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FORMULA ONE 2023 SEASON PREVIEW



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Why team penalty won't hold Max Verstappen back

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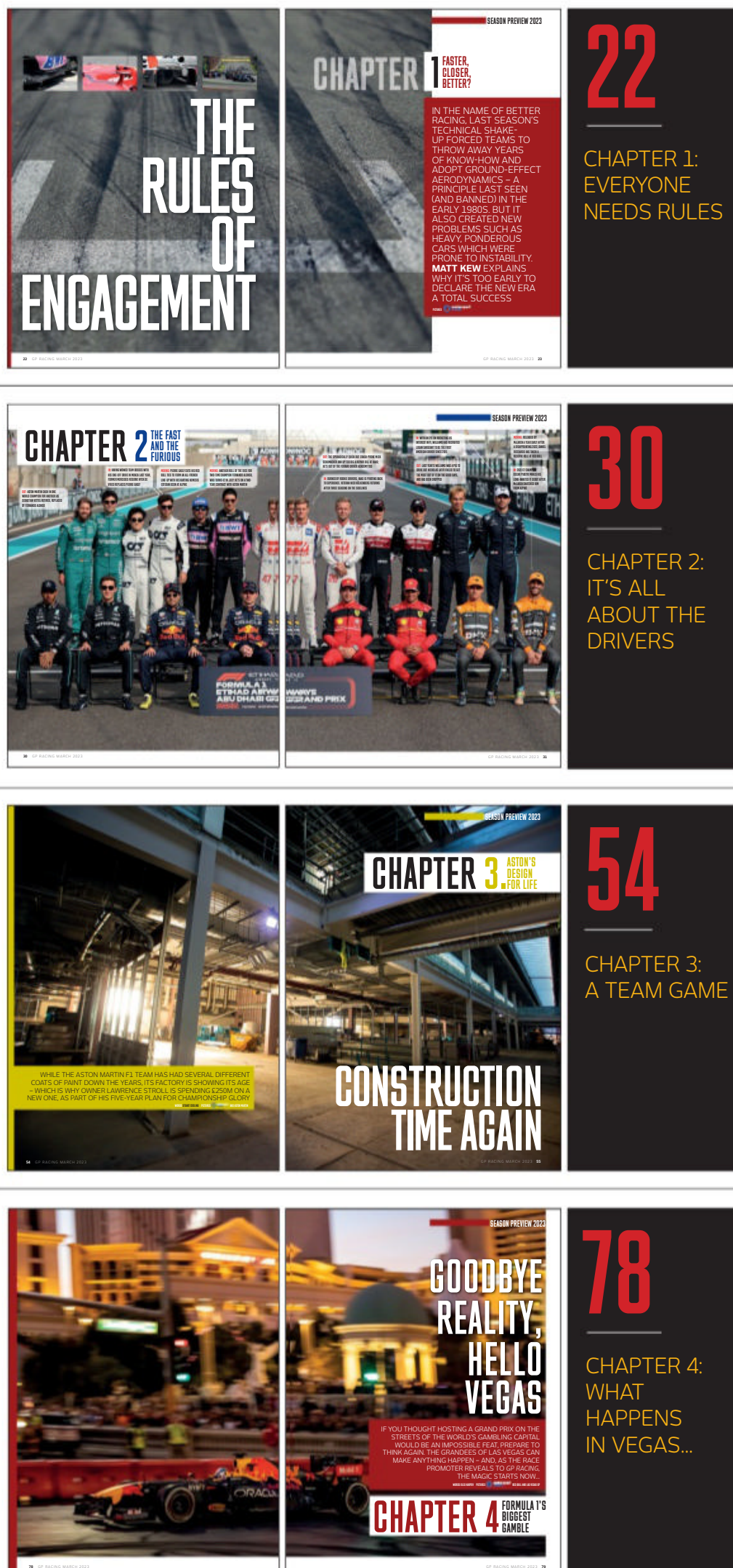
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Stuart
Codling



When the kidding stops, who'll be on top?

Formula 1's launch season remains a hotbed of intrigue despite the dead hand of the budget cap and the attendant limits on car development. There's a delightful element of 'kidology' at play as some teams pull the wraps off cars with unusual aerodynamic features which may or may not see action on track (here's looking at you Alfa Romeo, and your serrated floor).

Others choose not to reveal their new cars at all, either through obsessive secrecy or the fact that they aren't actually ready yet. It has always been so and yet some people in the wider world still don't get it: step forward the *Daily Express*, a newspaper which has long seemed to inhabit a parallel universe. Red Bull's new-livery-on-old-car launch moved that organ to become uncommonly vexed, as if an actual fraud had been perpetrated. No matter how fatuous the complaint, it seems these days that if a handful of people on Twitter are disgruntled about something, this is axiomatically news.

Hopefully more-of-the-same will not become a running theme on track this season. In the absence of profound changes in the rulebook, maintaining design momentum will be the key for the teams who got it right last year. That should play in favour of Red Bull despite the team's protestations about the effects of its punishment for breaking the cost cap; if any pain is to be felt it will likely come later in the year, as we examine on p64.

If Mercedes has banished the issues which plagued the W13, we could be in for a three-way fight for the constructors' championship. And, if so, we'll also likely see a change in the dynamic between a certain seven-time world champion and the driver Mercedes has been fettling to succeed him. As Andrew Benson elucidates this month (p32), last year George Russell got closer to Lewis Hamilton on pace than any of Lewis's other team-mates since Fernando Alonso. That situation can persist without fear of rancour while there's nothing to play for, but who knows what may come when wins are at stake?

Speaking of stakes, we have a new circuit to look forward to this season. It takes a bold vision to lay on a race on the streets of Las Vegas. We spoke to the promoters to find out just how they plan to stage a grand prix while *not* interrupting the flow of pennies into slots...

- This being the season-preview issue, we've gone up a size (to 132 pages) in order to accommodate all the latest happenings from the world of F1. Unfortunately, economic realities dictate a little extra cost on the news stands. We'll be back to the usual size and the usual price next month.

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Contributors



LUKE SMITH

Luke catches up with the returning Nico Hülkenberg (p42) and F1 new boy Logan Sargeant (p48) ahead of the new season



ANDREW BENSON

BBC Sport's chief F1 writer tries to answer the thorny question of who will be the best Brit at Mercedes in 2023 (p32)



MATT KEW

An analysis of whether last season's rules reset had the desired effect is Matt's focus this month, (p22), plus what's been tweaked for 2023 (p28)



MATT YOUSON

Matt has taken a look at what all 10 teams need to do in 2023 and whether or not they'll be successful in their endeavours (p88)

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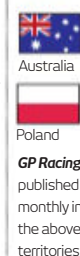
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FIA PRESIDENT HANDS OVER F1 REINS

01 **FIA President Mohammed Ben Sulayem** will no longer be hands-on in Formula 1's daily affairs. He made the announcement in a letter sent to F1 teams at the beginning of February, in which he reiterated that relinquishing executive responsibility was part of his election manifesto.

Dealing with everyday matters will now be the responsibility of Nikolas Tombazis, the former Benetton, Ferrari and McLaren engineer who has been the FIA's head of single-seater technical matters for the past few years, and who now becomes its single-seater director. The appointment of the Greek, who has always shunned publicity, is sure to reduce the tensions which have recently built up between the FIA and F1.

The commercial rights holder has been aggrieved by matters such as the delay in approving extra sprint races,

followed by the FIA's decision to publish the 2023 calendar in advance of F1's own announcement. There has been friction, too, over news leaking that Red Bull and Aston Martin had failed to comply with F1's financial regulations – before those

THE TIMING OF THE FIA PRESIDENT'S PROMISED DEPARTURE FROM THE F1 SCENE IS INTRIGUING

breaches were officially announced.

At the same time, unlike his predecessor Jean Todt, Ben Sulayem has been a regular presence in the media, and his comments have received mixed reactions from the paddock. Even while attending the Dakar Rally and WRC opener in Monte Carlo, Ben Sulayem generated F1-related headlines.

Among other topics, he spoke about the confusion surrounding F1's rulebook – a notable example being the chaos after the Japanese Grand Prix when it was unclear whether Max Verstappen had actually collected enough points to win the title. In his rather awkward speech during the FIA's prize giving ceremony in Bologna, Ben Sulayem managed to blame the F1 teams, who he said were responsible for writing the rules. "The FIA was blamed for the points, but it was not the FIA which made the rules; it was the teams who made the rules, and we were



Ben Sulayem was a constant and very visible presence at GPs last season, meeting and greeting the great and the good of F1 and beyond

implementing them," said the head of the organisation officially responsible for F1's sporting regulations.

There have also been public differences over Michael Andretti's putative F1 entry in alliance with Cadillac, a project of which Ben Sulayem has been an enthusiastic proponent even as F1 and its teams slammed the shutters down.

The timing of the FIA president's promised departure from the F1 scene is intriguing. It comes just a few weeks after he angered F1's commercial rights holder, Liberty Media, by commenting on rumours circulating in the media about an alleged offer from Saudi Arabia's sovereign wealth fund to buy F1 for \$20 billion.

"As the custodians of motorsport, the FIA, as a non-profit organisation, is cautious about alleged inflated price tags of \$20bn being put on F1," he wrote on his social media channels.



