell has voiced his faith not only in his own engineers, but in all the engineers up and down the pitlane to find the solution. Good man: we expect to see many changes arrive on the W13 fairly quickly, though it could take time before it gets on a par with Red Bull and, perhaps, Ferrari.

Last season proved that Mercedes can develop its way into contention after a problematic start, but Hamilton did not sound confident after the Bahrain test, and the feeling was that it was more than just the usual gamesmanship.



#44
LEWIS HAMILTON



#63
GEORGE RUSSELL

2ND	2021 POSITION	15TH
37	AGE	24
288	STARTS	60
AUSTRALIA 2007	FIRST GP	AUSTRALIA 2019
103 WINS	BEST FINISH	2ND
103 POLES	BEST QUALIFYING	2ND
59	FASTEST LAPS	1



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Lewis Hamilton

Understandably hurt by the shambolic way the 2021 season ended, the seven-time world champ was punchy when he broke his silence last month. Hamilton has a history of coming out fighting when he feels things have gone against him, so expect some fireworks. The only questions are: will George Russell’s arrival upset the equilibrium at Mercedes? And how will Hamilton decide to deal with Max Verstappen’s on-track aggression in 2022?

George Russell

It feels like an age that Russell has been waiting for a chance in a top car since his impressive but fruitless one-off for Mercedes in the 2020 Sakhir GP. Russell is now in an ideal position to make the most of Hamilton’s experience and quality. He’ll undoubtedly give his team-mate major worries, though Russell will want to keep his Mercedes future in mind before he creates the sorts of waves Nico Rosberg did. This is a fascinating subplot for F1 this year.

Red Bull

CAR RED BULL RB18 ENGINE RED BULL RBPTH001 (HONDA)



STARTS 325 | FIRST GP AUSTRALIA 2005 | WINS 75 | POLES 73 | FASTEST LAPS 76 | 2021 2ND

World champion Max Verstappen has rightly chosen to take the number 1 for his car, but will the RB18 be the machine to help him keep it? With an aerodynamic guru such as Adrian Newey as the chief designer, one has to expect that he will extract the maximum from the new regulations. He has knowledge of previous successful (and unsuccessful) attempts using venturis under the sidepods to generate downforce, as in the 1980s. The only difference now is that there are no side skirts touching the ground to seal that area.

The team's rather disappointing launch gave nothing away, as expected, but we saw why it kept the real RB18 away from prying eyes when it finally appeared on the first testing day at Barcelona. It seems that Newey and his team have indeed succeeded in getting the centre of pressure correct, because the drivers were

not complaining so much of the porpoising effect that troubled other teams. The other interesting fact was that the squad concentrated on using the hardest tyres for most of the first test and not running the softest rubber.

We suspect that, like other teams, Red Bull was running a good amount of fuel at all times to analyse how the tyres coped, and we haven't seen its ultimate pace yet. Just how much did Red Bull still have in the tank?

We got the glimpse of an answer on the final day of the Bahrain test. Armed with an RB18 with revised sidepods and soft tyres, Verstappen jumped to the top of the times and must surely be the championship favourite heading into the opening rounds. If Sergio Perez can step up and/or the car is far enough ahead, Red Bull could take its first constructors' crown since 2013 this season. The other teams seem to have a big task to stop it.



#1
MAX VERSTAPPEN



#11
SERGIO PEREZ

1ST	2021 POSITION	4TH
24	AGE	32
141	STARTS	213
AUSTRALIA 2015	FIRST GP	AUSTRALIA 2011
20 WINS	BEST FINISH	2 WINS
13 POLES	BEST QUALIFYING	2ND
16	FASTEST LAPS	6

Max Verstappen

Verstappen answered many questions in 2021 and will forever be the driver who ended Hamilton's reign at the top of F1. There's no reason to think he'll be anything other than a leading contender again, providing the RB18 is as quick as everyone expects. The only obvious weakness in his game – both from an ethics and points-accumulating stance – is his aggression in wheel-to-wheel combat, and it might take actions by others to curb that.

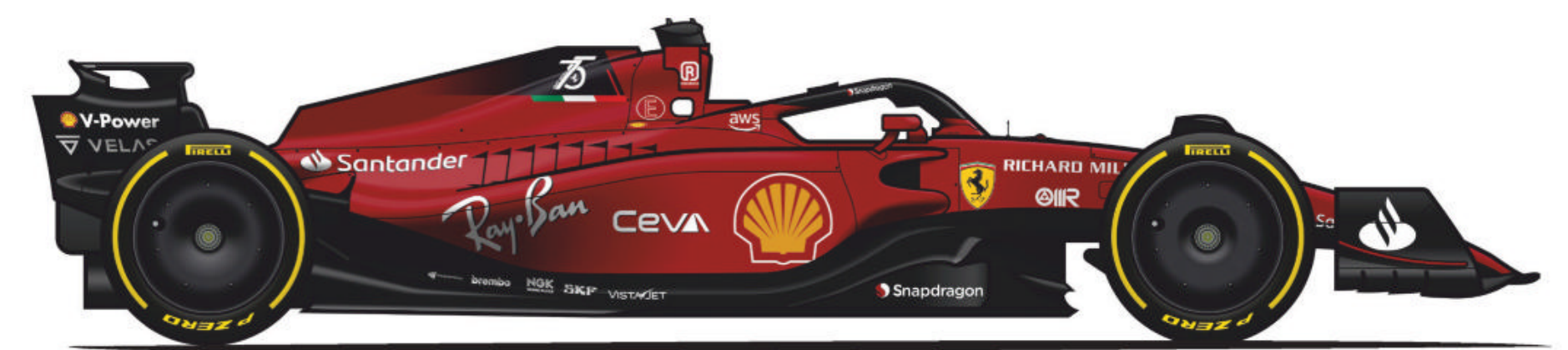
Sergio Perez

The popular Perez had some fine moments in 2021, his first season at Red Bull, but ultimately he was too far off Verstappen too often and the team lost the constructors' title. The regulation change should help him as it forces the team into a new design philosophy that the Mexican will hope makes the car less edgy and nervous. It's an important season for Perez – he's entering his 12th year in F1 and now knows Red Bull, so must deliver in 2022.



Ferrari

CAR FERRARI F1-75 **ENGINE** FERRARI 066/7



STARTS 1030 | **FIRST GP** MONACO 1950 | **WINS** 238 | **POLES** 230 | **FASTEST LAPS** 254 | **2021** 3RD

Could this be the year when Ferrari finally gets it right? Towards the end of 2021 the team came on strong and denied McLaren third place in the constructors' championship, with Carlos Sainz Jr beginning to push his team-mate and be more comfortable within the squad.

The new F1-75 has some interesting features, including the top surface of the sidepods helping to channel the air towards the rear, where it helps to draw the low-pressure air out of the underside of the car. But Ferrari is another team that suffered from the dreaded porpoising, with many uncomfortable images of the car bouncing its way down the long Barcelona straight.

It's interesting that, although team boss Mattia Binotto was talking down the chances of the team at its launch, he seems to think that Ferrari has already solved the aero imbalance.

Sainz didn't seem to be too fazed about the porpoising, and it certainly didn't stop both drivers recording decent lap times in Spain. Charles Leclerc ended up fastest on day two, having been just behind McLaren's Lando Norris on day one.

Clocking up the most laps over the three days in Spain showed an impressive reliability and that continued in Bahrain. The F1-75 also looked strong over longer runs, even though Verstappen's pace on the final day suggests that Red Bull has a performance advantage.

It really is about time Ferrari put together a title challenge again and there are lots of promising signs. As well as a fine pre-season testing campaign, it has one of the best line-ups on the grid, and the battle with McLaren last year should have honed its strategy and pitstops. It would be great for F1 if Ferrari could take the fight to Red Bull, particularly if Mercedes *has* missed the mark.



#16
CHARLES
LECLERC



#55
CARLOS
SAINZ JR

7TH	2021 POSITION	5TH
24	AGE	27
80	STARTS	140
AUSTRALIA 2018	FIRST GP	AUSTRALIA 2015
2 WINS	BEST FINISH	2ND
9 POLES	BEST QUALIFYING	2ND
4	FASTEST LAPS	1



Charles Leclerc

Yes, Leclerc was beaten in the points by new team-mate Sainz in 2021, but don't let that fool you. The Monegasque is a class act, as demonstrated by his two superb poles last year, even if there were also a few mistakes along the way. Leclerc saw off Sebastian Vettel and proved he was capable of winning grands prix almost the moment he arrived at Ferrari. He'll surely be ready to fight for the championship *if* the latest Ferrari is up to it.

Carlos Sainz Jr

Of all the drivers who switched teams last year, Sainz was probably the most impressive. He was certainly the quickest to adapt, perhaps a legacy of Ferrari being his fourth team in F1. Sainz forms a strong partnership with Leclerc and showed an ability to learn during 2021, which helped him to an impressive fifth in the table. Sainz is climbing high on the 'most starts without a win' list, and few would begrudge the Spaniard a victory.

McLaren

CAR **McLAREN MCL36** ENGINE **MERCEDES M13**



STARTS 902 | FIRST GP MONACO 1966 | WINS 183 | POLES 156 | FASTEST LAPS 159 | 2021 4TH

With a solid driver pairing that at last provided a splendid 1-2 finish at Monza in 2021, and a striking new paint job, will McLaren finally start to worry the leading teams? New front and rear suspension plus the new aero package and 18-inch wheels are a lot to understand, so let's hope that the team has its simulations right. Executive technical director James Key hinted that there were areas in the new regulations that can be exploited, so we'll wait and see what surprises McLaren comes up with.

Again, although Key suggests that the team may have lucked into getting it right, the McLaren did look much more settled than most, and Daniel Ricciardo in particular expressed satisfaction with the feeling of the car. He certainly looked to be excelling during the wet tyre test at the end of day three in Spain (below).

Lando Norris seemed a little more

downbeat about the team's progress despite topping the times on day one of the Barcelona test. His feeling, like some other drivers, is that they need to understand where more performance can be found.

Last week's Bahrain test was less encouraging, with front brake duct cooling issues that hampered running, particularly over longer distances. Ricciardo was also ill and missed all three days, so he won't have had as much mileage in the car as he would have liked, unfortunate given his struggles with last year's McLaren after joining from Renault.

As with many of the teams, McLaren's true position is tough to gauge and may not be known for several races, but it currently seems more likely that it will be part of the tough midfield fight rather than making the step up to the front. That final leap might have to wait another year or two, once its new windtunnel and facilities come on line.



#3
DANIEL RICCIARDO



#4
LANDO NORRIS

8TH	2021 POSITION	6TH
32	AGE	22
210	STARTS	60
BRITAIN 2011	FIRST GP	AUSTRALIA 2019
8 WINS	BEST FINISH	2ND
3 POLES	BEST QUALIFYING	1 POLE
16	FASTEST LAPS	3

Daniel Ricciardo

The likeable Australian struggled to adapt to the McLaren MCL35M but bounced back after the summer break to end the team's victory drought at Monza. He'll need to at least match Norris in 2022 to prove that he can get back to the level that put him in F1's very top tier of drivers in 2014-17. His experience should help McLaren with the regulation changes, and Ricciardo's form could be crucial if the team again finds itself in a close fight.

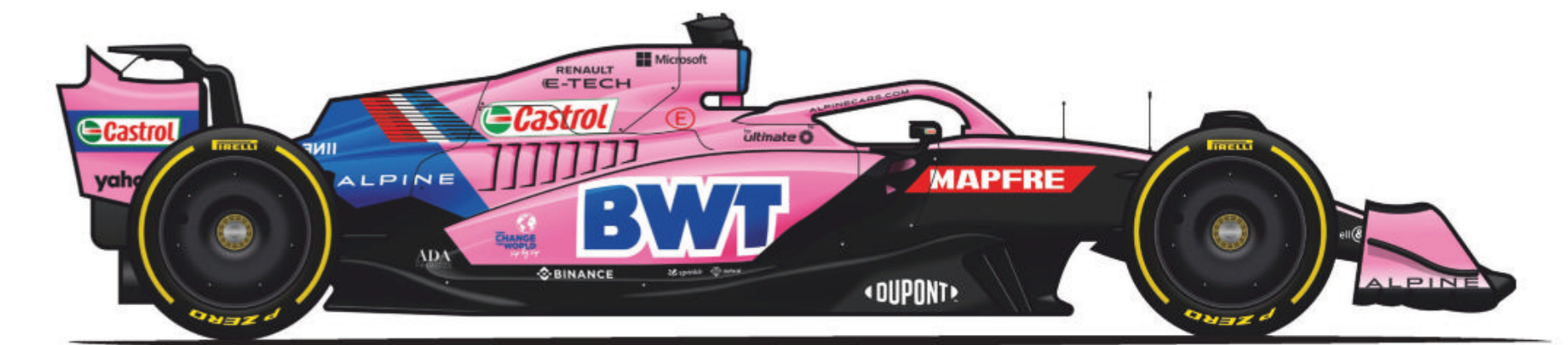
Lando Norris

This time last year, many were viewing the season as a big test for Norris. He had a proven race winner in Ricciardo arriving as his team-mate and, with two years under his belt, had nowhere to hide. But he outshone Ricciardo, particularly in the first half of the year, took his first pole at Sochi, and was often the most impressive performer behind the Big Two. He was unlucky not to be fifth in the points and is surely ready for that first win.



Alpine

CAR ALPINE A522 ENGINE RENAULT E-TECH RE22



STARTS 422 | FIRST GP BRITAIN 1977 (AS RENAULT) | WINS 36 | POLES 51 | FASTEST LAPS 33 | 2021 5TH

So, the pink is back! With BWT now on board, one hopes that the striking livery brings the team the karma that Andreas Weissenbacher, CEO of BWT, is so passionate about. As with Aston Martin, there have been many management changes, with the surprise departure of Renault ambassador Alain Prost and the arrival of ex-Force India/Racing Point/Aston man Otmar Szafnauer as team principal. Will this make any difference to the results?

Last year provided glimpses of performance and a somewhat lucky victory at the Hungarian GP, with Fernando Alonso playing his part to help team-mate Esteban Ocon win. Renault has made a huge investment in redesigning the engine package, finally following the Mercedes route of splitting the turbo. It has even admitted it is chasing performance over reliability.

At the Barcelona test, it was notable that the A522 was suffering the most from the porpoising and one wonders if the constant pounding that this causes had a hand in the resultant hydraulic leak that led to the small fire ending the team's test prematurely. Alonso was still upbeat about the situation and is at least saying that the current regulations have brought back the fun of driving.

Ocon still managed a race distance that showed good reliability from the restructured engine package, and Alpine seemed to make progress in the Bahrain test. Porpoising still appeared to be a problem, but pace was encouraging.

The new rules do not yet seem to have completely eradicated the gap between the top teams and the tightly bunched midfield, so Alpine could be set for a similar season to 2021. There really needs to be a point when all the investment and changes start to kick Alpine towards the front.



#14
FERNANDO ALONSO



#31
ESTEBAN OCON

10TH	2021 POSITION	11TH
40	AGE	25
333	STARTS	89
AUSTRALIA 2001	FIRST GP	BELGIUM 2016
32 WINS	BEST FINISH	1 WIN
22 POLES	BEST QUALIFYING	3RD
23	FASTEST LAPS	0



Fernando Alonso

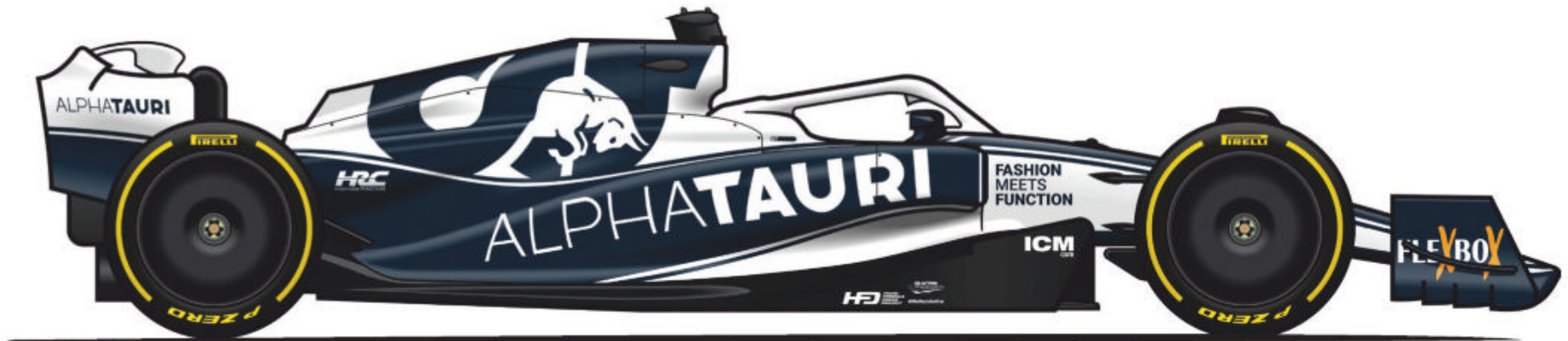
Alonso returned to F1 last year after two seasons away, during which he won Le Mans and the World Endurance title, and didn't take long to get back up to speed. There were some fine drives, including against Hamilton in Hungary that helped secure victory for team-mate Ocon, a highly rated youngster Alonso beat in the standings. Now 40, Alonso is set to take the record for most F1 starts this year, but will there be any more wins?