Following Ben Sulayem's decision to step back from hands-on involvement in F1, Nikolas Tombazis will be the FIA's point man for Formula 1

Liberty Media's response came in the form of a legal letter reminding the president that this was in fact none of his business. In the contract between the FIA and F1 from the early 2000s (agreed by Max Mosley with Bernie Ecclestone) the FIA had pledged not to get involved in commercial matters, accepting the role of being primarily a sporting regulator.

"The FIA has given unequivocal undertakings that it will not do anything to prejudice the ownership, management and/or exploitation of those rights," *GP Racing's* sister publication *Motorsport.com* quoted F1's letter as saying. "We consider that those comments, made from the FIA President's official social media account, interfere with those rights in an unacceptable manner."

While some suggest that Ben Sulayem's subsequent decision to step aside from F1 matters was a necessary measure to avoid the conflict escalating into a real legal confrontation, the FIA insists it was always part of his plan. Having fulfilled his election promise to form "a leadership team focused on transparency, democracy and growth," he will now focus on strategic matters. It is emphasised that Ben Sulayem will continue to be involved in high-level decision-making and focus on strategic issues.

One of these is the formal procedure for accepting applications from potential new teams. It has now been agreed that new entrants will have until the end of April to provide the FIA with all the necessary details of their application, including information on technical resources and funding. A decision on the admission of new teams to the championship will be made by June 30 – in consultation with F1 itself.

"Existing F1 teams will be given priority over new applicants," read the FIA document. "In the event that no applicant is considered suitable by the FIA and/or by the F1 Commercial Rights Holder, no new F1 team(s) will be selected."

Evidently, the FIA President cannot force Liberty to accept Andretti's bid. Whether he can resist the temptation to comment on the progress of new team applications (or any other F1-related issues) in the media remains to be seen. ►

"Any potential buyer is advised to apply common sense, consider the greater good of the sport and come with a clear, sustainable plan – not just a lot of money." He noted: "It is our duty to consider what the future impact will be for promoters in terms of increased hosting fees and other commercial costs, and any adverse impact that it could have on fans."

PICTURES: MARK SUTTON; STEVE ETHERINGTON; JERRY ANDRE

FORD RETURNS TO MILTON KEYNES

02 Red Bull Racing has finally settled on a brand that will lend its name to the engines its new powertrain division is developing for the 2026 season. After spending much of last year in negotiations with Porsche, the championship-winning team has finally announced a partnership with Ford instead. The American company will therefore come full circle, returning to the Milton Keynes-based F1 factory it sold to Red Bull 19 years ago when it divested itself of the ailing Jaguar Racing team.

It seems to be one of those win-win deals where both sides get exactly what they want.

Negotiations between Red Bull and Porsche had progressed so far that even press releases had been arranged, but in the end the deal fell through, the main reason being that the German manufacturer wanted too much control. It is known Porsche wanted to buy a 50% stake in the team and wanted to place some of its own people in senior positions there.

By the summer, however, it became clear Red Bull didn't even need a supplier as such. The team's own powertrain division, which had been established following Honda's decision to pull out of F1, began to make progress with development of the new engine. This boosted Red Bull's confidence that it could handle the task on its own.

It would've been logical for Honda to take advantage of such an opportunity. Given the history between the two companies, no one would have been surprised if the Japanese company had agreed to a slightly modified form of continued cooperation with Red Bull. But in the end, the talks went nowhere.

"We have a great relationship with Honda and we've

The link up between Red Bull Powertrains and Ford for 2026 (above) was announced at the 2023 team launch with Ford CEO Jim Farley (below)



enjoyed so much success with them," said Red Bull Racing boss Christian Horner. "And that relationship runs to the end of 2025. Both the team and Honda will be doing everything possible to add to the success that we've already achieved to the conclusion of those agreements. We explored the relationship beyond 2025. But it just logistically became too complicated."

Perhaps Honda wasn't really open to the prospect of its involvement being reduced to little more than branding an engine built in Milton Keynes. But Red Bull was already committed to that model. The team was looking for a partner whose influence on the final results would be minimised. By building its own engine, Red Bull is insuring itself against a situation similar to the one it was in at the start of the hybrid era, when Renault's engines turned out to be uncompetitive and other manufacturers indicated they were unwilling to supply a key rival. The fate of the team is now in its own hands.

Ford has proved to be an almost perfect option for Red Bull. Having witnessed the rapid rise in popularity of F1 in the United States, company bosses began to consider the possibility of entering the championship. However, the failure of Jaguar Racing lingered in the memory, plus starting an engine development programme would have required a significant financial outlay.

A partnership with Red Bull was a safer and most likely cheaper option. Ford can also offer its hybrid engineering expertise, which will be useful, so the proclaimed role of 'technical partner' is, in fact, more than nominal. ►

NEWS IN BRIEF... NEWS IN BRIEF... NEWS IN BRIEF...



JEAN-PIERRE JABOUILLE, who claimed Renault's first win in F1 at Dijon in 1979, has died aged 80.

CARS

The plan to reduce car weight to 796kg has been abandoned despite resistance from some teams

ENGINES

Cosworth has ruled out a return to Formula 1 despite its former partner Ford's planned comeback with Red Bull in 2026

POLITICS

F1 CEO Stefano Domenicali has distanced F1 from the FIA ban on drivers making "political" statements

FANS

Red Bull is to use different fan-designed liveries for the three races in the US this season

RACES

Las Vegas officials have approved plans to shut the iconic Strip for the race for the next 10 years

DRIVERS

Daniel Ricciardo, now Red Bull's third driver, says he has no plans to race elsewhere this season



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ALFA ROMEO APPOINTS 'TEAM REPRESENTATIVE'

03 **Alessandro Alunni Bravi** has been appointed to head the team that currently competes in F1 under the Alfa Romeo moniker. For at least the initial phase of the transition period, at the end of which the team should be under full control of Audi, he will act as “team representative”.

Preparations for the Audi future have already begun. The 2023 season will be the last time the Hinwil-based team will compete as Alfa Romeo. Sauber’s contract with the Italian manufacturer is coming to an end, so in 2024 the team is likely to revert to its historic name.

Andreas Seidl has been tasked with heading preparations for the Audi project. The German, who spent the past few years as McLaren team principal, had previously been head of the endurance racing programme at Porsche, Audi’s neighbour in the Volkswagen Group. He became Sauber’s new CEO in January, succeeding Frédéric Vasseur, who left to join Ferrari (see p70).

Seidl is understood to be Audi’s choice, so it would make little sense for him to be team principal of an organisation racing as Alfa Romeo. Therefore he is likely to remain in the background this year, dealing with organisational matters. The public face of the team will be Alunni Bravi; Seidl was present at the presentation of the team’s new car in Zurich, but remained among the spectators while the drivers, technical director Jan Monchaux and Alunni Bravi were up on stage.

Curiously, Alunni Bravi’s title is ‘team representative’ instead of the conventional ‘team principal’. He has been at Hinwil since 2017, most recently as managing director. Despite a wealth of motorsport experience, the role of F1 team boss will be new to him.

“First of all, you always have to learn,” Alunni Bravi told *GP Racing*. “Of course, I don’t have the experience of other team principals, but I have strong support from the team. I will be coordinated and guided by our group CEO Andreas Seidl, we have [sporting director] Beat Zehnder on track, we have people like [head of trackside engineering] Xevi Pujolar, who has huge experience. So I will be supporting them as they will be supporting me.”



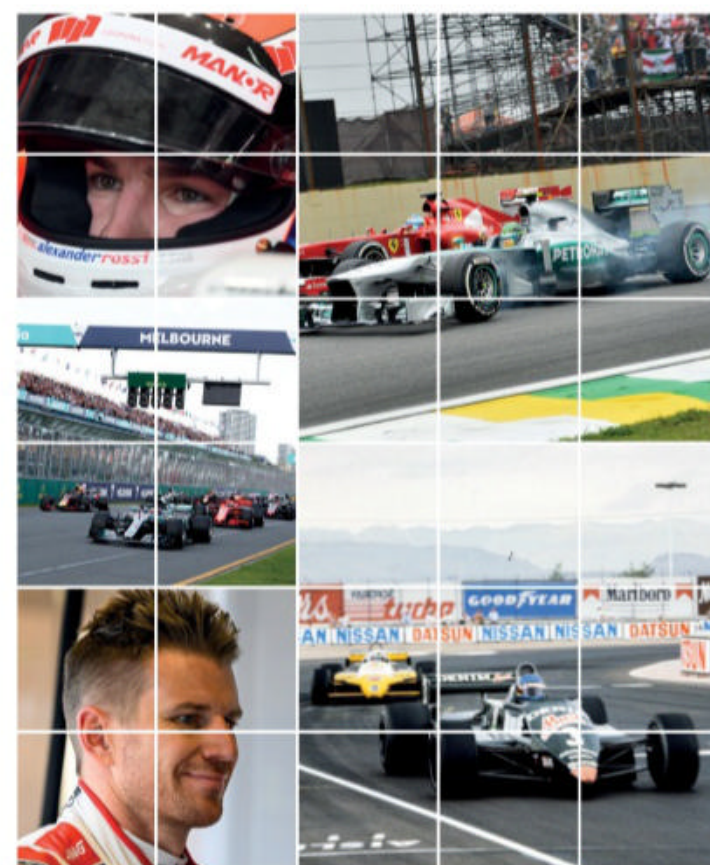
Alessandro Alunni Bravi will be Alfa’s public face in 2023, not new CEO Andreas Seidl

SAUBER’S CONTRACT WITH THE ITALIAN MANUFACTURER IS COMING TO AN END, SO IN 2024 THE TEAM IS LIKELY TO REVERT TO ITS HISTORIC NAME

F1 MASTERMIND

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- Q1** Which two current drivers made their F1 race debuts in 2019?
- Q2** Did Sebastian Vettel score more points in his last season with Ferrari or his last season in F1?
- Q3** When did Red Bull last win the opening race of the world championship?
- Q4** Since the Australian GP moved to Melbourne how many times, including the two missed pandemic years, has the series not begun down under?
- Q5** How many times has Fernando Alonso started a GP on home soil: 18, 21 or 24?
- Q6** Who am I? I started 93 GPs from 1985 to 1993 for Tyrrell, AGS, Leyton House, Ferrari and Jordan, and managed three podiums.
- Q7** Who was returnee Nico Hülkenberg’s first-ever team-mate in Formula 1?
- Q8** True or false: Lewis Hamilton led more laps in 2022 than he did in 2013, when he only won a single GP?
- Q9** Alan Jones and Michele Alboreto won the 1981 and 1982 Caesars Palace GPs in Las Vegas but which drivers were on pole for those races?
- Q10** Alexander Rossi was the last American to start an F1 race, but which was the GP and in which year?