Esteban Ocon

Just how good is Ocon? It's a tough one to answer, but he beat Verstappen in F3, took his Hungarian GP chance with aplomb last year, and sometimes got the better of Alonso in 2021 – no mean feat. Given their past in F3, Ocon could also be the antidote to Verstappen in the on-track stakes, but it seems unlikely at this point that the Alpine will be a match for the Red Bull this season. Beating Alonso would be a fine target for the 25-year-old.

AlphaTauri

CAR ALPHATAURI AT03 ENGINE RED BULL RBPTH001 (HONDA)



STARTS 307 | FIRST GP BAHRAIN 2006 (AS TORO ROSSO) | WINS 2 | POLES 1 | FASTEST LAPS 2 | 2021 6TH

This team could spring some surprises, with a strong engine package from Red Bull Powertrains (nee Honda) and consistent driving we have become accustomed to from Pierre Gasly. Now that he has one season under his belt, Yuki Tsunoda could also show his undoubted talent without all the silly accidents.

The team's clever launch was something quite different and refreshing. Micro bots (presumably borrowed from Disney's *Big Hero 6*) were set in action by the car's steering wheel being attached to a column set into a table top. The bots then grew into robotic figures passing through a portal to become human models sporting the company's clothing range.

This time AlphaTauri has not followed sister team Red Bull on suspension set-up, deciding to stay with a front-pushrod, rear-pullrod system as run last year.

This could be a wise decision, but does it compromise the aerodynamics where the venturi tunnels exit?

Tsunoda had the privilege of starting the Barcelona test and racked up a decent total of 121 laps as the team began to understand both how the car responds and the impact of the bigger wheels and tyres.

Their on-track performance, particularly on day two, was impressive, both with the highest number of laps covered and with Gasly setting the second best time, just two tenths off Leclerc in his Ferrari. That continued in Bahrain, particularly when Gasly topped the timesheets on the first day.

Exactly how much potential the AT03 has is hard to know, but it looks like a solid package that should be able to continue AlphaTauri's place as a consistent points threat. Gasly can be relied upon to put the car where it belongs, and hopefully Tsunoda will join him in 2022.



#10
PIERRE GASLY



#22
YUKI TSUNODA

9TH	2021 POSITION	14TH
26	AGE	21
86	STARTS	21
MALAYSIA 2017	FIRST GP	BAHRAIN 2021
1 WIN	BEST FINISH	4TH
2ND	BEST QUALIFYING	7TH
3	FASTEST LAPS	0

Pierre Gasly

A strong midfield performer since being demoted from Red Bull halfway through the 2019 campaign, there's not a lot left for Gasly to prove at AlphaTauri. He's even won a GP, thanks to his drive at Monza in 2020. All he can do is keep putting in sublime qualifying performances, perhaps avoid some of the drama that befell him at times in 2021, and keep scoring points. Even that might not be enough for another shot in a big team...

Yuki Tsunoda

The latest Japanese sensation to arrive in F1, Tsunoda took a fine ninth first time out in the 2021 Bahrain GP. But there were too many crashes (as well as some interesting radio communications) and he only scored 29% of Gasly's points tally – had he been closer, AlphaTauri could have beaten Alpine in the constructors' table. But Tsunoda has another chance and a year of experience behind him, so the focus now will be on delivering his potential.



Aston Martin

CAR ASTON MARTIN AMR22 ENGINE MERCEDES M13



STARTS 27 | FIRST GP NETHERLANDS 1959 | WINS 0 | POLES 0 | FASTEST LAPS 0 | 2021 7TH

With many internal changes brought about by Lawrence Stroll, will Aston Martin be able to take greater steps up the championship ladder? Let's not forget that, as Racing Point, the team was a race winner and had the third fastest car in 2020 before the aero rule tweaks hurt its Mercedes-inspired low-rake concept. That should no longer be an issue thanks to the regulation changes.

Aston Martin has a known driver pairing in Sebastian Vettel and Lance Stroll and, with many common parts from Mercedes, the team should be a lot more confident of good results once it understands the AMR22.

The launch was at least done with the actual car, complete with flashing strobe lighting and a group of the team's actual sponsors, plus sensible contributions from the drivers and technical chief Andy Green. When the car ran later that same day,

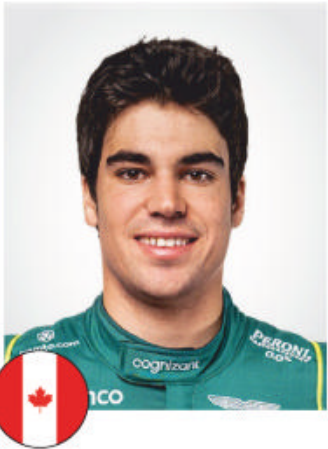
completing a shakedown at Silverstone, it did look as though it was sporting a different front-wing assembly.

Both drivers sampled the car on day one at Barcelona, with Vettel taking over for the afternoon, and he benefited from the set-up work laid down by his team-mate as he ended up sixth fastest. On the last day further progress was made and he ended up fifth quickest, enough for seventh overall from the three days. Vettel looked competitive before a mechanical problem caused him to spin and caused a fire, which he helped to put out.

In Bahrain, Aston Martin didn't seem to go for a glory run, as many teams did, so ended up quite a long way down the timesheets. It's likely that the team is more competitive than that and should once again be fighting in the midfield – though it seems we are saying that about most of the squads this season!



#5
SEBASTIAN VETTEL



#18
LANCE STROLL

12TH	2021 POSITION	13TH
34	AGE	23
279	STARTS	100
USA 2007	FIRST GP	AUSTRALIA 2017
53 WINS	BEST FINISH	3RD
57 POLES	BEST QUALIFYING	1 POLE
38	FASTEST LAPS	0

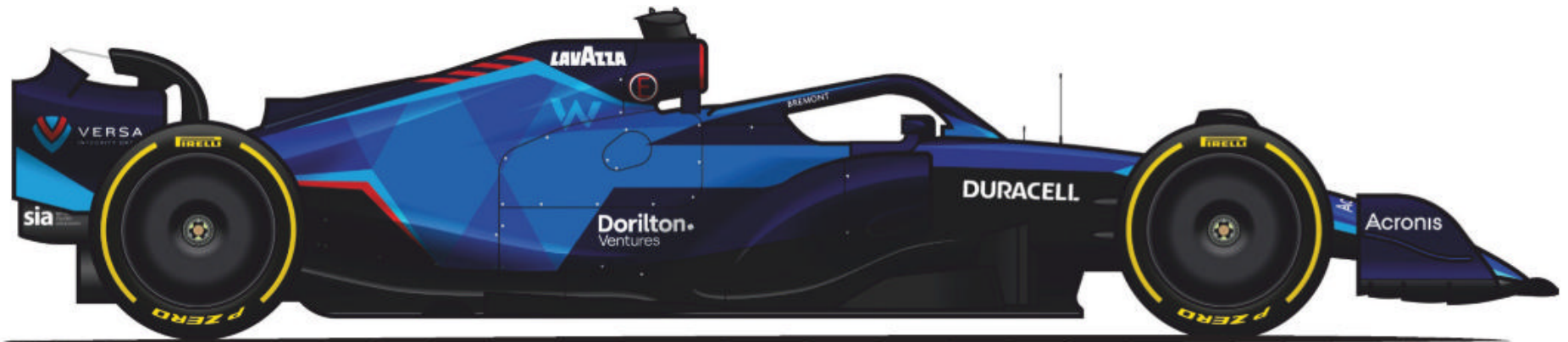


Sebastian Vettel
When Vettel joined the 'new' Aston Martin team for 2021, his stock was not high. He had been soundly beaten by Leclerc at Ferrari and the troubles of the 2020 car had left him languishing in 13th in the championship. Things didn't start well at Aston, but the commendably outspoken four-time champion did rediscover some of his form, beating Stroll and putting in strong drives in Monaco and Hungary. Can he build on that?

Lance Stroll
Stroll has now started more world championship F1 races than three-time champion Jackie Stewart and seven-time GP victor Juan Pablo Montoya. Inexperience is no longer an excuse. Stroll has his good days, such as the wet-weather pole in Turkey in 2020, and is a decent F1 driver. But he now has to step up a gear to really demonstrate that he can be part of pushing his father's team further up the field, which the new investment demands.

Williams

CAR WILLIAMS FW44 ENGINE MERCEDES M13



STARTS 766 | FIRST GP SPAIN 1977 | WINS 114 | POLES 128 | FASTEST LAPS 133 | 2021 8TH

One hopes that Nicholas Latifi and Alex Albon will be technically strong enough to push the team the way that George Russell did, otherwise making much headway will be difficult. At the launch, Latifi certainly seemed the stronger of the two, with Albon a bit tongue-tied and lost for the right words to say about the car and the coming season.

The car itself was again not the real thing, with Jost Capito saying the team wanted to get the position of stickers in the right place. A new colour scheme always gives the team fresh hope and, with a new sponsor in the form of Duracell, let's hope the team can continue the momentum it gained last year with new owner Dorilton Capital.

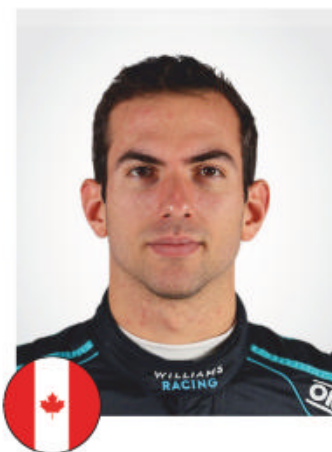
True to form, the car that ran at Barcelona had changes to both front and rear wings, the latter with just the single pillar incorporating the

DRS. Both drivers showed good form in Spain – they had a slow start on the first day, ending up 11th and 14th, but by the end of the test had progressed to eighth and ninth.

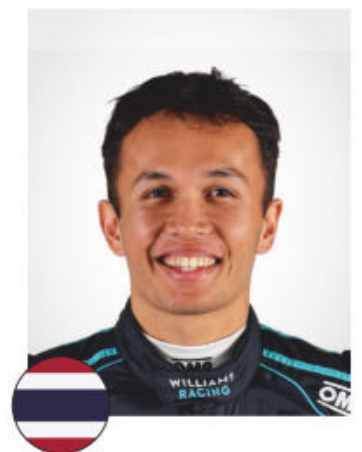
Like many drivers, Albon has stated that the current cars need a revised style of driving since they are heavier and, at the moment, less responsive in the slower-speed corners, though that is the same for everyone.

The Bahrain test was less impressive, with a spectacular brake fire and not the most impressive turn of speed. But the FW44 looks decent enough and it would be a surprise to see Williams as far back as it was during the dark days of 2019-20.

All in all, the signs are that Williams can make a good step forwards and will become a regular part of, you guessed it, the midfield battle as it continues its efforts to get back to the front. Pastor Maldonado's win in Spain – the team's 114th in F1 – will be 10 years ago in May...



#6
NICHOLAS LATIFI



#23
ALEXANDER ALBON

17TH	2021 POSITION	6TH IN DTM
26	AGE	25
39	STARTS	38
AUSTRIA 2020	FIRST GP	AUSTRALIA 2019
7TH	BEST FINISH	3RD
10TH	BEST QUALIFYING	4TH
0	FASTEST LAPS	0

Nicholas Latifi

A likeable 'pay driver', Latifi is better than most people believe, notwithstanding the Abu Dhabi GP mistake that attracted some ridiculous abuse on social media. He's not a future F1 world champion, but he won races in F2 and did a solid job learning alongside Russell during 2020 and 2021. The challenge now will be for Latifi to hold his own in the competitive midfield contests that Williams hopes it can join this season.

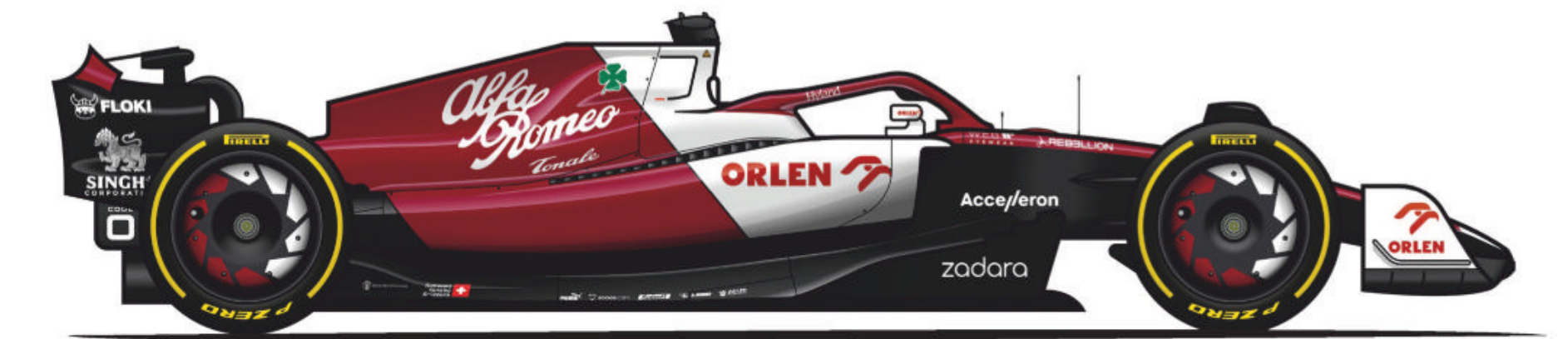
Alexander Albon

His rapid graduation from Toro Rosso to Red Bull in 2019 didn't quite work out, but big efforts behind the scenes have got Albon back into F1 after just one year away. He has big shoes to fill – Russell was clearly the team leader and helped drive the legendary squad forwards. Albon's career so far has been one of flashes of brilliance rather than consistency. Williams is in a better place than it has been for some time, and needs Albon to deliver.



Alfa Romeo

CAR ALFA ROMEO C42 ENGINE FERRARI 066/7



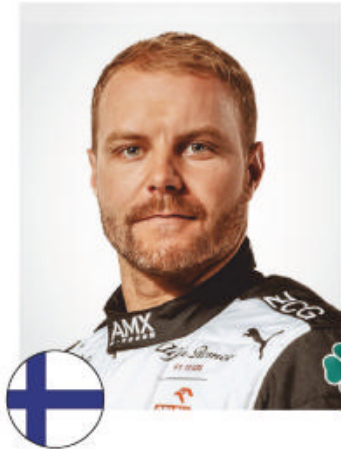
STARTS 170 | FIRST GP BRITAIN 1950 | WINS 10 | POLES 12 | FASTEST LAPS 14 | 2021 9TH

With Valtteri Bottas on board, Alfa Romeo has at least got a cool head to give stability, but is he technical enough to point the engineers in the right direction? With a rookie in the other seat, it's going to be a steep learning curve for Guanyu Zhou and the team. Even though the team ran the car at Fiorano before the Barcelona test, reliability hampered its progress in Spain. Bottas only managed to complete 23 laps on day one. Zhou certainly explored the limits of the new cars as he managed to beach his in one of Barcelona's unforgiving gravel traps and caused a red flag. Quite why the Sauber-run operation left the official launch of the new colours until the end of the first test is a mystery since the black and white camouflage did it no favours. Maybe this was something demanded by Alfa Romeo itself as it seems to work when testing new road cars.

Alfa Romeo was the only team to use its reserve driver, Robert Kubica, which perhaps was a political move, or rather a logical link to last year's car. But it would have made more sense to get star driver Bottas up to speed. Looking at the head-on image of the car turning during the wet-tyre evaluation session, it seems that the way the front suspension elements are arranged gives the outside wheel more camber change on lock. This would seem to be in line with technical editor Jake Boxall-Legge's assessment, where this also helps deflect the airflow downwards. Alfa Romeo's raw performance in Bahrain was better and indicated it perhaps won't be propping up the back of the field as first feared. Reliability, however, remained a problem. Quite apart from that being a concern in itself, it also means that the teams and drivers will still have knowledge gaps on the C42.