1 Alexander Albon and Lando Norris **2** Last in F1 (37 to 33) **3** 2011 (Sebastian Vettel - Australia) **4** 5 **5** 24 **6** Ivan Capelli **7** Rubens Barrichello **8** False (46 in 2022, 66 in 2013) **9** Carlos Reutemann and Alain Prost **10** Brazilian GP, 2015



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meant those championship contenders often started at the back of the grid. But his racecraft was so good and he just got straight in and got on with it. Against guys like Stoffel and others with lots of Formula E experience, he really impressed.”

Victory in the opening race in Saudi Arabia was followed by another win in Spain and then two crucial podiums at the ExCel London event, this in a season where everybody went through ups and downs, but Nyck managed to know when to pace himself and when to go for it.

“The tolerances for getting it right or wrong at the top level in Formula E are absolutely minuscule,” Dario explains, “but Nyck adapted well. His attitude: he knew when to be aggressive and when not to be. Early on perhaps he got involved in a couple of scrapes but his understanding increased quickly and then he went on to win the championship.”

Last year Nyck achieved another pair of victories and, although some unfortunate retirements put him out of the challenge by the end of the FE season in August, by then he had already thrived in F1 free practice sessions for Williams and Mercedes.

Four weeks after the last Formula E round in South Korea, he made his F1 debut at Monza. It was a superb performance, finishing ninth in the Williams to match Alex Albon’s best result of the season (and open the door at AlphaTauri). It was an achievement Dario enjoyed watching.

“I wasn’t surprised when Nyck did such a mega job at Monza. He knew this was his chance and he took massive advantage of it. He’s a tough customer. He’s not a pushover at all. He can be properly aggressive when he needs to be and I think those couple of years in Formula E have taught him a little bit about when to be aggressive and when not.”

De Vries is now gearing up for a full season alongside 22-year-old Yuki Tsunoda, who is entering his third season of F1. The Japanese driver has displayed real talent but this is going to be an interesting time for both as they attempt to further impress the owner of their team, Red Bull, and seek a chance to join Max Verstappen in the future. Even before those decisions are taken, perhaps we will see the first Dutch driver not called Verstappen grab a podium at a grand prix.

And let’s not forget there are two teams already in F1 with drivers sharing nationalities: Mercedes with two Brits and Alpine with a French duo. What’s the chance Red Bull will one day combine a Dutch pairing to become the third team to continue the trend? It’s a possibility to savour, especially for Dutch fans.

DE VRIES ON A DIFFERENT ROAD TO F1 GLORY?

Opportunities to race in Formula 1 seldom fail to differ. Max Verstappen remains the youngest-ever starter of a world championship grand prix at 17 years old, just two years after winning key world titles in karting. By comparison his friend, compatriot and a rival from those karting days, Nyck de Vries, made his grand prix debut at the age of 27 last year at Monza and is now preparing for his first full season in F1.

Gilles Villeneuve was another driver who grabbed the opportunity to demonstrate his talent at the same age as de Vries when he was invited to race at Silverstone with McLaren in 1977. Like Nyck, he didn’t begin his full career in the team with which he started. Instead he was taken up by Ferrari and, one season later, Gilles was battling for the title against experienced teammate Jody Scheckter.

De Vries has an impressive background in motorsport. Winning the Euro KF3 karting title in

2009 was the precursor to Alex Albon grabbing it the following year, then George Russell winning it twice followed by Lando Norris in 2013. It makes sense that Nyck is now going up against these drivers at the highest level. His progress in the junior ranks of single-seater racing didn’t have quite the same momentum as some of those rivals, but Nyck won the Formula 2 championship at his third attempt and then moved to Formula E with the Mercedes EQ team.

It was in that electric-powered mind-changing single-seater that he impressed many people, including four-time Indycar champion and Formula E world feed co-commentator Dario Franchitti. “He was quick right out of the box,” Dario says. “I was a little surprised he took that road away from F1 but he got straight on it. It’s not the easiest championship because saving energy and driving quickly at the same time is incredibly difficult; it adds a completely new dimension. He took to it very quickly.”

Nyck’s team-mate and former McLaren F1 driver Stoffel Vandoorne had already spent a year understanding the keys to performance in Formula E when they joined forces, and Stoffel was a step ahead in the 2019-2020 season. But de Vries responded the following year in perfect style by driving himself to the very top.

“The year he won the championship was a tough year,” Dario says, “because they introduced a new qualifying format where the faster drivers went out first and had the worst track conditions, which



De Vries took full advantage of his surprise race debut at Monza in 2022, finishing in the points with Williams



De Vries was succesful in karting, winning the Euro KF3 title in 2009 ahead of Carlos Sainz



A switch to ART, a team de Vries had raced with in GP3, for his third crack at F2 in 2019 proved to be a shrewd move



After learning the ropes in his first season in Formula E, de Vries took the title in 2020-2021



AlphaTauri came calling after his Monza heroics and de Vries jumped at the chance



UNDER THE HOOD

PAT SYMONDS

PICTURES  **motorsport** IMAGES

COMPUTER SAYS YES: THE POWER OF CFD

There are many terms in motorsport bandied about by many people with only a vague understanding of what they really mean. One such is CFD or Computational Fluid Dynamics. In a way the very term is autological in that it describes itself but, equally, three simple words cannot do justice to an immensely complex subject.

Any physical system can, in theory, have its various states calculated mathematically. Sometimes this is easy, such as the case of an object falling in a vacuum. Sometimes it's more difficult, such as calculating the stress of an object of complex shape under loading. When it comes to predicting the flow of air over and around an F1 car, the problem becomes immensely complex but not insoluble to a reasonable degree of accuracy.

The calculations involved in solving this problem are based on the Navier-Stokes equations which, when Sir George Stokes added a method of resolving the viscous terms in the mid-19th century, became a viable way of predicting air flow. Unfortunately, before the advent of computers,

than a modern phone. With this and a simplified implementation of CFD called panel methods, we were able to look at some basic surface-pressure profiles of our rear wings. While simple, this was the first time we had moved away from purely empirical aerodynamics.

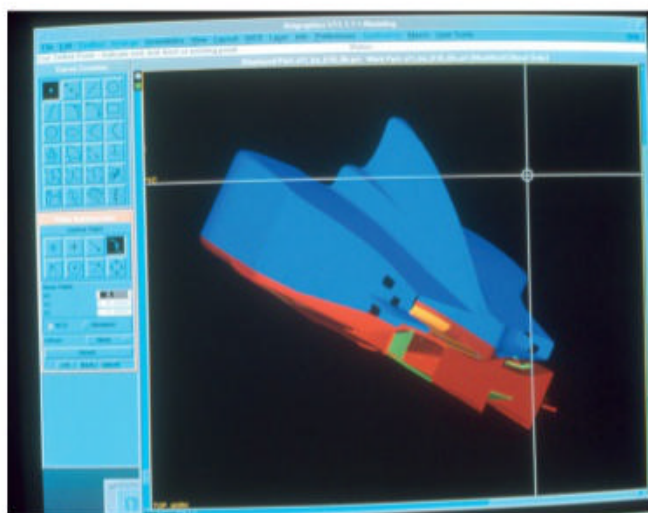
Although it was exciting to be able at last to gain some understanding and use it to improve performance, the method was extremely limited. It was two dimensional and only really worked to examine flow on the surface. The next step forward came with improved commercial codes in the early 1990s. Computers too were developing rapidly and F1 teams embraced this new technology.

While an F1 car achieves phenomenal aerodynamic performance

it's very difficult to simulate because the airflow around the car is far more complex than, say, on an aircraft. Flow detaches from numerous parts of the car and breaks up into turbulent eddies and vortices. These are even more difficult to predict and we were still hampered by the fact that, while the 3D solvers could handle the more simple parts of the Navier-Stokes equations, they struggled with turbulent flow. As an industry, F1 was instrumental in pushing the vendors of CFD software to improve the turbulence modelling and it was this which started to make the method deliver reasonable results. The technique was called RANS, which stands for Reynolds-Number Averaged Navier Stokes and is still in common use.

Interestingly, one spin-off from the push for better turbulence modelling was that exactly the same problems needed to be solved by wind farms. A single wind turbine is one thing to simulate but a wind farm, where each turbine is operating in a flow field dictated by the turbulent flow from its neighbours, is much more complex. It's comforting to know that the push to improve the performance of F1 cars also led, indirectly, to better performance of wind farms and made a contribution to mitigating climate change.

Even now there are different turbulence models but, as they improved, so too did the accuracy of simulation. Just as importantly, computing power was following Moore's law of doubling computing power every two years, allowing more detailed simulation of ►



Computers began to supplant drawing boards in the 1980s but processing power was a limiting factor'

it was impractical to solve the equations for any meaningful problem.

While work was undertaken on the primitive computers that existed in the 1950s it wasn't until 1967 that the first paper was published suggesting solutions to 3D fluid-flow problems. During the 1960s and '70s work at Imperial College, London took the art forward leading to the first commercial code, Phoenix, being released in 1981.

By the late 1980s F1 teams were looking at using CFD to guide simple optimisations. I was at Benetton and we invested in what was then a sophisticated Sun Sparc workstation running at 25MHz and with 64MB of RAM, significantly less

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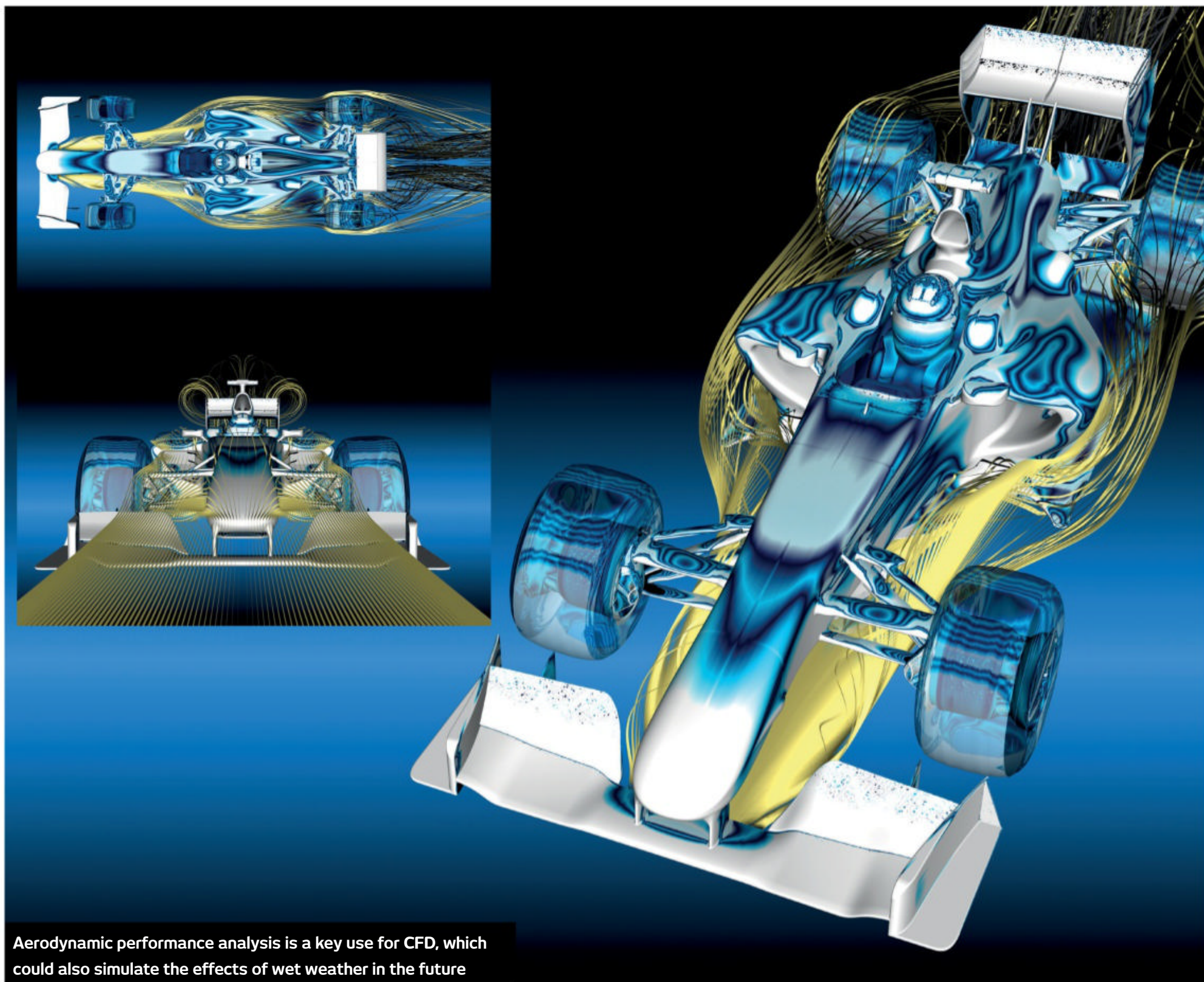
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Aerodynamic performance analysis is a key use for CFD, which could also simulate the effects of wet weather in the future

the flow field. The reason this is important is that the volume on the surface of the virtual model and the volume of the air around it is split up into a mass of virtual cells. The partial differential equations that describe the flow field then have to be solved for each of these cells. For a simple case we're talking of around 95 million cells which, on a single-core laptop, would take around 40 weeks to solve. Hence the need for computing power. Typically a team may be running around 192 cores, bringing the solve time down to a matter of hours.

Unfortunately, even with improved turbulence modelling, the RANS technique has limitations and the gold standard at present is Direct Numerical Simulation or DNS. This solves the equations directly for all eddies but is so computationally intense as to be impractical for F1 use. When developing the 2022 F1 car a system known as DES or Detached Eddy Simulations was used, which is effectively a mid-complexity

solution which allowed the turbulent wake to be studied in detail while keeping the computing time within reasonable, but still very large, bounds. A further technique known as the Lattice Boltzmann technique or LBM was also used in the studies.

CFD and computing power have developed enormously in a short period of time, such that it's now a viable proposition to do a significant amount of development in CFD – but what of the future? I believe aerodynamic development will expand in

CFD AND COMPUTING POWER HAVE DEVELOPED ENORMOUSLY IN A SHORT PERIOD OF TIME, SUCH THAT IT'S NOW A VIABLE PROPOSITION TO DO A SIGNIFICANT AMOUNT OF DEVELOPMENT IN CFD

two realms. The first is machine learning – about which I'll write soon – and also in the area of multi-physics, where a complete system and its environment are co-simulated. For example, the aerodynamic solver will apply loads to the body which will deflect, hence altering the aerodynamics. Even the effects of wet weather could be simulated and full trajectories analysed. It can be done to some extent already but future developments will accelerate this analysis.



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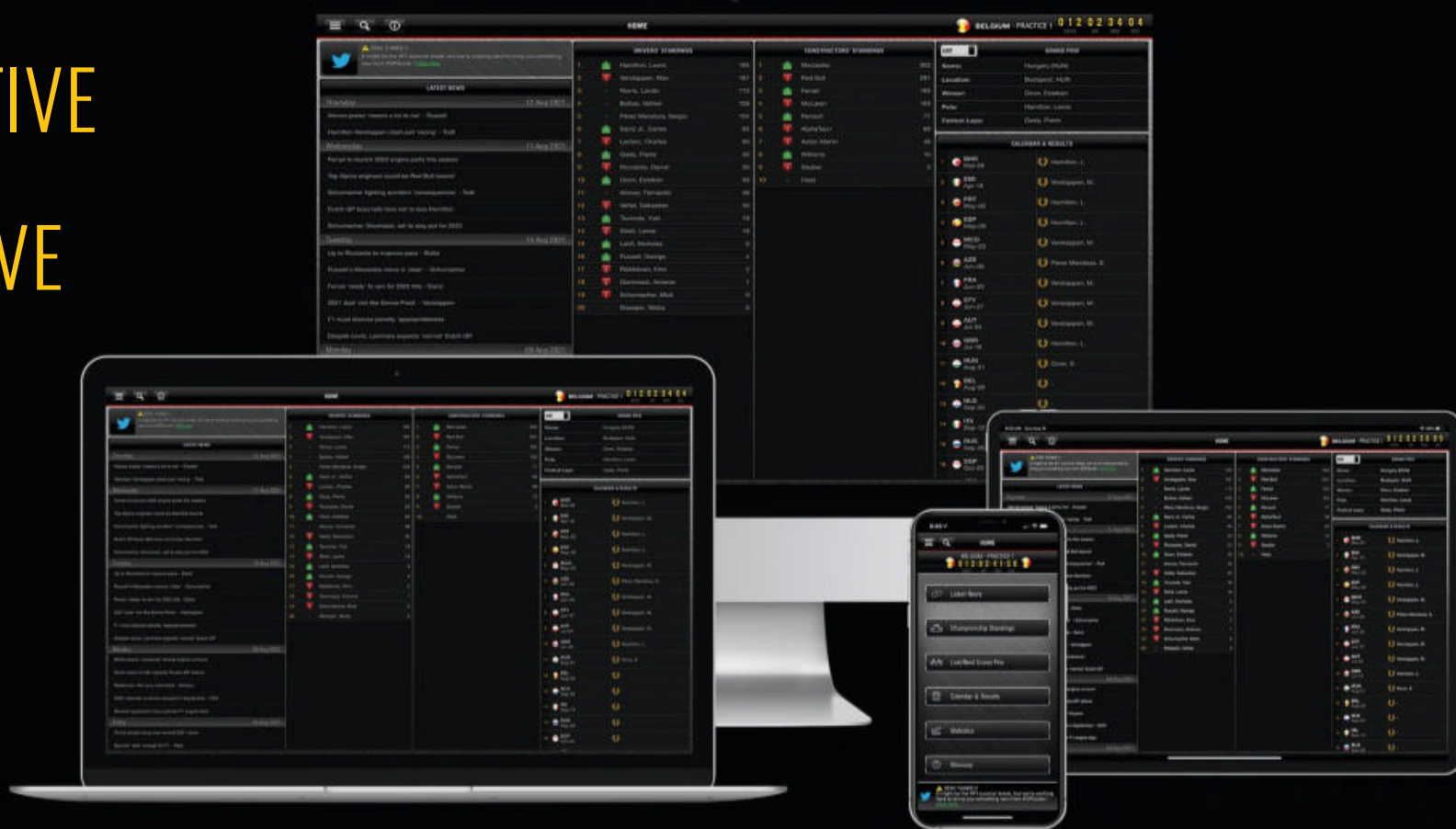