#24
GUANYU ZHOU



#77
VALTTERI BOTTAS

3RD IN F2	2021 POSITION	3RD
22	AGE	32
0	STARTS	178
N/A	FIRST GP	AUSTRALIA 2013
N/A	BEST FINISH	10 WINS
N/A	BEST QUALIFYING	20 POLES
N/A	FASTEST LAPS	19

Guanyu Zhou
The arrival of China's first F1 racer is a big moment, and Zhou reaches the pinnacle of the sport after finishing third in F2 last year. But it might be a tough rookie season. Alfa Romeo could find itself towards the back, and Zhou has a very experienced and proven team-mate who will be tough to beat. If Zhou can rack up the miles without too many mistakes and occasionally get near Bottas, that should be considered a decent effort.

Valtteri Bottas
Bottas has to be Alfa Romeo's best weapon for 2022. He's a proven race winner who was often close to Hamilton over a single lap, and knows how a multiple championship-winning team works. A possible snag is that racecraft hasn't always been Bottas's strong point, which could be exposed in any midfield battles, but the Finn is likely to show where the pace of the C42 really is and score points if chances arise.

Haas

CAR HAAS VF-22 ENGINE FERRARI 066/7



STARTS 122 | FIRST GP AUSTRALIA 2016 | WINS 0 | POLES 0 | FASTEST LAPS 2 | 2021 10TH

After a terrible 2021 season in which it failed to score a point, Haas will have been looking forward to this year and the new rules. Then came the Russian invasion of Ukraine.

The team understandably severed its ties with Russian sponsor Uralkali, and Nikita Mazepin lost his drive following the first test. The latter move is almost certainly a bonus, given that the experienced Kevin Magnussen is his replacement.

The Dane should also provide a more interesting benchmark for Mick Schumacher. The son of seven-time world champion Michael had a solid debut season, but it was hard to gauge exactly how good it was due to the car's lack of competitiveness and his team-mate.

Either way, much, of course, will depend on the car. With a Ferrari engine that improved so much during 2021, the team has no excuses about

power, but has it got the new aerodynamics right? It looks very much as though, with its collaboration with Ferrari, that the front suspension has been 'borrowed' from Maranello.

In a series of firsts, Haas was at the head of the queue of launches and then first onto the track at Barcelona, where it used its 100km filming day. But again, reliability hampered progress, especially on day one when, between them, the drivers racked up fewer than 50 laps. On day two Mazepin managed to string enough laps together and ended up eighth, with Schumacher in 13th.

When running consistently, the signs were positive, and Haas ended up ahead of Alfa Romeo on the Spanish timesheets.

Reliability was again suspect in Bahrain, but Magnussen's belief that the team's potential is greater than it was when he left in 2020 will be a fillip for the hard-working squad.



#20
**KEVIN
MAGNUSSEN**



#47
**MICK
SCHUMACHER**

7TH IN IMSA	2021 POSITION	19TH
29	AGE	22
119	STARTS	22
AUSTRALIA 2014	FIRST GP	BAHRAIN 2021
2ND	BEST FINISH	12TH
4TH	BEST QUALIFYING	14TH
2	FASTEST LAPS	0

Kevin Magnussen

The son of Jan Magnussen appeared to have bid farewell to F1 and Haas at the end of 2020, and was looking to a career in sportscar racing, with a Peugeot deal for when the French manufacturer's Hypercar is ready. But the fallout from Nikita Mazepin losing his seat resulted in the Dane beating Pietro Fittipaldi and Antonio Giovinazzi to the Haas slot. A known quantity, Magnussen should provide a good benchmark for Haas and his team-mate.

Mick Schumacher

Schumacher has a habit of stepping up his game in his second season in a category. He finished 12th in his rookie campaigns in both Formula 3 and F2, then took the title in each with his second effort. Nobody should expect jumps like that this year, but Schumacher will almost certainly improve and it would be great to see him fighting for points if the Haas is fast enough. Will Magnussen's arrival prove a boost to his progress or a hindrance?



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MAUGER
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IMAGES

1 BAHRAIN GP

Sakhir
20 March
UK start time: 1500

2 SAUDI ARABIAN GP

Jeddah
27 March
UK start time: 1800

3 AUSTRALIAN GP

Melbourne (right)
10 April
UK start time: 0600

4 EMILIA ROMAGNA GP

Imola
24 April
UK start time: 1400

5 MIAMI GP

Miami
8 May
UK start time: 2030

6 SPANISH GP

Barcelona
22 May
UK start time: 1400

7 MONACO GP

Monte Carlo
29 May
UK start time: 1400

8 AZERBAIJAN GP

Baku
12 June
UK start time: 1200

9 CANADIAN GP

Montreal
19 June
UK start time: 1900

10 BRITISH GP

Silverstone (above)
3 July
UK start time: 1500

11 AUSTRIAN GP

Red Bull Ring
10 July
UK start time: 1400

12 FRENCH GP

Paul Ricard
24 July
UK start time: 1400

13 HUNGARIAN GP

Hungaroring
31 July
UK start time: 1400

14 BELGIAN GP

Spa
28 August
UK start time: 1400

15 DUTCH GP

Zandvoort
4 September
UK start time: 1400

16 ITALIAN GP

Monza
11 September
UK start time: 1400

17 SINGAPORE GP

Marina Bay
2 October
UK start time: 1300

18 JAPANESE GP

Suzuka
9 October
UK start time: 0600

19 UNITED STATES GP

Austin
23 October
UK start time: 2000

20 MEXICAN GP

Mexico City
30 October
UK start time: 2000

21 SAO PAULO GP

Interlagos
13 November
UK start time: 1800

22 ABU DHABI GP

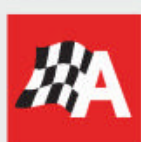
Yas Marina
20 November
UK start time: 1300

SLOXHAM/MOTORSPORT IMAGES



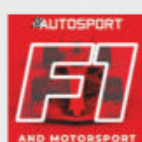
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As ever, **Autosport magazine** will run in-depth reports from every grand prix, Alex Kalinauckas and Matt Kew explaining how each race was won as well as picking out the key stories. Jake Boxall-Legge will keep his eyes on technical developments as the championship battle unfolds.

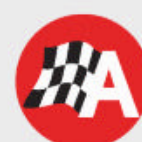


Autosport.com will provide live text commentary from every practice and qualifying session plus all the races in the 2022 Formula 1 season, alongside comprehensive

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Extra weight, carbon brakes and increased downforce were biggest changes Hauger had to adapt to during testing. Limited amount of running means the “super feeling” is still to come



F2 SEASON PREVIEW

Fjord focus

Norwegian talent Dennis Hauger has a tough act to follow in Oscar Piastri's footsteps on his graduation to F2 as the reigning F3 champion. Here's what he makes of the task ahead of him

MEGAN WHITE

PHOTOGRAPHY DUTCH PHOTO AGENCY / RED BULL CONTENT POOL

Last year, Oscar Piastri stepped up to the FIA Formula 2 Championship with Prema Racing as the reigning FIA F3 title holder, and swept to the crown. This weekend in Bahrain, 2021 F3 champion Dennis Hauger embarks on his rookie F2 season after stepping up with Prema, and...

No pressure then.

The Norwegian Red Bull Junior does indeed have big shoes to fill. But with four wins – including three from the seven feature races – under his belt from his victorious F3 campaign, he has proven his confident racecraft. His pace was rapid too, with three out of seven poles.

Now the 19-year-old faces a bigger challenge, entering a strong F2 field full of returning drivers hoping to have their taste of the title this year, including 2021's highest-placed returnee Theo Pourchaire. Some of Hauger's fellow F3 graduates will fancy their chances too, with Mercedes F1 junior Frederik Vesti and 2021 F3 runner-up Jack Doohan moving up with ART Grand Prix and Virtuosi respectively. And he faces strong competition from his fellow Red Bull juniors. Hauger is one of no fewer than five on the grid, including his new Prema team-mate Jehan Daruvala, plus Juri Vips, Liam Lawson and Ayumu Iwasa.

But Hauger is confident. “It’s good, it feels nice and I’m confident after last season,” he states. “I think I learned quite a few things about myself, and also just the confidence in driving itself. So it’s good to »

Hauger reckons the pressure of expectation is a good thing as it reflects people's belief in him





How Mercedes' star junior driver hopes to conquer F2

Frederik Vesti has high expectations on his shoulders heading into his FIA Formula 2 rookie season in 2022. The Mercedes junior makes his move up the single-seater pyramid with ART Grand Prix, which took the drivers' title in 2018 and 2019 with stablemates George Russell and Nyck de Vries.

Despite being

disappointed with his season in 2021 – he was fourth for the second consecutive year in FIA F3 – he's ready to fight back. Although he says that was "honestly not a good result", the 20-year-old Dane believes it is "the fuel on the fire right now for me, because I want to make sure that this year I'm as well prepared as possible and mentally ready for F2".

Vesti also thinks that the 2021 campaign, in which he scored one win and four other podiums after joining ART from Prema, has "really built the foundation for where I am today with ART".

"I feel like the season somehow turned me into a different driver, because with Prema the year before, I achieved massively, a lot of success, but also a lot



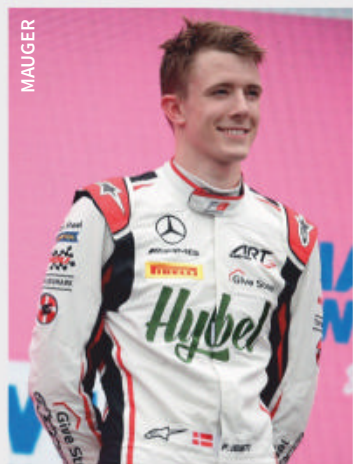
of down periods," he says. "But with ART I was able to really work on myself and the way we work together as a team. At times, obviously, we were not as successful as we'd hoped during the season. But we still did pole positions and race wins.

"The main thing I'm trying to say is that this second year with ART, actually, I feel in a better position."

Vesti's Mercedes backing is something he is clearly proud of, and he intends to take full advantage of its support in 2022, moving to Oxford to be

closer to the team's base. His focus is on having the best F2 rookie year possible with ART in a bid to one day reach F1.

He might have had an unlucky 2021 but, should the stars align for him in 2022, that dream might not be too far away.



be with Prema as well to keep that up together, something that is already strong. It’s a big learning curve with not so many test days, but I think we have done a good job on the test, just doing step by step and just keeping on developing ourselves. So yeah, I think we just have to get started now and keep learning.”

Pre-season testing in Bahrain boosted his confidence, despite the differences between F3 and F2 machinery, with carbon brakes and heavier cars the two biggest changes he has had to tackle. Although there were just two and a half days on track, with a sandstorm curtailing the final session, Hauger says that “in a general sense on that test, I think I found myself pretty comfortable in the car. I just got more and more confidence every day. Obviously, it’s quite different with the carbon brakes and the car is heavier, and the downforce is more in general. So there were quite a few differences in terms of just driving style, how to maximise that downforce, which was sort of the biggest improvement for me, especially on the soft tyres, which we only got

“It’s going to be a long season – 14 countries – so we have to keep building and keep pushing”

two sets from the test. I didn’t really get like a super feeling of it yet, so I think that’s something to build upon. I just have to keep working on that.”

Before Piastri’s runaway victory in 2021, the last rookie to take the F2 title was George Russell in 2018. Like Hauger, he had claimed the crown in the F2 feeder series (then known as GP3) the previous year. Charles Leclerc had completed the same feat in 2017, claiming F2 honours as the reigning GP3 champion.

Hauger acknowledges the challenges he faces as a rookie, but he is determined to emulate Leclerc and Russell – and Piastri – by continuing his winning streak. “In the end, I go in as a rookie, so I think I just have to build everything up,” he reflects. “And maybe there’s a bit of extra pressure that people, you know, look at me a bit extra, but that’s a good thing that they think I have the abilities to do it. So I just have to see it for the positive things and focus on myself and my own driving. It’s just about keeping calm.”

Things haven’t always been so rosy for Hauger. After a torrid 2020, when he graduated to F3 with Hitech Grand Prix as reigning Italian Formula 4 champion and finished a lowly 17th in the points, the move to Prema for 2021 improved his driving and confidence. Spurred on by that adversity, he took the title while settling in well at the Italian squad. He says Prema is a “great team and the teamwork we’ve had has been good”, adding: “I don’t think what Oscar did has happened a lot of times, obviously. But it sets me up for a good position to start the season, so I just have to keep working with them.”

Hauger adds that he learned “quite a few things from last season, in terms of just how to be in the championship and fight for that win. And I think that set me off mentally, in a good way. So definitely some things to bring from that season, and also some things to learn and just keep moving forward and keep working on it. It’s going to be a long season – 14 countries – so you know, we have to keep building and keep pushing and not settling for anything. The main thing is to just always aim for goals.”

The winning track record of Prema will likely boost Hauger’s confidence. Since its step up to GP2/F2 level in 2016, it has run four of the six drivers’ champions – Pierre Gasly, Leclerc, Mick Schumacher and Piastri – and claimed three teams’ crowns. Other Prema alumni include Esteban Ocon, Guanyu Zhou, Lance Stroll and Nicholas Latifi. So Hauger is in good company.

As a bonus, he will benefit not only from the experience of the team, but also of Daruvala, who enters his third season in the series after two years at Carlin. “There’s definitely things to take from him,” Hauger says. “I mean, he’s a nice guy in general, as well. So it’s good to work with an experienced driver who has been through it and going into the third

ENTRY LIST

NO	DRIVER	TEAM
1	Dennis Hauger (NOR)	Prema Racing
2	Jehan Daruvala (IND)	Prema Racing
3	Jack Doohan (AUS)	Virtuosi Racing
4	Marino Sato (JPN)	Virtuosi Racing
5	Liam Lawson (NZL)	Carlin
6	Logan Sargeant (USA)	Carlin
7	Marcus Armstrong (NZL)	Hitech Grand Prix
8	Juri Vips (EST)	Hitech Grand Prix
9	Frederik Vesti (DNK)	ART Grand Prix
10	Theo Pourchaire (FRA)	ART Grand Prix
11	Felipe Drugovich (BRA)	MP Motorsport
12	Clement Novalak (GBR)	MP Motorsport
14	Olli Caldwell (GBR)	Campos Racing
15	Ralph Boschung (CHE)	Campos Racing
16	Roy Nissany (ISR)	DAMS
17	Ayumu Iwasa (JPN)	DAMS
20	Richard Verschoor (NLD)	Trident
21	Calan Williams (AUS)	Trident
22	Enzo Fittipaldi (BRA)	Charouz Racing System
23	Cem Bolukbasi (TUR)	Charouz Racing System
24	Jake Hughes (GBR)	Van Amersfoort Racing
25	Amaury Cordeel (BEL)	Van Amersfoort Racing

CALENDAR

RD	VENUE	DATE
1	Sakhir (BHR)	19-20 March
2	Jeddah (SAU)	26-27 March
3	Imola (ITA)	23-24 April
4	Barcelona (ESP)	21-22 May
5	Monte Carlo (MCO)	28-29 May
6	Baku (AZE)	11-12 June
7	Silverstone (GBR)	2-3 July
8	Red Bull Ring (AUT)	9-10 July
9	Hungaroring (HUN)	30-31 July
10	Spa (BEL)	27-28 August
11	Zandvoort (NLD)	3-4 September
12	Monza (ITA)	10-11 September
13	TBC	24-25 September
14	Yas Marina (ARE)	19-20 November

season. He’s gonna be a hard team-mate, but also a good guy to learn from, especially in the beginning. So I think it’s a good thing.”

Though he is reluctant to set goals, Hauger is clear of his intentions for this year: “Obviously, I’m a racing driver, and I’m here to win, so that’s always my goal. But I think, for my mindset now, it’s just about taking one step at a time and not worry too much about anything, just taking it race by race and just trying to learn as much as possible, especially in the beginning. Then keep developing and I hope it will combine itself in the end.” ❄️



Clockwise from top left: Bearman felt at home straight away at Prema; O'Sullivan remains at Carlin for his graduation to F3; returnee Edgar aims to bounce back with his new team Trident

British racers taking on the F3 challenge

Zak O'Sullivan, Ollie Bearman and Jonny Edgar are all proteges of F1 teams, and are talents to watch as the season kicks off this weekend

MEGAN WHITE

The FIA Formula 3 Championship returns to action this weekend in Bahrain, and for 2022 it's back racing alongside Formula 2 at the same events, with a nine-round calendar set for the season.

Last year, honours were split among two Italian teams. Red Bull Junior Dennis Hauger clinched the drivers' title for Prema Racing, leading from the off in supreme style to beat Jack Doohan. But it was Doohan's Trident squad that snatched the teams' championship away from the previously dominant Prema squad by just four points. With Hauger and Doohan among those moving up to Formula 2, new challengers will emerge this season. Among them are three Britons who all made the finals of the Aston Martin Autosport BRDC Young Driver of the Year Award in 2021.

With a brilliant season on the UK scene in 2021 behind him, Zak O'Sullivan looks set to be one of F3's most promising rookies this year. The 17-year-old claimed seven wins on his way to the GB3 title last year and, since making his car racing debut in 2019, has never ended a season lower than second in the overall standings – he finished as runner-up in the 2019 Ginetta Junior Championship and the 2020 British Formula 4 Championship. Days after being named as a member of the Williams Driver Academy, he was announced as the Aston Martin Autosport BRDC winner. Not a bad way to celebrate your birthday... And in between, he was confirmed as remaining with

“As long as I work on myself and improve all aspects, I can make the most out of the package”

Carlin for a third year for his graduation to F3.

While Carlin has been the place to be in other categories, the British operation has struggled in F3. It finished last in the F3 teams' standings in 2021, without a single point in the second half of the season, and 2020 wasn't much better – Carlin was eighth out of the 10 teams. But O'Sullivan remains positive that the team's fortunes can change. Although he is reluctant to set any goals for the season, he is excited about his prospects.

“It's a good test of team and driver,” he reckons. “To be honest, like most other years, it'd be very difficult to put a number on it, especially due to Carlin's form last year. We'll see how we do this year, but I think as long as I work on myself and really improve all aspects, I can make the most out of the package. We have got round one coming up and I can say more from there, and I think hopefully the results should follow.”

Staying with a team does bring its benefits. O'Sullivan is still working with the same engineer – Anthony Grenier – he's had since his British F4 days, while other members of the squad moving up alongside him bring “familiarity and the trust factor”. In the meantime, he is feeling “as confident as I can be, obviously I'm quite confident in my own ability”. With such a strong track record, why wouldn't he be?

At Prema, Ollie Bearman joins the F3 paddock as a new member of the Ferrari Driver Academy, after defeating the squad to win the Italian and German Formula 4 championships last season. As you might expect, Prema has assembled a strong line-up, with 16-year-old Bearman partnering Ferrari stablemate Arthur Leclerc and Red Bull Junior Jak Crawford. Both are second-year F3 drivers, with Leclerc remaining at Prema after two reversed-grid wins in 2021, and Crawford moving over from Hitech, where he scored one podium. »



Leclerc's second charge



Leclerc has to up his game from last year

GASPEROTTI/MOTORSPORT IMAGES

Arthur Leclerc has a lot of expectation upon his shoulders entering the 2022 FIA Formula 3 season.

The younger brother of Ferrari Formula 1 driver Charles Leclerc will race for Prema Racing this year as the team's only returning driver, alongside fellow second-year F3 racer Jak Crawford and rookie Ollie Bearman. Last season he finished 10th in the points, with two reversed-grid race wins and a best feature race result of

second in Hungary. That was below expectations for a Ferrari Driver Academy prospect.

Searching for a breakthrough, the Monegasque competed in the Formula Regional Asian Championship over the winter break in a bid to hone his racecraft. And it worked, with Leclerc claiming the title thanks to four wins and five further podiums across the 15 races held in Dubai and Abu Dhabi. Although that was with the Mumbai Falcons team, that squad was very much operated by Prema.

"We did a really good job," he smiles. "It was really the goal of this championship to get ready for Formula 3, to work on our weaknesses last year. So yeah, it was a really good season to train, and now we need to reset our mind because now it's a new championship."

Reflecting on 2021, he says he lacked consistency and made too many mistakes, something it's clear he overcame in the winter break. "I don't think it was a good season, definitely," he admits. "At the end, it's not reflecting what we... I will not say it's not what we deserved, we finished 10th and you deserve what you get, but it's not reflecting our pace or speed during the championship. I think we were a lot faster than this. But yeah, I did some mistakes in the season. The luck has not been every time on my side as well."

It's clear that the title has put a spring back in Leclerc's step, giving him a much-needed confidence boost ahead of his return to F3. With new team-mates and a year of experience behind him, he hopes to "just continue the good work, keep doing what we did this winter season".



FERRARI

Bearman says he felt at home "straight away" at Prema, and that he's moved to Italy to be closer to its base. But he admits that from F4 it's a "big, big step and a lot of pressure," and adds: "Everyone has super-high expectations of me, I'm sure. So, obviously to fulfil them, it's not easy. And, yeah, in that sense, there is some pressure."

"I think it's important to be realistic. It's tough to really make predictions, but the first half of the season, I think I need to really take it more as a learning curve, especially at least the first two or three races, take it as just keep learning. And then the second half of the season is where it really starts to count, and that's where the difference can be made, I think."

A key difference to Bearman's campaign this year will be a lack of testing. F3 has far stricter regulations around running than F4, and this is something that can catch out those who make the same leap. Hauger, for example, claimed 17th place in the 2020 F3 rankings on his graduation as Italian F4 champion. But Essex racer Bearman says this can be remedied with additional time on Prema's "super-advanced" simulator and relying on the team's "really good references from the past three years" — it has, after all, run all three FIA F3 drivers' champions, with Robert Shwartzman in 2019 and Alpine F1 reserve Oscar Piastri in 2020 coming before Hauger.

In order to deal with the pressure that comes with such high expectations, Bearman is open about his work with a sports psychologist as part of Ferrari's junior programme, and says it has been "quite helpful just to kind of look at everything. It's tough to really see gains in your mental state — you go to the gym, and you can see yourself getting stronger, but you can't see your brain getting stronger. You have to really wait until the time comes where you struggle, and then you're just making sure that these things don't go wrong. You can't really tell until that happens, but we've worked hard at it, so I think should it happen, I have the resources and the provisions to overcome it."

Jonny Edgar, who is about to embark on his second season in the series, finds himself in a different predicament. The 2020

"Compared to any team I've been in they definitely do more with the drivers to prepare us"



Edgar's backer
Red Bull picked his
new berth at Trident



Bearman acknowledges steep learning curve in the step up to F3

German F4 champion ran with Carlin last year and finished down in 18th in the standings. Now he's joined reigning champion team Trident, and the 18-year-old is looking to bounce back in 2022 after a "difficult year, struggled all year really", although he admits that "some weekends were better than others".

The Cumbrian, who adds that this is "most likely the last year I'll be doing F3", is impressed with what he's seen of Trident so far. "Compared to any team I've been in they definitely do more with the drivers to prepare us, which I think especially with F3, with how limited the track time is, it's helpful," he points out.

Edgar has been a Red Bull Junior since 2017, before his move from karting to single-seaters. It was Red Bull that chose his seat at Trident, while he also takes advantage of the racing simulator at its Austrian headquarters. His aim is to be "in the top three at least" this year, before hoping for a move up to FIA Formula 2 in 2023.

"Obviously, the second year, there's a few things – being on the pace quicker, with more confidence in the car, and just knowing that the car's gonna be getting closer to the limit sooner," he states. "Everyone has the same perception, it's always gonna be easier and returning to some tracks will help.

"And also just the whole format of the weekend, going from practice to quali, kind of improving on the things you have to improve without many laps. You need to focus on the weekend, but that will be a lot easier to do in the second year."

The young Brits might all look like promising contenders, but they'll have other drivers to look out for. Reigning Formula Regional European champion Gregoire Saucy enters the fold off the back of a brilliant 2021, and remains with ART Grand Prix, while a fourth Briton, Ayrton Simmons, is keen to make his mark at Charouz Racing System after finishing as 2021

GB3 runner-up to O'Sullivan.

Isack Hadjar has joined the Red Bull stable fresh from his race-winning rookie FRegional campaign, and topped two days of the Bahrain pre-season test for Hitech Grand Prix. Barbadian Zane Maloney, who was Hadjar's FRegional team-mate last year and was also a race winner, lines up alongside Edgar at Trident and headed the first day of testing.

Meanwhile, there are established talents such as Victor Martins, who finished fifth last year with MP Motorsport and is the highest-placed returning driver – and has reverted to his spiritual home of ART. To him, you can add his 2021 team-mate, the Nicolas Todt-managed Caio Collet who remains at MP, as well as Leclerc.

Anyone fancy predicting a poleman or race winner for this weekend? 🏆



DUTCH PHOTOAGENCY/RED BULL CONTENT POOL

ENTRY LIST

NO	DRIVER	TEAM
1	Jonny Edgar (GBR)	Trident
2	Roman Stanek (CZE)	Trident
3	Zane Maloney (BRB)	Trident
4	Ollie Bearman (GBR)	Prema Racing
5	Arthur Leclerc (MCO)	Prema Racing
6	Jak Crawford (USA)	Prema Racing
7	Victor Martins (FRA)	ART Grand Prix
8	Gregoire Saucy (CHE)	ART Grand Prix
9	Juan Manuel Correa (USA)	ART Grand Prix
10	Caio Collet (BRA)	MP Motorsport
11	TBA	MP Motorsport
12	Kush Maini (IND)	MP Motorsport
14	Laszlo Toth (HUN)	Charouz Racing System
15	Ayrton Simmons (GBR)	Charouz Racing System
16	Francesco Pizzi (ITA)	Charouz Racing System
17	Kaylen Frederick (USA)	Hitech Grand Prix
18	Isack Hadjar (FRA)	Hitech Grand Prix
19	Nazim Azman (MYS)	Hitech Grand Prix
20	David Vidales (ESP)	Campos Racing
21	Hunter Yeany (USA)	Campos Racing
22	Pepe Marti (ESP)	Campos Racing
23	Ido Cohen (ISR)	Jenzer Motorsport
24	Niko Kari (FIN)	Jenzer Motorsport
25	William Alatalo (FIN)	Jenzer Motorsport
26	Zak O'Sullivan (GBR)	Carlin
27	Brad Benavides (USA)	Carlin
28	Enzo Trulli (ITA)	Carlin
29	Franco Colapinto (ARG)	Van Amersfoort Racing
30	Rafael Villagomez (MEX)	Van Amersfoort Racing
31	Reece Ushijima (USA)	Van Amersfoort Racing

CALENDAR

RD	VENUE	DATE
1	Sakhir (BHR)	19-20 March
2	Imola (ITA)	23-24 April
3	Barcelona (ESP)	21-22 May
4	Silverstone (GBR)	2-3 July
5	Red Bull Ring (AUT)	9-10 July
6	Hungaroring (HUN)	30-31 July
7	Spa (BEL)	27-28 August
8	Zandvoort (NLD)	3-4 September
9	Monza (ITA)	10-11 September



The Penske ORECA at speed during the WEC Prologue last weekend at Sebring, and (above) carrying the giveaway national flag of its entrant



The prototype for a prototype

Penske is gearing up for its role in running Porsche's LMDh programme with an LMP2 campaign. That makes the class even more fiercely competitive

GARY WATKINS

PHOTOGRAPHY  **motorsport**
IMAGES



The announcement last May by Porsche that Team Penske will run the factory cars in the World Endurance Championship, as well the IMSA SportsCar Championship, on the arrival of its new LMDh prototype in 2023 was nothing short of momentous. It meant the US giant would be ending long absences from not only world championship motor racing but also the Le Mans 24 Hours. Only those historic returns won't be made next year: they are happening right now in 2022.

Penske will join the WEC – and therefore go back to Le Mans – this season with what might be described as a lead-in programme, one that tells you just how serious, diligent and, perhaps, humble the team is. A Team Penske-run car, an off-the-shelf ORECA-Gibson 07 LMP2, will grace a world championship grid this Friday at the Sebring 1000 Miles WEC opener, a first since it called time on its Formula 1 programme at the end of 1976.

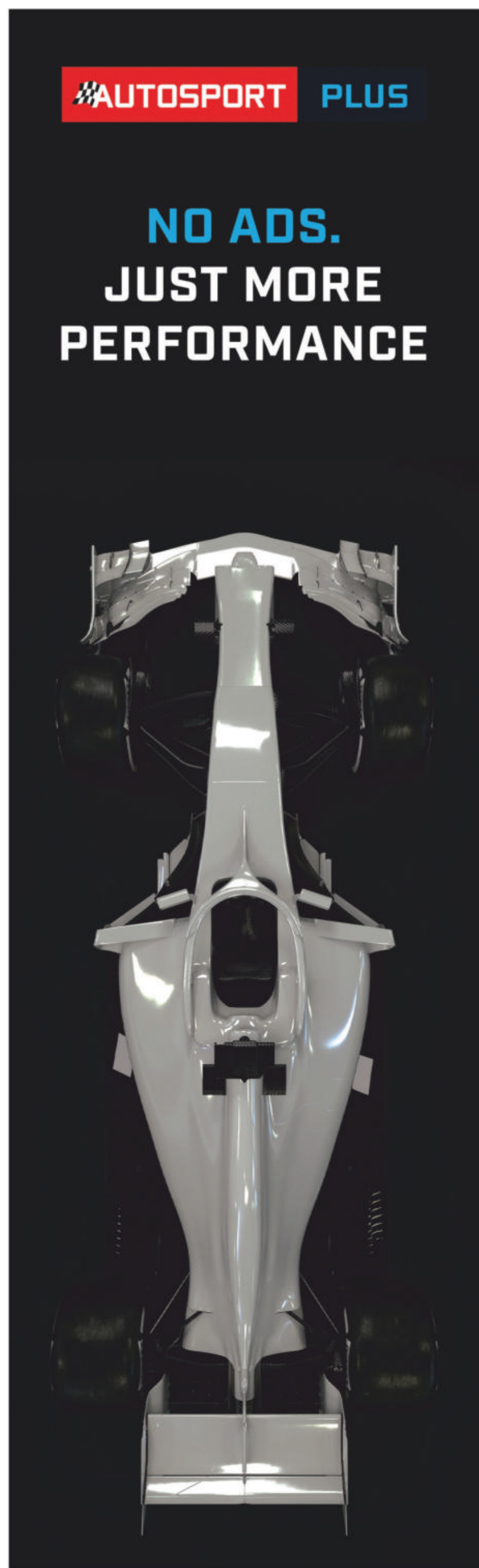
Then, come the second weekend of June, the car shared by two new Porsche factory drivers (Felipe Nasr and Dane Cameron) and one old (Emmanuel Collard) will be back at the Circuit de la Sarthe after an even longer absence. It's 51 years since the Sunoco-liveried Ferrari 512M driven by Mark Donohue and David Hobbs graced the grid.

“Our group knows how to go racing and to be successful, but there is a lot to learn”

Taking part in the WEC this year was “absolutely necessary”, says Jonathan Diuguid, a veteran of the team's Porsche RS Spyder LMP2 and Acura Daytona Prototype international programmes in North America, and now managing director of a new entity called Porsche Penske Motorsport that will run the LMDh on the world stage and in North America. The WEC attack is about learning the intricacies of a new series and moulding a team as development of the Porsche ramps up through to its debut next year.

“Obviously our group knows how to go racing and to be successful, but there is a lot to learn outside of making the car competitive,” says Diuguid. That's not just about gaining experience of tracks “we've never been to or haven't been to for quite a long time”, he explains, but also “understanding the differences in how the races are run between IMSA and the WEC”.

“One of the main focus points is the difference in race strategy »



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Penske's last start in a world championship race was with John Watson in 1976 Japanese GP

between the two championships," points out Diuguid in reference to IMSA's sometimes trigger-happy approach to deploying the safety car and WEC's Full Course Yellow virtual safety cars and, at Le Mans, the slow zones where speed is limited to 80km/h (50mph) within defined points.

"The FIA takes an approach to try to keep the race as fair as possible, so there are a lot of virtual safety cars and things like that to maintain the distances between the cars," he observes. "In IMSA you have regular reset points where the cars compact up and you can gain large amounts of time or even laps, and do some strategy plays. The strategy approaches are quite different and the only way to learn about them is to experience them. We'll probably make mistakes, but we will learn from them to understand how the different rules and regulations apply."

That's why Penske is undertaking a full WEC campaign with its ORECA. Diuguid admits that a limited programme focused on Le Mans was discussed, though rapidly discounted. "It became clear quite quickly that it wasn't going to be an option; we've seen the WEC making an upturn and entries are hard to come by," he explains. "A full season was aligned with the goals of the programme. It is more racing on top of LMDh testing, but all of that goes to making sure we as a team are fully prepared for 2023."

That team will end up as a mixture of staff carried over from the campaigns with the Acura in 2018-20, which yielded the DPi title in the second and last of those years, and new recruits from Europe. Diuguid is promising "a one-team approach" across the European and North American arms of Porsche Penske Motorsport. "Information transfer is going to be quite open and there is going to be lot of cross-pollination," he says. "In the LMDh testing phase we already have positions repeated, two mechanics and two engineers in the same position."