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STRAIGHT TALK

MARK GALLAGHER

[@_markgallagher](#)

Aside from the Netflix *Drive to Survive* effect and F1's surging growth in the United States, the sport's commercial landscape has seldom been more attractive. Revenue is up, costs are controlled and the decade-old hybrid powertrain technology is set for another major shift in 2026. That bigger energy recovery system and battery, mated to an engine no longer running on fossil fuel, can only be attractive for a company heavily committed to electric vehicles and decarbonisation.

In mid-2021 Ford announced a further £25billion investment in electric vehicles which, when added to previous commitments, takes the total to well over twice that figure. However, F1's continued use of an internal combustion engine didn't matter, even if Ford intends to be selling electric cars only in Europe by 2030.

Two points to make.

The first is that F1's decision to stop relying on dinosaur juice from 2026 really appeals. That's one reason for Audi's impending entry and Alpine's continued involvement on the eve of its shift to an electric-only future. The increased contribution from the powertrain's

electrical systems combined with F1's connected, data-driven approach to performance also helps.

The second is that F1's marketing power has never been greater. It was always going to be the case that if audiences and interest surged, car manufacturers would return.

Ultimately it matters little whether the car is powered by a synthetic-electric hybrid or grapefruit juice. If the marketing appeal is high enough and racing stops adding to the planet's stock of atmospheric CO₂, the attraction is strong.

In developing a strategic partnership with Red Bull Powertrains, Farley and his colleagues don't even need to go to the trouble of manufacturing an engine in order to increase Ford's total of 176 grand prix victories.

That the company remains third behind Ferrari and Mercedes in the tally of wins by engine manufacturers is astonishing. Ford powered 13 world champions between 1968 and 1995, bringing Michael Schumacher his first title and Ayrton Senna his final win. It's a golden thread which should never have been cut.

It was the Jaguar Racing debacle which ended Ford's love affair with Formula 1 in 2004. It is ironic that Ford should return to partner the company which bought that team and saved its staff from unemployment.

It's almost emotional, circle-of-life stuff, a triumph for Christian Horner and an extremely elegant solution for Ford.

FORD FALLS BACK IN LOVE WITH FORMULA 1

Some of the biggest names in America have fallen for F1. Never mind the A and B-listers studiously ignoring Martin Brundle's best efforts to get a coherent sentence out of them during a grid walk. Even the country's automotive industry has been smitten.

While General Motors has embarked on a blind date with Andretti, Ford took a shine to someone with proven world championship-winning credentials. As soon as they met, Ford and Red Bull decided to get a room, then marry.

Jim Farley will go down as the Ford CEO who did the right thing and decided to bring the blue oval back to Formula 1. A man who races a classic GT40, made his pro racing debut at Daytona in January and builds large-scale models of a Williams FW14B or Lotus 49 in his spare time clearly has a passion for it.

Considering the scale of the announcement both Ford and Red Bull did well to keep the details under wraps. The time is right, the case for it has never been better.



Ford's last dalliance with Formula 1, through Jaguar Racing (top), ended ignominiously in 2004. Farley (above) is the man behind the blue oval's return for 2026, in partnership with Red Bull

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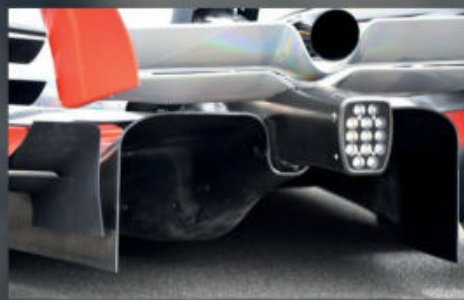
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THE RULES OF ENGAGEMENT

CHAPTER

1 FASTER, CLOSER, BETTER?

IN THE NAME OF BETTER RACING, LAST SEASON'S TECHNICAL SHAKE-UP FORCED TEAMS TO THROW AWAY YEARS OF KNOW-HOW AND ADOPT GROUND-EFFECT AERODYNAMICS – A PRINCIPLE LAST SEEN (AND BANNED) IN THE EARLY 1980S. BUT IT ALSO CREATED NEW PROBLEMS SUCH AS HEAVY, PONDEROUS CARS WHICH WERE PRONE TO INSTABILITY. **MATT KEW** EXPLAINS WHY IT'S TOO EARLY TO DECLARE THE NEW ERA A TOTAL SUCCESS

PICTURES  **motorsport**
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It was arguably the biggest rethink of the technical regulations in Formula 1 history and that meant sky-high expectations. If the return of ground effect created races which featured anything less than a stream of spectacular overtakes, then the new rules would only ever earn a lukewarm reception.

But the new framework – first presented at the 2019 United States Grand Prix – was already taking a pounding long before the opening round of 2022. Those who wandered to the bottom of the main Barcelona straight during pre-season testing were treated to a sight not seen in F1 since the early 1980s. The cars were hopping violently as speeds climbed. The rediscovery of this sensation would make ‘porpoising’ the buzzword at the dawn of the new era.

This made F1 look short-sighted. Bouncing and ground effects come as a package deal, but CFD simulations hadn’t predicted it to return so severely. In a bid to maximise downforce, teams were running their creations slammed into the ground. When the air kept detaching and reattaching itself, cars began kissing the asphalt, so complex carbon floors were being shredded for fun. Teams, each horrified to discover the issue during private filming days, were equally relieved when they arrived in Spain to find the rest of the pitlane was similarly stymied.

F1’s former managing director of motorsport Ross Brawn, one of the architects of the 2022 rules, rolls the blame downhill towards the competitors. He says: “Some of the teams got sucked in, excuse the pun, to seeing how much performance there was if you ran the car close to the ground and as hard as possible. But, in the

real world, you couldn’t do that.”

That may sound like the top brass had foreseen the issue, even if the teams hadn’t. However, the FIA permitted floor stays to be introduced and then stepped in at the Belgian Grand Prix with a technical directive to monitor wear on the underside of the car. It can reasonably be argued, therefore, that the lawmakers were also caught off-guard: this intervention was a tacit acceptance that the rules weren’t prescriptive enough.

The weight of expectation

Even though drivers were preoccupied with their spines being shaken, it was soon apparent that the switch to underbody aero had generated much of the desired effect. The previous 2017-21 generation machinery – with its less regulated front and rear wings, hideously complex bargeboards and fully exposed wheels and tyres – lost a staggering 45% of downforce when running within a second of the car ahead. The feedback from the early 2022 races was that following closer and for longer had become much easier. ▶

Bouncing was a known phenomenon with ground-effect Formula 1 cars, but the severity of the problem hadn’t been foreseen by many of the teams



1.1 FASTER, CLOSER, BETTER?

“It’s definitely a step forward,” was Charles Leclerc’s verdict. “The balance of the car is much more predictable.”

When FIA single-seater technical director Nikolas Tombazis was asked to quantify the improvements, he reckoned the loss of downforce while following was now down to 25%. However, there was an element of robbing Peter to pay Paul. Drivers reported that, having closed in the corners, it was now more of struggle to slipstream on the straights. The reduction in drag meant a smaller hole was being punched in the air, lessening the power of the tow. Long DRS zones to remedy this brought claims that passing with the overtaking aid became too “ritualistic”.

Yet people were gripped by the opening two rounds as a brace of blockbuster dices between defending champion Max Verstappen and nearest title rival Leclerc unfolded in Bahrain

The rule changes allowed drivers to follow each other more closely through the corners but this did come with a reduction in the power of the tow

and Saudi Arabia. That said, their scraps weren’t quite the ground-effect paragons they were being made out to be. Engine performance skewed the assessment.

Ferrari had finally recovered from a private FIA settlement after its oil-burn trick was outlawed. Its latest power unit enjoyed supreme acceleration and, nestled in one of the few packages at the 798kg minimum weight limit from the off, was a force to be reckoned with out of slow corners. The rebadged Honda powerplant in the back of the bulky Red Bull, meanwhile, flexed its muscles at higher speeds. These contrasting characteristics defined the two protagonists’ frenetic DRS duels on the Middle Eastern back straights, not primarily the switch to ground effects.

Not every race was quite so closely fought. Before retiring with a fuel system fault,

Verstappen fell too far behind Leclerc in an inescapably dull Australian GP. A maiden Miami trip and a visit to Mexico were similarly forgettable. When the high-octane peaks did arrive, it would be wrong again to attribute full credit to the new rules. Consider the best race of the season in Austria: Leclerc passing Verstappen on track three times helped make it an all-time classic. However, a far more complex cocktail of factors was at play. Ingredients included the RB18 being overweight, an early morning rain shower ridding the track of rubber, and the Saturday sprint race teaching Leclerc a valuable lesson in saving his new 18-inch Pirelli rubber until later in a stint. A dash of DRS gave Leclerc further help in taking the spoils.

Rocking the status quo?

Many other critical plot points were also outside the influence of the rules rejig. Rounds in Spain and Azerbaijan will be remembered for the Ferrari engines self-immolating. This fragility prompted the Scuderia to turn down the turbos after the summer break, so the red cars were thereafter seldom close enough to Verstappen to make the reduction in dirty air count. Mercedes struggling with its draggy W13 was a separate story. When it did threaten for victory in Austin (after an 11s pitstop for Verstappen), Mexico (where the thin air at high altitude masked its shortfalls) and Brazil (ditto for the absence of long straights), it would again be wrong to say the rules had set the stage for these events.

There are also areas in which the regulations have arguably detracted from the spectacle – namely, any time the going got tight and twisty. Combine an aerodynamic package which works best at high speeds with cars now heavier than ever and the result is ponderous understeer. At low speeds the cars look sluggish and reluctant to change direction.

It was also hoped that the status quo would be destabilised, which it wasn’t. A repeat of the 2009 technical revamp, which produced the unlikely Brawn GP fairy tale, was always unrealistic. But it was reasonable to expect another team to at least take the fight to Red Bull, Ferrari and Mercedes. Include the three sprint races and, of the 75 podium places on offer in 2022, only one featured a face from outside the ‘big three’. Lando Norris chalked up third in the Emilia Romagna GP. That was it. No hope of



The superb Leclerc and Verstappen battle in Saudi Arabia was more about DRS and differing engine characteristics than a result of the new rules



a handful of surprise winners, even though there were two in 2021, thanks to Daniel Ricciardo coming up trumps in Monza after Esteban Ocon defied the odds in Hungary. Here, F1 took a backwards step.

At least the midfield proved more promising. According to Pirelli figures, in 2021 there were 599 on-track passes. That increased by a considerable 31% to 785 in 2022. The tyres being less prone to overheating when running in the wake of the car ahead certainly helped. An immediately smaller gap from worst team (Williams) to best (Red Bull) might also go down as a plus. Again, though, the picture is muddled by Haas deciding early in 2021 to focus on developing its ground-effect car, which meant its deficit grew as that season played out. Alfa Romeo rising from ninth to sixth in the constructors' championship last year also wasn't out of step with what might happen from one season to the next during a period of rules stability. Other major shuffles in the order were in short supply.

Red Bull's dominance

It's also difficult to overlook the sheer level of dominance Red Bull exerted, particularly after the summer break when Ferrari wound down its engine and the lighter RB18 emerged. Adrian Newey's creation won a staggering 17 of the 22 rounds. Any hope that the cost cap would rein in the big hitters was snuffed out. However, that shouldn't be a total surprise given the leaders' class-leading infrastructure and technical departments remained in place.


Tombazis says: "The effect of the cost cap, it will take some years for it to sink in because there's still an initial advantage for people. In terms of being the first year of the regulations, I think the gaps were very low. If it was the fifth year like that, it would be more worrying."

The FIA can also defend its work when it comes to fulfilling the brief to produce design differentiation. From the moment Mercedes bolted on its size-zero sidepods, Ferrari unveiled its bathtub-like recesses and Red Bull emerged with its chiselled RB18, few could argue the cars looked the same. Of course, an updated Aston Martin and Williams did then resemble the Red Bull. Since a convergence around the optimum solution is only natural, more imitators are likely to emerge.

"THE EFFECT OF THE COST CAP, IT WILL TAKE SOME YEARS FOR IT TO SINK IN BECAUSE THERE'S STILL AN INITIAL ADVANTAGE FOR PEOPLE. IN TERMS OF BEING THE FIRST YEAR OF THE REGULATIONS, I THINK THE GAPS WERE VERY LOW. IF IT WAS THE FIFTH YEAR LIKE THAT, IT WOULD BE MORE WORRYING"

NIKOLAS TOMBAZIS

Aerodynamic Testing Restrictions and the budget cap will surely hasten this but should make the field more competitive and ultimately lead to a kinder verdict on the new rules in the near future. Fears that a mandated 15mm rise to the floor edge will cost 0.5s per lap are likely to be offset by the off-season developments. Spending restrictions slashed the flow of upgrades each team was bringing late on. These can now be fitted over the winter.

The promising title fight for the ages between Verstappen and Leclerc collapsed all too soon. But 2022 was still pleasingly peppered with on-track excitement. Only, too much of it was circumstantial and composed of other elements for the second ground-effects chapter to be considered an emphatic success from the word go. The progress was more muted. A report card would read: "Good start but must try harder." 

Mercedes struggled for most of the year. When it was competitive it was individual circumstances, not the rules, that allowed it to battle at the front



Red Bull, once it had ironed out those early fuel issues and shaved weight from the RB18, was in a class of its own, especially after the summer break



WHAT'S NEW FOR 2023?

AFTER LAST YEAR'S MAJOR RESET,
THIS SEASON'S NEW REGULATIONS
ARE DETAIL CHANGES AIMED AT
TIDYING UP LOOSE ENDS
AND LOOPHOLES

WORDS MATT KEW PICTURES 

AERO

The way Formula 1 cars generate downforce was effectively inverted for 2022, with fiddly top surfaces marginalised in favour of ground effects. As such, edits after year one were inevitable. Banishing extreme porpoising has been the focus for legislators, resulting in a 15mm raise to the floor edge (teams lobbied against an initial 25mm hike) and the diffuser throat upped by 10mm. What's more, floors can now deflect by just 5mm, to prevent teams using the elasticity of materials to flex downwards towards the track and induce an aerodynamic 'seal'.

Although these tweaks could cost 0.5 seconds per lap, designers reckon the steep learning curve at the start of a new rules cycle will ensure these losses are immediately recouped by the winter development

race. This comes after the budget cap forced many teams to shelve update packages originally planned for late in 2022.

Front and rear wing design has also been made more prescriptive to eliminate extreme designs generating the levels of dirty air the rejigged regulations worked hard to slash. Notably, Aston Martin introduced a complex rolled edge to its rear wing for the Hungarian GP. Similarly, Mercedes caused a minor fuss with an updated front wing spec that was said to produce more outwash from the way its endplates connected to the main assembly. By dialling out some of the wiggle room, the FIA anticipates teams will be dissuaded from exploiting any further grey areas because the costs will likely outweigh the benefits.



Aston Martin's rear wing in Hungary was one reason regs on front and rear wing design have been altered



A small tweak has been made to the lowest temperature that fuel can be, once it is actually inside the car

TECHNICAL

Two kilograms were to have been shaved off the dry minimum weight limit to bring the porky breed of grand prix racers down to 796kg, but this idea was officially dropped just two weeks before the pre-season test. A year ago the limit was raised to 798kg because several teams were struggling to get close to it. In theory, design departments have had sufficient

time to strip the bulk out of the chassis – but the latest tyres are heavier and the cars must now carry additional FIA sensors.

It might seem like a minor detail, but the temperature of the fuel inside the cars must now not dip below 10°C. Previously, the lower limit was 20°C, but its halving is anticipated to help with reliability in hotter rounds.

SAFETY

Zhou Guanyu reckoned he experienced a decade's worth of F1 action in his rookie campaign alone. That's partly due to his terrifying first-corner Silverstone shunt in which his Alfa Romeo skated upside down before smashing into the tyre wall and then becoming pincered between the barrier and catch fencing. In response to his crash, the FIA has bumped up the requirements for roll hoops. Now, they must be rounder to avoid

digging in and should withstand a 15G impact plus the simultaneous application of a frontal and rearward load.

And in the name of avoiding such carnage in the first instance, the reflective part of the 'wing' mirrors has been increased by over 60% from 150mm by 50mm to 200mm by 60mm to improve visibility. Several teams have already evaluated the new-spec mirrors during quieter practice sessions.



The roll hoop requirements have been beefed up following on from Zhou Guanyu's British GP shunt

FINANCIAL

The budget cap is back on its glide path after a blip in 2022, when soaring fuel prices and inflation prompted a rise from the planned \$140million to \$142.4m. But that drops to \$135m in 2023 and the revised total is set to stay in place until the end of the 2025 campaign.

Some small economic relief has been afforded by the FIA rubber-stamping amendments to the sprint race compensation plan. For the

six Saturday races, teams will be able to spend up to \$300,000 each. This all falls outside the budget cap. However, for the past two seasons, this figure could be increased in relation to crash damage. But now the T-Cut must be paid for out of the same bigger kitty. The human cost has also been considered by bringing forward the Wednesday to Friday curfews to gradually ease working hours.



With the budget cap ceiling coming down, teams will want to avoid shunts like this



Kevin Magnussen was on pole for the third and final sprint race of 2022. This year there will be six

SPORTING

For as long as F1 is enjoying its Netflix-led popularity boom, more is simply more. So, the number of sprint weekends doubles from three to six in 2023. Saturday races will run in Azerbaijan, Austria, Belgium, Qatar, the USA (Austin) and Brazil.