This year is going to be a busy one for Penske's new sportscar



Diuguid is heading up Penske's attack on the WEC



set-up as it ramps up the LMDh test programme that kicked off in earnest at Barcelona in February, and races in the WEC. The ORECA will arrive in April at a new facility in Mannheim, 80 or so miles north of Porsche Motorsport HQ in Weissach. Diuguid then expects the team to be on track every couple of weeks either racing the ORECA or testing the LMDh, with that development programme expanding to North America in the summer.

A desire to be on track as much as possible explains the arguably left-field choice of Collard as the silver-rated driver alongside Nasr and Cameron, the first drivers announced by Porsche last December for the LMDh programme. Penske has opted for an old hand rather than a young gun, though the supply of the latter has been diminished for this year with a tightening up in the way the FIA's driver categorisation rules are applied.

It opted for a known quantity with recent WEC experience: Collard was GTE Am champion in 2016 and 2019-20. He owes his silver status to the downgrade for which he was eligible upon passing 50 last year, and has had multiple stints racing factory Porsches, including with Penske. His appearances with the team in the American Le Mans Series with the RS Spyder included an overall victory in the 2008 Sebring 12 Hours together with Romain Dumas and Timo Bernhard ahead of the Audi and Peugeot LMP1 turbodiesels.

"The approach goes back to the goals of the programme," explains Diuguid of the choice for the third driver. "We want to be successful, but at the same time we want to learn by participating in as much of each of the races as possible. 'Manu' comes with a wealth of experience. He understands the championship and knows when to take risks and when not to take risks."

Collard tested the Penske ORECA at Sebring in January, though Diuguid insists that it wasn't a try-out to see if a veteran with 24 starts at Le Mans to his name still had it. "You have to create the right environment: for him to be a successful part of our team we had to give him plenty of seat time," he says. "Although Manu lacks prototype experience over the past three or four years, he picked it up quite quickly."

Diuguid stresses that the goals for the WEC campaign include winning as well as learning. "We are going to the races with the intention to be competitive and have the chance to win," he says. "Penske doesn't enter any championship or any race without that mentality, but we do respect the teams that have competed in the championship for quite a long time. We are not naive or over-confident going into this championship."

Diuguid points out that Penske is beginning its campaign with a track at Sebring where the team "has a tremendous amount of experience". That means it is going in "with the intention to be competitive and to have the chance to win. It is a learning experience, but if you don't go in with the aim of winning, you're not going to learn much." >>





Glickenhause is the only realistic full-season Toyota rival

Hypercar

Can anyone stop Toyota from sweeping to a fourth straight World Endurance Championship crown? That’s a question that has to be asked in the face of a Hypercar class entry that will remain slim in the extreme until Peugeot arrives in the series some time after Le Mans. The answer to that one lies with the chances of Glickenhause taking the fight to the reigning champion.

The American entrant’s solo Pipo-engined 007 LMH entered for the full season is one of two cars that will take on the Toyota GR010 HYBRIDS across all six races. The Alpine-Gibson A480 is a grandfathered LMP1 machine and, under the Balance of Performance that has been part of the top class of the WEC since 2021, should be half a yard behind the Le Mans Hypercars on outright pace.

Glickenhause is promising it will be pitching up with a much-improved car, to be driven at Sebring by Romain Dumas, Olivier Pla

Penske’s major rivals



WRT

WRT

Reigning P2 champion defends its title with a two-car squad. Rene Rast bolsters the lead crew alongside fellow Audi factory driver Robin Frijns, although silver Sean Gelael, runner-up last year with Jota, isn’t a like-for-like replacement for Charles Milesi. Ferdinand Habsburg moves over to what looks on paper to be a second-string car to share with Norman Nato and Rui Andrade.

Prema Powerteam

The Italian single-seater powerhouse takes in its first sportscar campaign with what might just be the strongest line-up. European Le Mans Series champions Robert Kubica and Louis Deletraz



Prema Powerteam

are joined by Lorenzo Colombo, a race winner in FIA Formula 3 last year but still silver-rated.

United Autosports

The British squad has put together two strong crews for its first multi-car World Endurance Championship attack as it attempts to regain the title it won in 2019-20. Josh Pierson, at just 16, is teamed with Oliver Jarvis and Alex Lynn, who is replaced by Paul di Resta this weekend. Former champs Filipe Albuquerque and Phil Hanson are joined by team returnee Will Owen.

Jota

Will Stevens, a multiple winner with the team in

2016-20, comes in alongside Antonio Felix da Costa and Roberto Gonzalez in the car that finished third last year. Fewer ‘fake’ silvers should work in their favour. The line-up of Ed Jones, Jonathan Aberdein and Oliver Rasmussen could be the sleeper in the pack.

Vector Sport

The line-up put together by an all-new team based at Silverstone underlines its ambitions. Audi man Nico Muller is paired with Sebastien Bourdais and Ryan Cullen for the season, with Mike Rockenfeller coming in for the Frenchman first time out at Sebring.



United Autosports



Jota



Vector Sport

and Ryan Briscoe, after showing promise without threatening Toyota across the three races of its debut season. “We had a clear view of the limitations of the car after Le Mans,” says Luca Ciano, who heads up the race programme at Podium Advanced Technologies in Italy. “I think we will have a much stronger package this year.”

He stresses that the focus, within the limits laid down by the car’s homologation, has been on reliability of the non-hybrid 007, although one development allowed in the rules for this year should offer a significant gain: fly-by-wire brake control is now permitted at driven wheels at the rear. “With the simulation that we have done, we can see that we can have much better brake bias control in different sections of the track and in different sections of each corner,” Ciano explains. “It offers interesting potential in terms of outright speed and our pace over a stint on the tyres.”

The other major regulatory change for 2022 affects Toyota. The minimum speed at which LMH hybrids can deploy power through the front wheels has been moved from the technical regulations to the BoP. This means it can change from track to track and, when the four-wheel-drive Peugeot arrives, car to car. For Sebring, this minimum has been set for the Toyota at 190km/h in all conditions, which compares to 120km/h when the car was on slick tyres and 150 when on grooved rubber last year. Toyota has yet to reveal what effect that will have on the performance of the GR010, but it is clear that its decision to switch to wider rear tyres and narrow fronts is related to the rule shift.

Ciano is confident that the BoP will give Glickenhaus a shot this year. “We have had a year of good processes to make the category a real BoP category where the performance is balanced between the different concepts and different cars,” he says. “If we do our job we can be close to our competitors, but at the end of the day results are not only about pure performance.”

GTE Pro

Corvette Racing has been a fixture at Le Mans since 2000, only missing the big race in 2020 as a result of the COVID pandemic. Yet this will be the first time it has contested a full season in the WEC. It’s taking on a pair of factory cars from each of Ferrari and Porsche in GTE Pro with a lone Chevrolet Corvette C8.R.

Chevrolet has opted for a split programme: Nick Tandy and Tommy Milner are racing one car in the WEC, while Antonio Garcia and Jordan Taylor take part in the IMSA SportsCar Championship with another. The new strategy can be explained by the rules shift over in IMSA. GT Le Mans for GTE machinery is no more and has been replaced by GT Daytona Pro for GT3 cars, as well as a C8.R

CALENDAR

RD	VENUE	DATE
1	Sebring 1000 Miles (USA)	18 March
2	Spa 6 Hours (BEL)	7 May
3	Le Mans 24 Hours (FRA)	11-12 June
4	Monza 6 Hours (ITA)	10 July
5	Fuji 6 Hours (JPN)	11 September
6	Bahrain 8 Hours (BHR)	12 November

in modified form to level up its performance with the new breed.

It’s easy to explain the strategy, says Tandy, who is returning to the WEC for a full campaign for the first time since his year in the Porsche 919 Hybrid LMP1 in 2017. “Le Mans is so important to the Corvette programme and it would be difficult if we were only doing that one race in full GTE trim and on the confidential Michelins [rather than the GTD control tyres],” he says. “This gives us the best possible chance at Le Mans.”

Corvette Racing has turned out in the odd WEC race outside of Le Mans in the past; four times since 2018. The C8.R made two of those starts – at Austin in 2020 and Spa last year – without distinction. The consensus was that the car was given a conservative BoP as the rulemakers felt their way with the new mid-engined machine.

Tandy agrees, pointing out that the Corvette was competitive by the time it got to Le Mans for its belated debut in the big race. He suggests that it’s in the interests of the powers that be to get the BoP right. “At the end of day the championship needs good racing and the BoP process is there to create that,” he says. “We are very hopeful that, between the three manufacturers, it’s going to be close all year.”

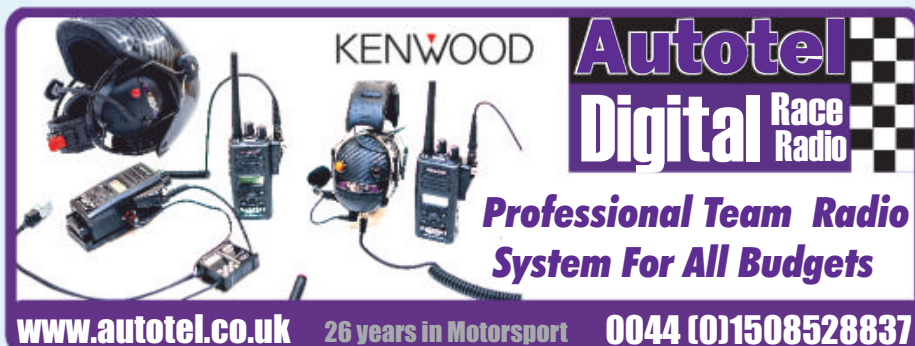
The BoP published in advance of last weekend’s pre-season prologue test at Sebring didn’t appear to be in Corvette’s favour. The C8.R was given an engine air-restrictor smaller in diameter than at Spa last year. That can be interpreted as a reflection of the Chevy’s pace at the 24 Hours, when it was all but a match for Le Mans winner Ferrari, which received a draconian BoP hit next time out in Bahrain.

Tandy is confident that Corvette Racing can make a running start at Sebring this weekend. The quirky Florida track, he points out, is the team’s home from home. “The team has 20 years of experience there and it’s the place we do a lot of testing,” he says. “It’s our back yard.”



Corvette takes on
Ferrari (and Porsche)
in full WEC campaign

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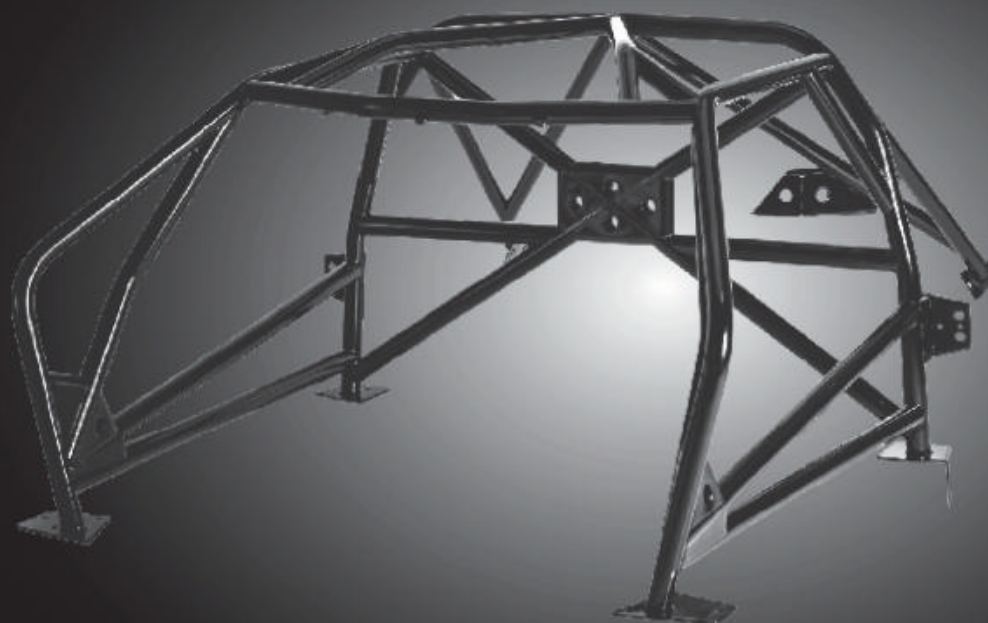
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Coroner rules marshal's death was an accident

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Death of marshal ruled an accident

BRANDS HATCH

The death of marshal Robert Foote at Brands Hatch last year has been ruled an accident by a coroner's inquest.

The 67-year-old was positioned at marshal post two on the approach to Paddock Hill Bend on 31 July 2021 during a British Automobile Racing Club meeting at the Kent venue. Simon Beament's Ford Escort RS2000 made contact with another car down the start-finish straight in the Pre-93 and Pre-03 Touring Car race, and was sent into the barrier on the outside of the circuit before flipping over into the marshal's post.

In a statement at the inquest held last Wednesday at Maidstone's County Hall, Beament said: "As I caught up with a black BMW car on the track, I remember feeling a tap on the right side of my car. I then felt a second tap and a third tap.

"My car did not change line, but it

then went into the barrier and rolled two or three times. As I took my hands off the wheel after the crash, I felt a bone coming through my left leg."

The race was immediately stopped and Beament was taken to hospital with a broken leg, while emergency services worked on Foote before he was pronounced dead at the scene at 2:48pm. A pathology report determined that the cause of death was "head injuries" and that this was "consistent with severe forceful impact to the head".

Paul Burlison, environmental health officer for Sevenoaks District Council, revealed that Motorsport UK carried out a routine inspection on the track in February 2021 and reported no issues. But it was noted that the way the car came down onto marshal post two "should not have happened". Burlison detailed how the Armco barrier should "give" when a car comes into contact with it at speed, but in this case the car rode on the top of the barrier.

Motorsport UK safety executive Daniel Carter carried out an inspection of the track days after the incident and found that the barriers were fixed by timber oak posts at the MotorSport Vision venue.

New guidelines were introduced in 2019 for all new circuits stipulating that Armco should be mounted to steel posts. Brands Hatch has installed metal posts for the past 10 years under a rolling programme, where timber posts needed to be replaced.

Steel posts and additional barriers such as tyres are also required in areas presenting a "higher risk" such as head-on positions at corners. It was said to have been "unusual"

for this type of crash to occur at marshal post two, and steel posts were not required under the applicable guidelines on straights, although were present in the Armco sections adjacent to the marshal post.

Jamie Champkin, Motorsport UK's regulatory counsel, revealed that since the incident occurred, approximately £500,000 is being invested in a programme with venues and others in rolling out LED signage at major circuits across the country in order to "enhance the safety of marshals".

Having considered the evidence, senior coroner Roger Hatch concluded that Foote's death was "caused by an accident".

Foote had been the Mayor of Epsom and Ewell in Surrey in 2014 and 2015, as well as being an aircraft engineer, qualified pilot, skilled mechanic and coach driver.

Brian Angus, chair of the Surrey Mayors' Association, said: "It was just amazing what he did do. I remember when he drove us on a coach trip to Bruges. The fact that he was the mayor and a coach driver was just hard to compute. He had a scuba kit, loved sailing. He really was just like a James Bond character."

Hundreds of tributes were made following Foote's death, including from Formula 1 drivers Lewis Hamilton and George Russell, while a JustGiving page raised more than £59,000.

MSV chief executive Jonathan Palmer said: "In conjunction with Motorsport UK and the ACU, MSV constantly reviews track safety and implements enhancements where appropriate, and as part of that process we learn from incidents like this tragic accident."

STEFAN MACKLEY & ADAM MCGROARTY





White (left) moves into Porsches this season alongside Smalley

FF1600 champ White joins Redline Racing

PORSCHE CARRERA CUP GB

Walter Hayes Trophy winner Oliver White will make his long-awaited graduation from Formula Ford and progress into the Porsche Carrera Cup GB this year with top squad Redline Racing.

The reigning Castle Combe FF1600 champion has been competing in the Kent-powered cars for a decade, and now a deal has been put together with the help of fellow FF1600 racer Chris Hodgen for White to drive a second Duckhams-backed Porsche alongside Junior Adam Smalley.

Hodgen was instrumental in oil company Duckhams returning to motorsport last year, when it supported Carrera Cup champion Dan Cammish's title-winning comeback to the series.

White says the deal came about after speaking to Hodgen about Porsches at last year's Formula Ford Festival. "I said to him that I would love to have a go in one and he said, 'You could do that next week with the taster day!'" said White, who won the 2020 edition of the WHT.

He sampled the Carrera Cup machine at Silverstone in November, swapping to the Porsche from pre-Hayes testing in his Medina Formula Ford. "I've never experienced a car with that much power before," the 29-year-old said. "I pulled out of the pits and it literally took my breath away. It's completely different to what I'm used to, but I loved it and I was determined to get back in the car. I did a test day at Portimao

in December and that went well.

"The chance to race a Porsche and step up from Formula Ford is a dream come true. I've had some great results and winning the Walter Hayes Trophy was a highlight. But I've wanted to move on for a while and I've been waiting for the right opportunity."

White is now seeking to get fully up to speed with the car, and feels that being alongside reigning Ginetta GT4 Supercup champion Smalley will help with that process. White says it is difficult to know what to expect this year as it is a completely new series for him, but added: "When I race, I race to win."

Meanwhile, Ginetta squad Toro Verde has announced that it will be expanding into the Carrera Cup with a four-car line-up. The Porsche team's management will be headed up by Jules Westwood, who has previously worked with Team Parker in the series.

STEPHEN LICKORISH

Rattican bids for title with Elite in 2022

GINETTA GT4 SUPERCUP

Ginetta GT4 Supercup runner-up Josh Rattican will continue with the Elite Motorsport squad for a second title attack on the series this year.

Rattican was on the pace from the start of his maiden season of senior racing in 2021, after finishing second in the Ginetta Junior Championship the year before, and took more podiums than any other driver during the campaign.

The series is now adopting the G56 for its top class, and

Rattican is aiming to go one better this time around. "Finishing second last season was a great achievement and I intend to build on that and fight for this year's title," he said.

"Elite is a multiple championship-winning team that has played a big part in my driver development. I have a great relationship and connection with Ed [Ives, team boss] and his team and I wouldn't want to be anywhere else right now."

Rattican will again be joined by Tom Emson in Elite's GT4 Supercup line-up. Emson



Rattican is aiming to go one better than in 2021

JEP/MOTORSPORT IMAGES

took his maiden win in the series at last year's finale and finished sixth in the standings, after contesting the Pro-Am class in 2020.

"The bond which has been formed with Elite over the past five years has seen me

grow and improve both as a driver and in confidence with the decisions I have made," said Emson. "My aim this season is to get as many podiums as possible and finish in the top three of the overall championship."

Burns and Brown
will drive BMW M4
GT4 in British GT



JEP/MOTORSPORT IMAGES

Burns to defend GT4 crown with Century alongside Brown

BRITISH GT

Will Burns will defend his GT4 title in the British GT Championship this season alongside race winner Jack Brown aboard a Century Motorsport BMW M4 GT4.

Burns, the 2020 Ginetta GT4 Supercup champion, took three wins in 2021 with team-mate Gus Burton, and the pair sealed the crown in their Century BMW with a race to spare. He will now seek to become the first two-time champion in the GT4 division.

Brown, a former Ferrari Challenge racer, took a win at Spa last year in his rookie GT4 campaign with Balfe Motorsport's McLaren.

Burns conceded that "it will be hard to top last year's success", but stressed that "I wouldn't be doing this if I didn't

think we had a good chance. Equally, I wasn't prepared to make up the numbers for the sake of it, which speaks volumes for my faith in Century and Jack."

After taking three second places last season with Andrew Gordon-Colebrooke, Chris Salkeld will also stay with Century in a second M4 GT4, although his co-driver is yet to be announced.

The Nathan Freke-run team has also set its sights on a return to GT3 with the new M4 GT3, and Autosport understands that it is speaking with interested parties.

Meanwhile, former Ginetta and Carrera Cup racer Jamie Orton has joined Team Parker Racing to partner Ginetta Junior graduate Seb Hopkins in its new Porsche 718 Cayman GT4.

JAMES NEWBOLD

IN THE HEADLINES

NO GO FOR GORNALL

James Gornall, who won the 2008 British GT Championship in a Dodge Viper, was denied the chance to race a similar machine in the British Endurance Championship's Silverstone season-opener last weekend after the car failed to meet noise restriction requirements during the pre-event test day. Another high-profile casualty before the weekend was Scott Sport's Mosler, a once-prolific runner in Britcar, after an engine failure in testing.

SUPERKARTS GET UNDERWAY

Matt Robinson took two wins and a second place as he headed the Superkart Division 1 category at Silverstone last weekend. UK Cup holder Liam Morley was the driver to prevent a clean sweep in a dry second race, after being sidelined in the first contest with an engine problem. Lee Plain took top spot in the 250 Mono opener after Paul Platt went out before the start with a broken front upright. A storming drive from the back of the grid in race two gave Platt the class win, which he repeated on Sunday.

SHIN JOINS VIRTUOSI IN F4

Michael Shin is the latest driver to be announced as competing in British Formula 4 this year. The South Korean has joined long-time F2 squad Virtuosi Racing, which is expanding into the series. Shin made his single-seater debut in UAE F4 over the winter with JHR Developments, taking a best result of 12th.

MORE GB3 AND GB4 DRIVERS

American David Morales has become Arden Motorsport's first signing for the 2022 GB3 Championship. The 18-year-old (below) competed with the squad in British F4 last season, taking a best result of second. In GB4, Swede Elias Adestam will race with Fortec Motorsport after finishing third in Formula Nordic in 2021.



JEP

Davidson sticks with Lux in Minis

MINI CHALLENGE

Mini Challenge frontrunner Jack Davidson will continue with Lux Motorsport for a fourth season this year.

Davidson was the form driver in the second

half of the 2021 campaign, taking three wins and four other podiums on his way to fourth in the standings. The 2017 Fiesta Junior champion is now planning to launch a full title bid this season. "I'm really looking forward to getting stuck in this year," said Davidson. "I had some great results last year and I'm hoping to build on that to give the championship a shot."

Davidson will be joined at Lux by Kenan Dole, the former Volkswagen Racing Cup contender moving across from Team Hard.

Meanwhile, in the second-tier Mini Challenge Trophy, race winner Alex Solley will join Graves Motorsport after finishing ninth in last year's points as a privateer, and Tyler Lidsey will remain with MRM.

Davidson hit his stride
in second part of year



JEP/MOTORSPORT IMAGES

Tarling stars at Phillip Island Classic Festival

HISTORICS

Richard Tarling and Brian Soule upheld British honour in a 52-strong Pre-1990 Formula Ford field at last weekend's 33rd Phillip Island Classic Festival of Motorsport, the Victorian Historic Racing Register's Australian showpiece back after a year's COVID-19 absence.

With the country newly reopened to tourists, Tarling was on the pace throughout in Chris Davison's Ecurie Australie Reynard 89FF. The 2017 Historic FF1600 champion qualified third behind Nick

McBride (Swift DB1) and Tim Blanchard (Van Diemen RF88), with Bruce Connolly fourth in an Australian-built Elwyn 003B.

Tarling hit the front in Friday's opener, but his joy was short-lived for the result was annulled after a race-stopping incident. "It was frustrating, because all four races ended behind the safety car," he said. "The top locals are very quick and the circuit rewards slipstreaming, so it's all about being there at the chequer."

Second to Blanchard in Saturday's sequel and third subsequently behind Jonathan



FF1600 ace Tarling missed out on final glory, fastest lap being his consolation

PETER ELLENBOGEN



Elfin pilot Bennett was driver of the meeting

PETER ELLENBOGEN

Miles (RF89) and Blanchard showed Tarling's mettle.

"Sunday's final was looking so good," added Tarling. "I'd towed up from half a second behind into a position to pounce over the last three laps when yellows flew again." He ended up third again, behind Miles and Blanchard, fastest lap of the meeting being his souvenir.

Soule, there to engineer Peter Lucas's Formula Atlantic Ralt RT4, got his racing chance when John Blanchard broke a leg in a mountain bike fall and offered him his RF88. After qualifying 15th, 'Souley' progressed to

a superb seventh in the final.

The solo pre-'85 final was won by Tarling's Swiss team-mate Gislain Genecand (Reynard 84FF) from the battling Steve Willing (Elwyn 003) and Nick Bennett (Elfin 600B).

After switching to a twin-cam Elfin 600B, Bennett won four from five in the Period M&O Sports & Racing category. Following a back-to-front charge – a loose engine cover stymied race four – Bennett pipped Andrew Robson (Brabham BT30) in the final stanza and was named driver of the event.

MARCUS PYE

Martin Colvill 1940-2022

OBITUARY

Britain's longest-serving Lotus main dealer Martin Colvill died last week, aged 81, following a long illness borne with typical fortitude.

As a young accountant in the late 1960s, Colvill supplemented his income by building Lotus kits – Elans and Europas – in quantity after hours.

Delivered pre-wired and plumbed, he said two experienced people could complete one in an evening!

Purley Performance Cars also ran the promising Colin Vandervell's Formula Ford Lotus and F3 Brabham. Despite the volume of kits sold, Lotus was unhappy with the workshop's presentation and threatened to discontinue its agency.

Fortuitously, architect racer Bobby Bell had aspirations in the motor trade, thus they formed Bell & Colvill Ltd and started operating from more salubrious premises in West Horsley, Surrey, in 1970. The multi-marque business

became a performance car mecca.

Both raced successfully when revenue allowed, Colvill wielding AC Cobras and the ex-JW Automotive Gulf Ford GT40 P1084 with panache. He went on to serve as secretary of the BRDC.

Colvill shared not only a love of all things Lotus but also of jazz with former F1 driver John Miles and 1960s band leader Chris Barber (whose race team ran Type 47s and a 63). Martin was a world authority on both.

To his wife Linda, the sport offers sincere condolences.

MARCUS PYE

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Double delight as Henderson takes another victory

CIRCUIT RALLYING

David Henderson and Sion Cunliffe made it two successive wins in the *Motorsport News* Circuit Rally Championship, with fastest times on all seven stages of the Dukeries Motor Club's Donington Rally in their Ford Fiesta R5.

Points leaders Neil Roskell and Andrew Roughead headed the pursuers until stage four. "I had upped my game and was flying on the first lap, but on the Craner Curves the red light came on," explained Roskell. "I had snapped a belt idler pulley and it had punctured the radiator." Henderson was left with an ever-increasing lead.

The Darrian of former champions Barry Morris and Tom Hutchings had managed to close on John Griffiths and Nigel Wetton (Fiesta R5). They ended stage three tied, before Morris then went ahead and then, following Roskell's retirement, he



was 38 seconds off Henderson at the end.

Griffiths tried to close on Morris again, but a mistake on the penultimate test cost him another 4s. He retained third but was only 2s up on Andy Scott and Laura Connell (Fiesta S2000T).

The Hyundai R5 of Ollie O'Donovan and Ashleigh Morris was fifth and, despite doing the second half of the rally in two-wheel drive after the front diff failed, Mark Jasper and Don Whyatt completed the top six in their Metro 6R4.

The final round of the championship is at Cadwell Park on 3 April.

PETER SCHERER



Extra Equipe GTS grid as ECR begins operating its own events

EQUIPE CLASSIC RACING

Equipe Classic Racing has put on a second grid for its GTS series for the Brands Hatch season-opener this weekend as it begins its first season of organising events.

The club's categories previously ran alongside a variety of clubs, predominantly at MG Car Club fixtures, but Equipe is now promoting its own events this year, with the Brands meeting also featuring races for Equipe Libre, Pre-'63 and 50s, as well as the MGCC's BCV8 Championship.

A total of 55 cars have already entered the Equipe GTS races, more than enough interest for the grid to be split into two.

"We're doing them as A and B races, splitting the grid by known lap times," explained ECR partner John Pearson. "We've got a faster race and a slower race and the great thing with that is you've got a whole bunch of people who are normally midfield runners who are going to be fighting for podiums and prizes. We're really pleased with the turnout and looking forward to getting back on track."

ECR is also keen to show its support for those struggling in Ukraine following Russia's invasion, and has had Ukrainian flag stickers printed. These will cost £50 and all proceeds will go to Ukraine.

STEPHEN LICKORISH

Mike Irons 1934-2022

OBITUARY

Architect, engineer, racing car constructor and Monoposto competitor Mike Irons died last Tuesday, aged 87, three days after a fall at home left him paralysed from the neck down.

Irons made early U2 chassis for Arthur Mallock, but took issue with the Major's proposal to pay when each 'kit' was sold.

His first Micron – based on a £160 prototype MRD/Brabham chassis – was debuted by Roger Lea, with 1172cc Ford power, in the 1964 Monoposto opener. The combo appeared spasmodically until a 1967 crash in 1000cc trim at Silverstone.

Irons bought the remains, updated it and went racing, later fitting a 1500cc engine. It subsequently formed the basis of the Chambers brothers' 'Micron Mk2C'.

Irons and Fred Place then built a monocoque Micron, which was ready in mid-1971. Having led the championship initially with a third and two seconds from the opening rounds in the ex-Edward Reeves Brabham BT18, Irons finished fourth in the table.

With the later Micron, then the BT18 with 1000cc engines in 1972, he won the Class B title even before multiple injuries sustained at Crystal Palace's final meeting ended his serious racing efforts.

Once recovered, Wavendon-based Irons built more Microns, including a front-engined one and another with transverse BMC power (Mini-Micron). He was also on the design team of Aston Martin's Bulldog.

MARCUS PYE





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A forgotten problem

As more UK organisers plan for a return to Europe, the issue of Brexit – reduced amid the pandemic – is once again rearing its head

STEPHEN LICKORISH

Brexit. It seems a long time since this was the forefront concern in many people's minds – the coronavirus pandemic and Russia's invasion of Ukraine have ensured that. As other matters of life and death have dominated the headlines, the challenges posed by the UK's exit from the European Union can easily be forgotten. Given the topsy-turvy nature of the past few years, some of those problems are still being discovered. And that is the case when it comes to the impact of Brexit on club racing.

At the start of last year, when laws actually changed – as the transition period following the UK's departure from the EU at the end of January 2020 concluded – governing body Motorsport UK issued advice about competing in Europe. It stated that those wishing to transport their car across the continent would need to apply for an ATA Carnet – an international customs document that acts as a passport for goods being temporarily transported. The cost of this is made up of a processing fee (negotiated to a reduced £240 + VAT) and a premium, either a refundable 40% deposit of the car's value or a non-refundable insurance payment to cover the deposit's amount. In other words, competing in Europe was going to cost quite a bit more than it once did.

But, as with anything to do with the B-word, the situation is far from clear cut. Motorsport UK has been seeking government guidance for more than a year to ascertain exactly where our sport,

“It still remains to be seen what the true impact of Brexit, and its rules regarding travel, will be”

particularly amateur competition, fits into post-Brexit border policies. To complicate the situation, the pandemic and its travel restrictions have meant far fewer people have even been contemplating competing abroad, meaning reduced numbers putting new procedures to the test.

However, what has subsequently become clear is Carnets are seemingly not necessary in all cases. The latest online Motorsport UK Q&A states: “If the vehicle is road-registered and road legal and you are transporting the vehicle yourself, you should not need a Carnet provided you can demonstrate ownership.” This is also what the Classic Sports Car Club has been suggesting, based on anecdotal evidence. The club's treasurer Richard Wos spoke to 16 British drivers during last year's Spa Six Hours meeting, all of which were private drivers and did not have a Carnet. Of these,

15 passed through customs without query, and the one who was stopped for a random check showed paperwork for his tow vehicle, trailer and race car along with a letter highlighting the Spa Six Hours was an amateur racing contest. He was therefore wished good luck and sent on his way.

The CSCC is therefore advising those transporting their own road-legal cars they do not need a Carnet, and even those with cars that are not road legal, but being raced on a non-professional basis (government guidance makes specific reference to “professional” when discussing Carnets), are unlikely to need one. “It's how you present yourself and your tow vehicle – that you are an amateur, attending a sporting event, in a race car that you own,” says CSCC director David Smitheram. “Your paperwork should be in order, showing your return crossing and you have an entry in a race with no prize money. If you haven't got 30 brand-new tool kits in the boot, you're going to give the impression you're not a commercial entity and you're going to be bringing this vehicle back. It's the same principle as towing your caravan for a holiday in France.”

Not all clubs are quite so sure, however. “I see no evidence to suggest a Carnet is not required,” says Historic Sports Car Club CEO Andy Dee-Crowne, pointing out there has been no change in the law in the past 12 months. “Our advice to all is to get a Carnet.” Ultimately, with or without a Carnet, there is always the threat of an overly picky official causing trouble on the border. But what is agreed is those racing professionally or transporting multiple cars as part of a team will need a Carnet.