Since no part of the schedule is considered unimprovable, only unimproved, qualifying is being lined up for a possible makeover. While that prospect might prompt an unwelcome flashback to the elimination system swiftly ditched in 2016, championship organisers will this time experiment with a so-called 'Revised Qualifying Format' at up to two events. For these trial sessions, tyre compounds will be mandated: hard in Q1, mediums in Q2 and softs for the pole position shootout. RQF rounds will also force drivers to be kinder to their rubber all weekend, since the total allocation of dry Pirellis will drop from 13 to 11 sets. With this the aim is to both 'improve the show' and further F1's sustainability drive.

The process of totting up grid penalties has been clarified in

the name of preventing so-called 'tactical penalties' where teams introduce new components at races where overtaking is easier. Ferrari tried to be clever in Belgium last year to help keep Charles Leclerc's evaporating title hopes alive, staggering the introduction of new parts through Friday and Saturday to exploit a vague clause in the regulations. It read as though each intake of new element was separate, potentially meaning a full change of the power unit might not invoke the maximum punishment as desired. However, from now on, drivers who receive "more than 15 cumulative grid position penalties, or who have been penalised to start at the back of the grid, will start behind any other classified driver" come what may.

Meanwhile, the activation of DRS at the start of a race or after a Safety Car restart will be evaluated so that it might be allowed after two laps rather than the existing three. This tweak will be trialled during each sprint session ahead of a likely blanket introduction in 2024.

CHAPTER 2 THE FAST AND THE FURIOUS

OUT: ASTON MARTIN CASH IN ONE WORLD CHAMPION FOR ANOTHER AS SEBASTIAN VETTEL RETIRES, REPLACED BY FERNANDO ALONSO

IN: HAVING WOWED TEAM BOSSES WITH HIS ONE-OFF DRIVE IN MONZA LAST YEAR, FORMER MERCEDES RESERVE NYCK DE VRIES REPLACES PIERRE GASLY

MOVING: PIERRE GASLY CUTS HIS RED BULL TIES TO FORM AN ALL-FRENCH LINE-UP WITH HIS KARTING NEMESIS ESTEBAN OCON AT ALPINE

MOVING: ANOTHER ROLL OF THE DICE FOR TWO-TIME CHAMPION FERNANDO ALONSO, WHO TURNS 42 IN JULY: HE'S ON A TWO-YEAR CONTRACT WITH ASTON MARTIN



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OUT: THE SPORADICALLY QUICK BUT CRASH-PRONE MICK SCHUMACHER RAN UP TOO BIG A REPAIR BILL AT HAAS; HE'S OUT OF THE FERRARI DRIVER ACADEMY TOO

IN: BURNED BY ROOKIE DRIVERS, HAAS IS PIVOTING BACK TO EXPERIENCE. VETERAN NICO HÜLKENBERG RETURNS AFTER THREE SEASONS ON THE SIDELINES

IN: WITH AN EYE ON ROCKETING US INTEREST IN F1, WILLIAMS HAS RECRUITED LOGAN SARGEANT TO BE THE FIRST AMERICAN DRIVER SINCE 2015

OUT: LAST YEAR'S WILLIAMS WAS A PIG TO DRIVE BUT NICHOLAS LATIFI FAILED TO GET THE MOST OUT OF IT ON THE GOOD DAYS, AND HAS BEEN DROPPED

MOVING: RELEASED BY MCLAREN A YEAR EARLY AFTER A DISAPPOINTING 2022, DANIEL RICCIARDO HAS TAKEN A RESERVE ROLE AT RED BULL

IN: 2021 F2 CHAMPION OSCAR PIASTRI MAKES HIS LONG-AWAITED F1 DEBUT AFTER MCLAREN SNATCHED HIM FROM ALPINE







2.1 HAMILTON VS RUSSELL: ROUND 2

IT'S THE MOST EXCITING DRIVER LINE-UP IN FORMULA 1: A SEVEN-TIME WORLD CHAMPION ALONGSIDE HIS APPOINTED HEIR – ALBEIT ONE WHO CAN'T WAIT TO GET THE SUCCESSION DONE 'N' DUSTED. SO HOW CLOSE WAS IT *REALLY* BETWEEN **LEWIS HAMILTON** AND **GEORGE RUSSELL** LAST SEASON, AND WHAT DOES GEORGE NEED TO DO NOW TO GET CLOSER TO – OR EVEN SURPASS – HIS ILLUSTRIOUS TEAM-MATE?

WORDS ANDREW BENSON PICTURES 

The closest team-mate contest in Formula 1 last year was at Mercedes, between a seven-time champion and a man who at the start of the season had not won a race

George Russell, the new boy, came out on top in the championship by two places and 25 points. So did Russell 'beat' Lewis Hamilton last year? Did the points table accurately reflect the balance of power at Mercedes? And what do the answers reveal about how their contest may develop into the new season?

Mercedes team principal Toto Wolff describes last year's championship statistic as "irrelevant" in the context of a difficult year in which the team battled its worst car for a decade, with neither driver in title contention.

It's the answer you would expect from a man managing two of the biggest stars in F1 in one team. Nevertheless, Wolff has a point.

Russell finished ahead in the standings and took both a race victory and a pole position, of which Hamilton achieved neither for the first time in his career. A closer look at the details of the season, though, shows that the stronger Mercedes driver over the course of 2022 was in fact Hamilton. Just.

The most successful driver in the history of Formula 1 had, prior to the start of last year, never been beaten on pure pace by a team-mate in his 15 years in the category.

He still hasn't.

Even on a basic count of their qualifying head-to-head, Hamilton finished the season 13-9 ahead of Russell. Delving deeper, and counting only the sessions in which a fair comparison can be made, the ratio was 11-5 to Hamilton. But his average pace advantage was only 0.051 seconds – which puts Russell as Hamilton's fastest team-mate since Fernando Alonso, whose margin to Hamilton was almost identical at McLaren back in 2007.

Pace exploration

That's just one measure of Russell's performance, and how closely matched the two were through last season. In the races, it was a similar story.

Putting the points aside, the score was 10-9 to Russell in terms of which driver crossed the line ahead, in races where both finished.

But as a measure of performance, those statistics are misleading. Take, for example, the run of races in the first part of the season when Russell finished ahead seven times in a row between Saudi Arabia and Azerbaijan, but in which three times Hamilton was behind only because of events outside his control.

In both Australia and Miami, Hamilton would have finished as the leading Mercedes driver had the timing of a Safety Car not worked out perfectly for Russell on an offset strategy and vaulted him ahead.

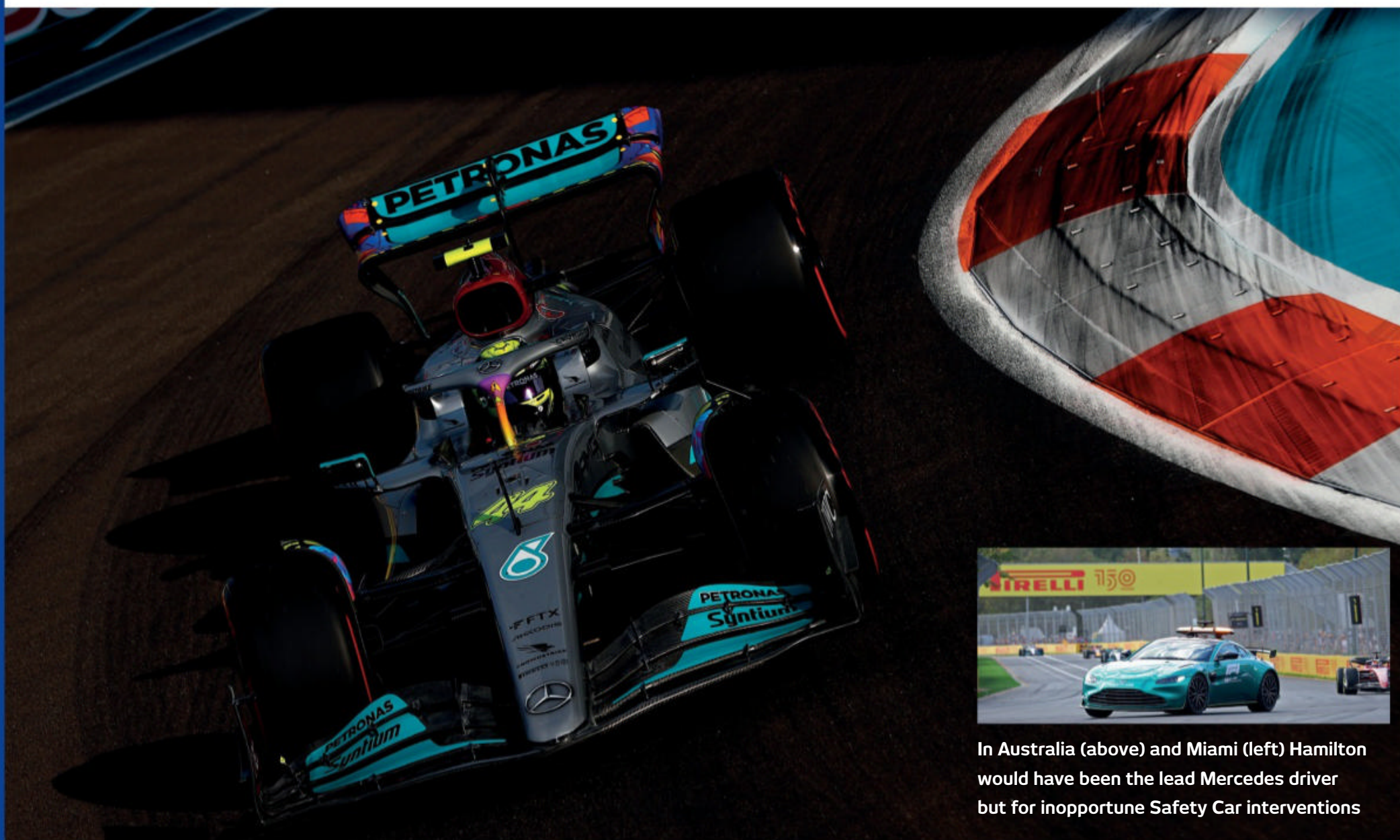
Likewise, in Spain Hamilton suffered a puncture in a first-lap collision with Kevin Magnussen's Haas, and mounted a superlative comeback drive in which he was at times the quickest car on the track. With a trouble-free race, he might even have contested for victory with Max Verstappen after the Red Bull driver's early spin into the gravel and Charles Leclerc's Ferrari engine failure while leading.