Regardless of the Carnet situation, perhaps the more fundamental question is whether there is still an appetite to race in Europe after two years where many have rediscovered the joy of UK circuits. When planning the 2022 calendar, Smitheram admits to wondering if “2019 was the high-water mark” for racing abroad. “But the feedback we've had is there's as much interest as ever to get back to racing at Spa,” he says. “The internal combustion engine in motorsport is probably going to change quite dramatically in the next five-10 years so there's an attitude of ‘let's do it while we can.’”

It is a similar story with the HSCC – where its Historic Formula 2 series, for example, is back to a European calendar. “The early signs suggest there's a lot of interest from those members to go abroad and race at the prestige circuits,” says Dee-Crowne.

Some organisers have not felt confident enough in the global health situation to add overseas events back to their schedules. After all, it only takes a COVID-19 resurgence in a country that then closes its borders to cast further doubt. Ultimately, Dee-Crowne feels it will take “a couple of years” before British drivers start competing in Europe in pre-pandemic numbers. And it still remains to be seen what the true impact of Brexit, and its rules regarding travel, will be. 🏁



Winning start for Khera/Frost in British Endurance

SILVERSTONE
BARC
12-13 MARCH

Lucky Khera and Lee Frost were on winning form at the British Automobile Racing Club's season-opener at Silverstone, dominating the inaugural British Endurance Championship race before a comeback drive earned them a podium in the Britcar Trophy.

The pair, who previously raced together in BMWs, were at the wheel of a Lamborghini Huracan for Saturday's three-hour endurance event, the first since the Motorsport UK-sanctioned rebrand of the Britcar Endurance Championship. Frost, who was racing the Huracan for the first time, quickly moved up to fourth on the Grand Prix Circuit. He had started

ninth, but was aided by several cars not making the rolling start.

After passing Peter Erceg in the Class C Porsche 911 and John Seale's polesitting Ferrari 488 Challenge, Frost took the lead away from the striking Aston Martin Vulcan driven by Gleb Stepanov at Village before the opening lap was completed.

After a brief safety car intervention, Frost built almost a one-minute lead over Stepanov before handing over to Khera at the start of the second hour. Khera then caught and passed Erceg – who had yet to stop – to put the Lamborghini back in front, where it would stay to the finish to give the newly formed Race Lab team victory on its debut by more than a lap.

Stepanov and Stephen Tomkins finished second, while Claude Bovet and David McDonald recovered from a pitlane start

to take third – and Class B honours – in a Ferrari 488 Challenge and give Race Lab a double podium finish. Ian Lawson and Kevin Clarke came home fourth overall in a BMW Z4, while Erceg and Marcus Clutton won Class C with fifth. Seale and Jamie Stanley, who won three Britcar Endurance races together in a Lamborghini Huracan last year, lost 12 minutes in the pits due to a brake pad change and finished 16th.

Ferrari stalwart Wayne Marrs's first time out in a Mercedes-AMG GT3 alongside Tom Jackson ended in disappointment after a promising fourth in qualifying. Marrs was forced to start from the pits, but the Rob Boston Racing pair recovered to second overall before an alternator problem brought their race to an end inside the final hour. They fared better than reigning champions Will Powell and Dave Scaramanga, whose season got off to a non-start in their McLaren GT3 when a steering rack issue ruled them out after qualifying.

After switching to a BMW E36 for Sunday's Britcar Trophy event, which featured more than 50 cars, Khera and Frost left themselves with ground to make up from 45th on the grid when a gamble on slick tyres in a damp qualifying failed.

Khera climbed into the top 10 before the halfway stage of the opening 50-minute encounter and continued to make progress. Frost moved into third following the mandatory stop, before gaining a further spot when Rob Baker's Volkswagen Golf ground to a smoky halt at the Vale in the final minutes. "It was in a million bits a week ago," said Khera of the Race Lab-run BMW. "I like the challenge of different cars, I adapt to it quite



ALL PHOTOGRAPHY: WALKER

WEEKEND WINNERS

BRITISH ENDURANCE CHAMPIONSHIP

Lucky Khera/Lee Frost (Lamborghini Huracan GT3)

BRITCAR TROPHY

Race 1 Mark Lee/Owen Hizzey (Ginetta G56)

Race 2 Sebastien Dubois (Ginetta G56)

PRAGA CUP

Race 1 Alex Connor/Tom Canning

Race 2 Charles Hall/Scott Mittell

SUPERKARTS

Races 1 & 3 Matt Robinson

(Anderson/Redspeed VM)

Race 2 Liam Morley (Anderson/VM)

SNETTERTON SALOONS/Z CARS

Rhys Lloyd (Opel Astra TCR, below)



For full results visit: tsl-timing.com

well. I'm really enjoying my racing, plus I'm back with Lee [Frost], so it's fun."

Mark Lee, together with new team-mate Owen Hizzey, led the majority of the race from pole to win by over 10 seconds in their SVG Motorsport-run Ginetta G56. Jasver Sapra battled his way into third in the closing stages in his BMW E46 after taking over from Bryan Bransom at the pitstop.

Driving solo at the wheel of Motus One's Ginetta G56, Sebastien Dubois took a remarkable victory in race two during his first weekend of car racing, after finishing sixth in the opener.

Hizzey led the early stages ahead of Sapra before both made their mandatory stops. But a well-timed pit visit during a lengthy second safety car intervention left Dubois in the lead when racing resumed with five minutes remaining. The debutant converted it into a win by more than a minute, despite being handed a penalty for a short pitstop, ahead of Darkside Motorsport's new Audi TT and the Team BRIT BMW M240i.

"Honestly, a lot of luck," said a delighted Dubois, who is planning to race in the Ginetta GT Academy series this year alongside the Britcar Trophy. "I just drove as hard as I could. We tried to leave the pit call until the last minute in case of a safety car, and we got it – amazing! First race, first time at Silverstone, it could not be any better!"

STEVE WHITFIELD

A SIGN OF THINGS TO COME



Series organisers expect grids to grow following a 13-car entry for the first round of the inaugural standalone Praga Cup season at Silverstone. Single-seater stalwarts Arden Motorsport and Mittell Cars each took a victory on their Praga debuts, but several teams suffered reliability issues with the R1 machine.

"It's been a hell of a few months getting it all together but, on the whole, really pleased," said Praga Cars managing director Mark Harrison. "The first-ever race, there were things that didn't go quite to plan, but the second race went much better and we're on our way.

"It's still so early. The cars have hardly been out for testing. Two or three of the new cars only came at the last minute. Lots of things add up. By the time we get to round three at Snetterton we will be well-oiled machines."

Although grid numbers were slightly lower than the expected 16 cars, Harrison believes that target will be reached by the middle of the season. "We'll definitely get more cars because we had four or five drivers who would have been racing who didn't have a National A race licence [in time for Silverstone]," he said.

"We'll definitely have more cars at the next round and, by the middle of the

season, we'll be up to the 16 cars that we promised. We've also got a couple of cars at the factory ready to roll.

"Every team that raced with us in Britcar Endurance last year has come back, and we've got new teams, so we're optimistic. I'm really pleased that people like Scott Mittell [from Mittell Cars] and RAW Motorsports are involved.

"We've had Arden here – which is fantastic – and they are looking at working with us through the season. We are attracting the right people and it's making it really competitive."

Alex Kapadia, who together with Richard Wells won the Praga class within the Britcar Endurance Championship last year, enjoyed the standalone format.

"Not having to dive between all the GT cars is great," said Kapadia. "It's much more pure. I think this is the most fun championship to be in. It's super-fast and reasonably good value. You've got equal cars and good depth of competition, and that will only get stronger."

Ex-British Formula 4 and GB3 racer Alex Connor and fellow Pro Tom Canning, running as an invitational entry, were victorious for Arden in an eventful opening race as several cars hit trouble. Ben Stone and Rob Wheldon were second for fellow debutant RAW Motorsports, while two-time F3 Cup champion Stefano Leaney took third with Jack Tomalin for Tim Gray Motorsport.

A brief rain shower caught a few drivers out in the early stages of race two, but Charles Hall and Scott Mittell stayed out of trouble to claim victory ahead of Stone and Wheldon, while Dan Gore and Christopher Wesemael completed a double-podium finish for the Mittell team.

STEVE WHITFIELD

Connor and Canning won for Arden





Old, New (*Borrowed*) and Blue

The CSCC's Special Saloons and Modsports series attracts some fantastic creations and three old-school specials are set to be among the stars of this year's grid

MARCUS PYE

PHOTOGRAPHY DAVE SMITH

Ask any marshal, photographer or motorsport fanatic of a certain age to name their favourite club racing era and “the 1970s and 1980s” will win hands down. Special/Super Saloons would surely top a sub-poll, for sheer variety and ingenuity of home-builds, the quickest and most spectacular wild caricatures of production cars often hiding outrageous engine transplants and proprietary racer’s suspension. Towards 50 years ago, when the genre was at its height, the crowd following was strong too, with ebullient maestro Gerry Marshall never far from the winner’s rostrum.

Since 2012, the Classic Sports Car Club’s retrospective — embracing the contemporary Modified Sports category, with more restrictive regulations — has rekindled the flame, bringing out some of the wackiest racers ever to emerge from workshops, lock-up garages and literally garden sheds. Revived to offer a competitive home for long-dormant ‘classic’ hardware, it’s bolstered by a ‘modern’ take on the theme with bespoke tubeframe chassis and current power units

offering viable options with a Donington/Special GT-type flavour, another category that ebbed away in the early 1990s.

Yes, there are still runaway victories in the mode of Marshall in his Vauxhall pomp, piloting Viva GT, Old Nail (Firenza), Big Bertha

“Some of the wackiest racers to emerge from workshops and sheds have been brought out”

(Ventora- Holden/Repco V8) and Baby Bertha — the 500bhp Aussie Formula 5000 engine repackaged as a Firenza clone following a catastrophic brake failure at Silverstone, which reduced its predecessor to scrap in 1974. On occasions, however, notably at Donington Park last

CALENDAR	
VENUE	DATE
Thruxton	24 April
Brands Hatch Indy	3-4 June
Oulton Park (Gold Cup)	30-31 July
Donington Park	10-11 September
Silverstone National	9 October



Vauxhall Magnum-based John Pope Special returned to action after 40 years in 2021

summer, when the 5.7-litre Chevrolet-powered Baby Bertha starred but failed to win, the quality of racing in big fields has been impressive. Two more cars raced by Marshall are among the miscellany due out this year, reprising the big man’s abiding love of the Aston Martin and Vauxhall marques, and of course full-blooded opposite-lock exits from corners, in a shower of shredded rubber. Counter-intuitive to today’s data-honed racers, Marshall’s trademark tyre-frying panache invariably left spectators gasping in admiration at the showman’s talent. They went home happy.

Neither hybrid (in traditional cross-bred sense, no silent electric motors here) is quite what it appears to be, or anything like engineers

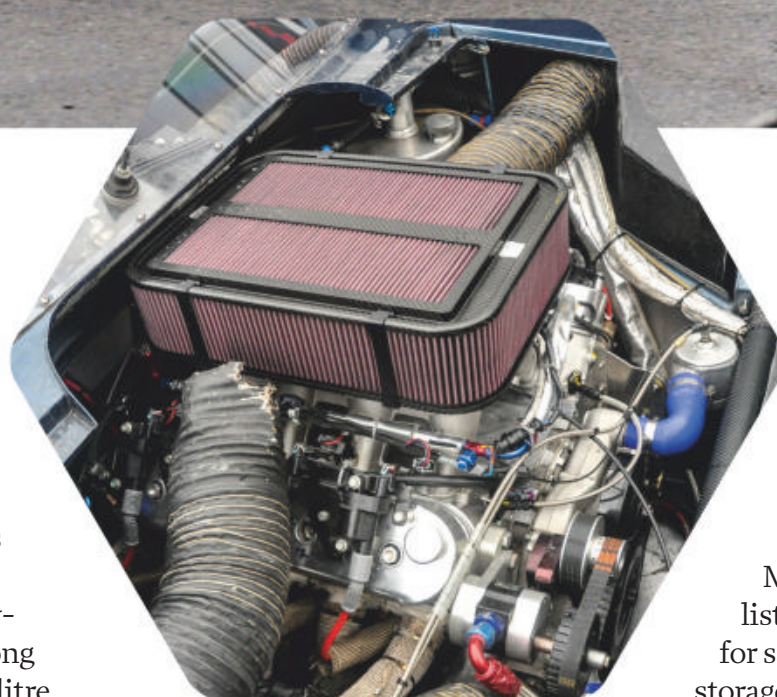
envisaged when the base cars left their respective factories. The John Pope Special, debuted in 1974, was the eponymous brainchild of a Hertfordshire farmer who incorporated the 5.3-litre engine, gearbox and suspension of a damaged Aston Martin DBS into a Vauxhall Magnum bodyshell, the de Dion rear end located by trailing links bolted into the Luton steel floorpan. Road-legal, and driven to events, it was a solid midfielder that annexed results when attrition ravaged rivals’ lighter, quicker steeds. Not an uncommon occurrence >>



as weekend warriors will attest.

Two big Garrett AiResearch turbochargers increased the output to conservatively 600bhp in 1975, and offered a claimed 900bhp with boost turned up! But even a heavy (1400kg) car capable of 150mph at Silverstone was trumped by much more sophisticated behemoths, Colin Hawker's magnificent Cosworth DFV-engined VW, hiding Alain de Cadenet's Gordon Murray-designed Duckhams Le Mans Special among them. Re-clothing superb-handling two-litre Chevron and Lola sportscars with replica fibreglass saloon bodies – typically 285bhp pushing 600kg – changed the landscape. Obsolete wagons, some comparatively crude, were widely dismantled and mechanical components sold. Some hulks rotted away and others, such as the ex-John Turner/Arthur Collier Skoda-Chevrolet, were consumed by fire.

Happily, Pope's legacy lives on with Geoff Harris, an Aston Martin



nut whose Berkshire-based Stemax business precision engineers specialist car components for veterans to F1.

The former bike racer competed in a DB4 GT from 1984, then a Zagato version built from its spares tranche, before switching to a Lola-Chevrolet T70 Mk3B until 1999.

"I'd spotted the JPS on the Aston Martin Owners Club Register's Specials list years ago and was surprised to see it up for sale in 2015," he recalls. "It had been in storage for 25 years, but quite well kept, with a fabulous engine. I had to have it."

Harris set about refreshing the car, importantly replacing its roll cage – alarmingly made of bent gas conduit as so many were – with a ROPS to current Motorsport UK specification. "I also fitted a new pair of turbos but, while the engine was idling outside my works, it dropped a valve," adds Harris. Expert specialist help was needed. David Jack's Aston Engineering team in Derby, preparer of many of the marque's finest race cars, and Tickford engine guru Dave Morgan breathed new life into the engine, saving the damaged cylinder head, changing the turbos (again) for lag-free response and redesigning the internals and throttle actuation for reliability and practicality.

"It's a sympathetic recommissioning," says Jack, who readied the JPS for last June's Yorkshire Motorsport Festival – the event's hillclimb being the car's first competitive outing since 1982. Subsequently, open-backed brake callipers and a servo have been fitted in the interests of arresting it, although the suspension, now with greater travel to overcome period damper bump-stop binding, has yet to be tuned. With only slick tyres available, driving the beast on a wet CSCC Donington trackday last month made no sense. But a squirt round the deserted larger paddock at the proud owner's behest (Gregor Marshall, Gerry's racer son, also had a go and emerged grinning) was sufficient to feel the smooth power delivery from 1500rpm – with 700lb ft of torque it pulls seamlessly to 5500 apparently – quietly orchestrated by the turbo whoosh. The good news is that Harris would like the old



warhorse to race again, “with the right driver” in CSCC events, and will demo it at Shelsley Walsh.

Another of Marshall’s old steeds is set to line up alongside it this year. Retired automotive engineer David Beatty sprinted a Westfield and a Porsche 930 Turbo in his native Northern Ireland before joining the CSCC Special Saloons fray in its first year. “I’d seen an advert for the ex-Rod Birley Honda Prelude Thundersaloon [built in 1992 by ace Alan Mann Racing fabricator Jim Morgan, with a turbocharged Ford Cosworth RS500 engine], and didn’t buy it but, when the owner decided to sell it two or three years later, I took the plunge – inspired by Lee Costello’s Ten Tenths forum posts – and was hooked,” says Beatty. “I last raced it in 2017, alongside the Marsh Plant Aston Martin DBS V8s, the first of which we ran with 5.3 and, later, 6.1-litre engines.”

The DBS Beatty now races, also saddled by Marshall for crane hire king Geoffrey Marsh, is ‘Evo 4’, which joined ‘Ro2’ in his stable in 2015. An AMOC force with Ray Taft in the 1980s, it was developed by Marsh and continued its winning ways, until Anthony Reid famously smote the flint wall at Goodwood’s Festival of Speed hillclimb, after which it was repaired and sold. Now under the bonnet, mounted lower and a foot further back than the 70kg heavier Newport Pagnell V8, which Beatty retains, sits a seven-litre Chevrolet LS7 engine mapped to develop 560bhp on Jenvey throttle bodies with 580lb ft of torque. Beatty shoehorned it in for the 2018 season, helped by fabricator Mike Johnston – whose MG Midget clones are regular CSCC winners.

Seated low and far back in the cockpit, looking past the large steering wheel and long H-pattern Tremec gearshifter (a sequential ‘box is now going in), I ventured onto a damp Donington track with a sense of trepidation way beyond wet Historic F5000 sorties of yore. Following MotorSport Vision’s instructions, I did four gentle laps in the surprisingly light (1230kg) Aston before pitting. Running off-line with one eye on the mirror, it was not possible to build tyre temperature on a bitterly cold day, thus too easy to break the treaded Toyo tyres’

traction, but a minor technical glitch precluded a harder run as the surface dried, for which slicks were available.

But, while the John Pope Special and Marsh Plant Aston have storied histories, they are due to be joined on the grid this year by a new creation, built in that same Special Saloon spirit. Norfolk construction expert Martin Reynolds’ thuggish 5.7-litre Ford Consul Classic V8 – personified by its ProConsul27 nickname – was finished in the paddock after a superhuman team effort and ran for the first time in the photoshoot. “It’s taken 14 months to build from a 1962 shell, a girder chassis and a Windsor engine I had lying around, but we had

“I love building the cars as much as driving them and am looking at the next project”

to be here,” says former short oval racer Reynolds, a Ford nut with a voracious appetite for campaigning charismatic Blue Oval products.

The Holley carburetted engine should develop around 575bhp, promising startling performance in a genuine ‘tin-top’ weighing 1400kg. Now MoT’d and road-registered, with its independent self-made wishbone suspension set-up and fibreglass wings, it’s a guaranteed head-turner. “We’ve got a real weapon here, and I’m looking forward to racing it at Thruxton,” Reynolds enthuses. “But I love building the cars as much as driving them and am already looking at the next Special Saloon project.”

One can’t help feeling that Gerry Marshall would have approved of the brawny newcomer created in the spirit of the Ford Anglia, Corsair, Cortina and Capri V8s that characterised Special Saloons, presaging the rise of the ‘Superloon’ movement, so fondly remembered. ❁



Reynolds’ new ‘ProConsul27’ special has been created in the spirit of the previous era



FINISHING STRAIGHT



Drive to Survive on two wheels? That's the idea of the new eight-part series

A two-wheel quest for new fans



AMAZON SERIES MOTOGP UNLIMITED

MotoGP
Unlimited,
the new

eight-part docuseries released on Amazon Prime Video last Monday (14 March), is nothing groundbreaking, but it takes its Formula 1 *Drive to Survive* influences and runs with them.

Announced last year, the series – produced by Spanish company MediaPro – represents the two-wheeled World Championship's hopes of snaring a new audience and repositioning itself in the

mainstream, following the success F1 has enjoyed with Netflix's *DTS*.

With a grid made up of largely fresh faces, the timing is right for a new generation of fans to get excited about MotoGP, and there is a sense that promoter Dorna Sports needs *Unlimited* to work as it moves into a new era without main draw Valentino Rossi. But those new fans must first be beckoned. Certainly, in the UK, access to MotoGP coverage is hard to come by. You either have to pay for a BT Sports subscription, pay for Dorna's video pass (which you're unlikely to know exists if you're a casual fan) or make do with one-hour highlights on Monday evenings on ITV4 after each race weekend.

It's in stark contrast to F1's UK coverage, which is on the more popular Sky Sports platform and is also covered extensively on Channel 4 via free-to-air television with a comprehensive highlights package, making it arguably easier for F1 to reach households.

Across its eight episodes, which run for around 45 minutes each, the 2021 season is detailed closely and a host of riders are followed. As you'd expect, world champion Fabio Quartararo is a main focus, as is 2020 title winner Joan Mir, Marc Marquez and his injury comeback, as well as Maverick Vinales's whirlwind year and Rossi's farewell tour.

But *MotoGP Unlimited* also casts its eye over the likes of Aleix Espargaro and Aprilia, Espargaro's relationship with his brother

Pol, as well as Ducati duo Jack Miller and Francesco Bagnaia, Pramac rookie Jorge Martin, and the bosses of Petronas SRT as its year unravelled.

Following the season in chronological order through its eight episodes makes sense, essentially turning the 2021 campaign into a television series. This means there's little jumping around and creation of confusing timelines. If you've never watched MotoGP before, *Unlimited* makes it easy for you to understand what's going on, especially with its helpful bits of info about certain rules and procedures. If you are a diehard fan, you'll likely pick up on the odd bit of mismatched footage, but this happens on very few occasions and will pass by casual observers.

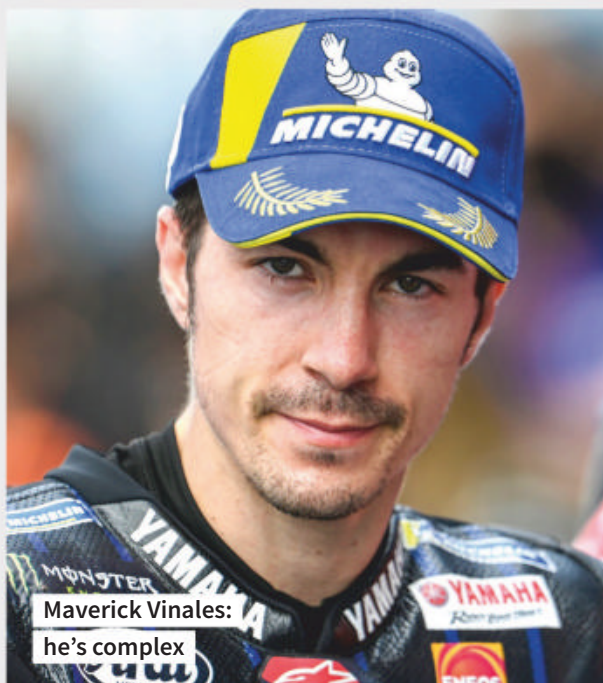
Unquestionably the highlights of *Unlimited* are the behind-the-scenes moments with Marquez as he continues his injury comeback, while its handling of Vinales's suspension and subsequent split from Yamaha is utterly compelling. This coincides with the madness of the Austrian Grand Prix, which Brad Binder won on a wet track while using slick tyres. Instead of following the South African that weekend, *MotoGP Unlimited* shows this race from Vinales's perspective as he watched with his family. His reaction to the drama of the race is juxtaposed by the frustration over his own situation. The series' ability to accurately display the complex character of



Comeback king
Marc Marquez
takes centre stage



ALL PICS: GOLD AND GOOSE
motorsport
IMAGES



Maverick Vinales:
he's complex

Vinales will undoubtedly endear him to new fans. And in general, *MotoGP Unlimited* humanises all of the riders.

Great respect is given in how the series handles the Mugello tragedy, when Moto3 racer Jason Dupasquier was killed in a qualifying crash.

The oddly controversial decision to let riders speak in their native tongue enhances *MotoGP Unlimited*, with that authenticity extending to the portrayal of the racing and the rivalries. The series is not without its flaws, such as the little focus given to some key players in MotoGP. But this is a minor gripe that does nothing to detract from how well done *Unlimited* – which writes many of the wrongs of the latest *DTS* series – is. Marketed correctly, *Unlimited* can do exactly what MotoGP needs it to.

LEWIS DUNCAN



youtube.com/AUTOSPORTdotcom



How accurate is season four of *Drive to Survive*?

Season four of Netflix's Formula 1 series was released earlier this month and has generated plenty of discussion regarding its use of artistic licence. But does it line up with what really happened in the 2021 F1 season? Autosport's F1 reporter Luke Smith gives his verdict.

WHAT'S ON

INTERNATIONAL MOTORSPORT

Bahrain Grand Prix

Formula 1 World Championship
Round 1/23

Sakhir, Bahrain

20 March

TV Live Sky Sports F1, Sun 1455

TV Highlights Sky Sports F1, Sun 1900, Channel 4, Sun 1930

FIA Formula 2

Round 1/13

Sakhir, Bahrain

19-20 March

TV Live Sky Sports F1, Sat 1635, Sun 1035

FIA Formula 3

Round 1/9

Sakhir, Bahrain

19-20 March

TV Live Sky Sports F1, Sat 0955, Sun 0855

IndyCar Series

Round 2/16

Texas Motor Speedway, USA

20 March

TV Sky Sports F1, Sun 2200 (delayed)

World Endurance Championship

Round 1/6

Sebring, USA

18 March

TV Livestream on motorsport.tv, Thu 2300, Fri 1530

TV Live Eurosport 1, Fri 1725

Sebring 12 Hours

IMSA SportsCar

Round 2/12

Sebring, USA

19 March

NASCAR Cup Series

Round 5/36

Atlanta, USA

20 March

TV Live Premier Sports 2, Sun 1830

NASCAR Xfinity Series

Round 5/33

Atlanta, USA

19 March

NASCAR Truck Series

Round 3/23

Atlanta, USA

19 March

TV Live Premier Sports 2, Sat 1830

MotoGP

Round 2/21

Mandalika, Indonesia

20 March

TV Live BT Sport 2, Sun 0630

TV Highlights ITV4, Mon 2000

UK MOTORSPORT

Brands Hatch ECR/MSVR

19 March

Equipe GTS, Equipe Libre, Equipe Pre '63 & '50s, MG BCV8

Silverstone BRSCC

19-20 March

Fun Cup, Mazda MX-5 (Championship/Clubman/Supercup), Modified Ford Series, National FF1600

Brands Hatch MGCC

20 March

Ecurie Classic Racing, MG Cup/MG Metro Cup, MG Midget & Sprite Challenge, MG Trophy, Triple M Challenge

FINISHING STRAIGHT



FROM THE ARCHIVE

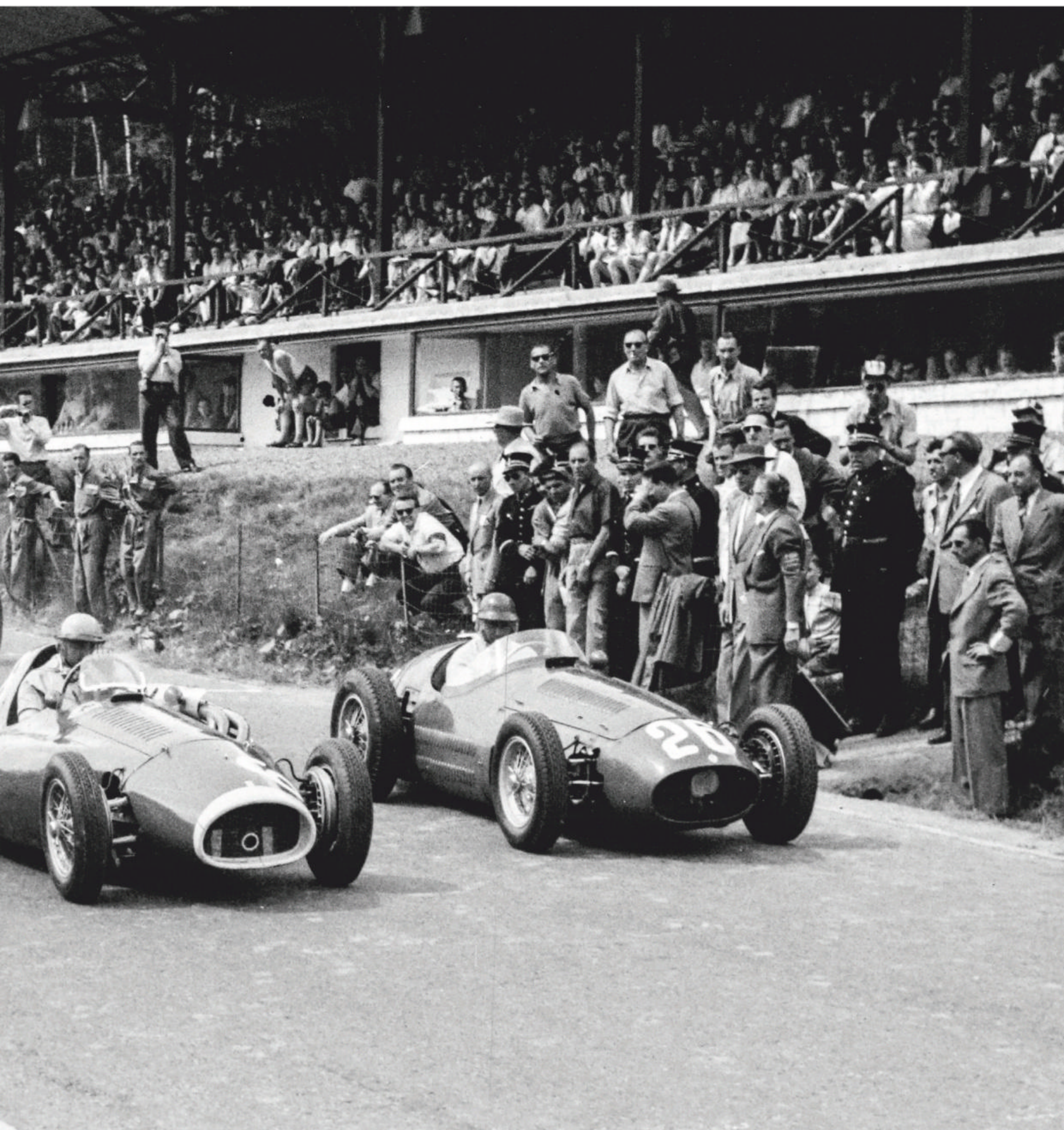
Front-row trio Giuseppe Farina (#4 Ferrari 553), Jose Froilan Gonzalez (#6 Ferrari 553) and polesitter Juan Manuel Fangio (#26 Maserati 250F) lead the 14-car field away at the start

of the 1954 Belgian Grand Prix at Spa. Gonzalez led on the opening lap before his engine failed; Farina was briefly the beneficiary, then Fangio took control, only relinquishing his position to deal with a broken visor strap, after which

he was peerless, setting fastest lap en route to victory. Farina was in second place when his engine expired on lap 15 of 36. Maurice Trintignant (Ferrari 625) finished runner-up ahead of a lapped Stirling Moss (Maserati 250F).



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MY FAVOURITE... **TRACK**

Rome street circuit

LUCAS DI GRASSI



It doesn't have the catchiest of names, but what the Circuito Cittadino dell'EUR lacks in that department it more than makes up for as a spectacle for Formula E racing.

The Rome venue's 19-turn, 2.103-mile layout that appeared in 2021 is longer than the original track that hosted the all-electric series in 2018 and 2019. But that fact doesn't bother Lucas di Grassi, who labels it "a mini-Macau". And since he's the 2005 Macau Grand Prix winner, he should know.

"I would say Rome and Macau have very similar qualities," says the 2016-17 Formula E champion. "You have jumps, different Tarmacs, different grips, high-speed and difficult braking, uphill, downhill. The current Rome track, the one we raced on last year, is not only my favourite but probably the most difficult we have in the world championship motorsport calendar."

To di Grassi, Rome is "like an old-fashioned track" full of imperfections that make it considerably more challenging than the best-known on Formula E's street circuit-heavy calendar: the ultra-smooth Monaco.

"People don't realise, by being not perfect, it's actually much more difficult to drive," the Venturi driver points out. "In Rome you have corners with the asphalt going your way, asphalt that has no grip, then

lots of grip. You have everything to make the track difficult. And it's very high-speed, you reach over 240km/h [150mph] on the back straight in qualifying mode."

Di Grassi says the old Rome track was one he "really enjoyed straight away", claiming second on his first visit. "But the new Rome is better still," he says.

To be fast on the circuit, with its quickfire series of corners, di Grassi says "you need to build up your confidence and the rhythm, it's not just somewhere you can arrive and go flat-out".

Last year, he was unfortunate not to win when his Audi's driveshaft failed while leading with three laps to go. But it hasn't dampened the Brazilian's enthusiasm, not least because of his Italian heritage. "It's almost like a little of my home race as well," di Grassi reckons.

He doesn't have long to wait before sampling it with his new team – Rome stages a double-header on 9-10 April.

JAMES NEWBOLD



IN NEXT WEEK'S ISSUE

Who will be on top in Bahrain?

FULL REPORT AS F1'S NEW ERA BEGINS

AUDICOMMUNICATIONS MOTORSPORT/MICHAEL KUNKEL; INSET: BINGHAM/MOTORSPORT IMAGES

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