There is also Zandvoort later in the season to take into account. Again Hamilton was the leading Mercedes driver, and battling for the lead with eventual winner Verstappen for much of the race, only this time to suffer for the decision not to change his tyres during a late Safety Car, and drop to fourth at the flag. ▶





“I FEEL INCREDIBLY FORTUNATE TO BE WITH A TEAM LIKE MERCEDES AND A TEAM-MATE LEARNED A HUGE AMOUNT. GOING UP AGAINST SOMEONE LIKE HIM IN



In Australia (above) and Miami (left) Hamilton would have been the lead Mercedes driver but for inopportune Safety Car interventions

Without these misfortunes for Hamilton, Russell’s final points advantage in the championship is wiped out. Factoring them all in, Hamilton actually finishes ahead of his team-mate by a scant five points.

At the same time, while Russell was absolutely superb in winning in Brazil, and holding off Hamilton in the closing laps after his earlier clash with Verstappen, the other truly outstanding Mercedes race drives last year were all from Hamilton – Spain, Silverstone, Hungary and Zandvoort.

But getting so close says a vast amount for the quality of Russell’s performance, bearing in mind Hamilton has been beaten in the championship by a team-mate over a season only twice before in his career.

Each time there were extenuating circumstances – in 2016, Nico Rosberg benefited from a significant reliability advantage and still only scraped to the championship; and in 2011 personal problems for Hamilton affected his on-track performance and his messy season contrasted with a strong year for Jenson Button.

In essence, there was effectively almost nothing to choose between Hamilton and Russell over the season in 2022 – just as between Hamilton and Fernando Alonso in 2007.

So Russell emphatically underlined his credentials as a future world champion and one of the leading lights of the new generation of drivers.

Internal battles

Despite the closeness of their performance, the relationship between them remained positive throughout, in contrast to Hamilton’s partnerships with Alonso and Rosberg, both notorious for their tension. Even with Button there was occasionally acrimony, even if both men were better at hiding it.

Hamilton, as the senior driver and fully invested in the Mercedes project for two decades, took an almost a fatherly approach to Russell last year.

“George is doing a great job,” he said during an interview in Austin in late October. “I don’t have any problems with it. There’s no issues in the background with us. George, I would say, and his team, they don’t experiment the same, obviously. But that’s because I’ve been here for a long time, so I’m willing to take these risks. I have the big, deep conversations with people I’ve been with for 10 years. So, me and ‘Shov’ [chief engineer Andrew Shovlin] can have arguments, constructive arguments.

“It’s his first year with the team, so he’s come in and he’s just doing his job to the best of his ability. Very little movement of setup. I’m doing all the leg-work, back and forth here and there, different wings, all these different things. And I like that anyway.”

SUCH AS LEWIS. HE HAS REALLY PUSHED ME TO MY LIMITS AS A DRIVER AND I HAVE THE SAME CAR, THERE IS NO BETTER REFERENCE”

GEORGE RUSSELL

Hamilton was often keen to point out his experimental focus to setup in the first part of the season whenever the subject of their comparative performance came up. It was a factual statement, but also served to explain and defend some of his shakier weekends earlier in the year, when some ill-advised commentary was even suggesting he should retire.

Russell’s personal standards are every bit as high as Hamilton’s so he, too, had mixed feelings about the year.

Mid-season, just before the summer break, he mentioned in an interview how he had things to improve on despite leading Hamilton in the championship – this being a reference to the fact that he knew Hamilton was beginning to establish a small but decisive performance advantage in both qualifying and races.

In fact, from Canada onwards, the internal battle swung in Hamilton’s favour. He outqualified Russell 10 times in the remaining 14 races, and one of the ones he didn’t was Hungary, where Russell took a brilliant pole, but a DRS failure prevented Hamilton from competing.

“If you had told me at the start of the season [that I would finish ahead], I would have been incredibly proud and happy, because nine times out of 10 if you finish ahead of Lewis Hamilton you are probably going to be world champion,” Russell said.

“The car hasn’t been performing and we’ve both had our difficulties. I have no doubt he is going to be back to his normal level next year if the car is capable of a championship win.

“He had a very difficult start to the season. Things weren’t going smoothly for him and they were a bit more smooth for me. That form swung around a bit in the second half of the season but over the season it probably balanced itself out.

“I feel incredibly fortunate to be with a team like Mercedes and a team-mate such as Lewis. He has really pushed me to my limits as a driver and I have learned a huge amount. Going up against someone like him in the same car, there is no better reference.”

Did Russell stay at Williams too long?

Within Mercedes it was always known Russell would be good, and a step up from his predecessor Valtteri Bottas.

Wolff had tried to get Russell out of Williams for 2021, but baulked at the multi-million dollar fee then team boss Claire Williams demanded for releasing him a year before the end of his contract. Why pay it, Wolff thought, when he could have Russell for free if he just waited a year?

Still, Wolff admitted during last season that Russell probably stayed at Williams for a year too long. He explicitly referred to the driver not needing that extra year of development – something Russell agrees with. But unspoken – out of respect for Bottas – was the realisation that, in hindsight, it would have been better for another reason if Russell had joined Mercedes for 2021.

Through Hamilton’s titanic title battle with Verstappen, only once all



MERC’S RAPID RECOVERY PLAN

Mercedes had a wake-up call in 2022, producing its worst car for a decade having failed to fully understand the complexities of Formula 1’s new regulations.

The car was conceived to run close to the ground. But doing so induced aerodynamic bouncing, or ‘porpoising’. Mercedes lost many months of development while it tried to understand that problem and fix it. Only then could it start to put performance on the car.

It is a measure of the capability of Mercedes’ design group that they then had arguably the steepest development curve of any team on the grid. A car that started the season a second or more off the pace ended it with a win in the penultimate race of the year, only just failing to beat Ferrari to second in the constructors’ championship.

The key questions hanging over Mercedes heading into 2023 are, has it properly understood where it went wrong last year and, if so, has it made up enough ground to compete right back at the front again?

Team boss Toto Wolff admits: “It will be tremendously difficult to catch up against Ferrari and Red Bull. We have started the 100m sprint 10m behind everyone, so we will just have to run faster –

and this organisation has all that’s needed to run faster.”

There will be great interest as to whether the Mercedes has changed significantly, and particularly whether the ‘zero-sidepod’ concept that marked it out from the rest of the field will stay. The team insist that the car’s external looks are not especially significant.

Wolff said at the end of 2022: “I go in the windtunnel and say: ‘That thing looks like this year’s car.’ But they say it’s very different underneath. It’s about the airflow, weight distribution and aero map.

“Mid-year, the concept of our car fundamentally changed, but you couldn’t see anything. So I think the narrow-sidepod concept is in a way a red herring.

“It’s different but looks the same. It’s full of surprises. The last time I saw it in the windtunnel, it looked the same but maybe not the same.”

He added: “It’s all in the fine detail of how can we make the car work aerodynamically, improve the ride and make it more stable.

“It’s multiple factors that contribute to a car that is simply not good enough. If we’re able to sort that out over the winter, at least we can provide a stable platform to the drivers and develop it from there.”



There was little to choose between the pair in 2022 but it was Russell who claimed the team's one pole in Hungary and sole GP win in Brazil

year did Bottas beat the Dutchman on merit – when Valtteri won the Turkish Grand Prix. So Bottas gave precious little assistance to Hamilton's title campaign. Given how Hamilton and Russell compared in 2022, it's reasonable to assume Russell would have fared rather better. Would that have been enough to turn the tables in Mercedes' favour?

Mercedes watched with interest the development of the contest between its two drivers in 2022. At mid-season, it was genuinely unclear who would

ON THE SAME STRATEGY AS A RIVAL
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come out on top, or how they would compare in detail. By the end of the year, though, a pattern had emerged.

In the races, the margins are fine, but Hamilton generally speaking had the edge, partly because of his experience and adaptability and how they enabled him to get the most out of whatever is asked of him in the race, whatever the nature of the stint in question.

On the same strategy as a rival, the team feel Hamilton will more often than not hunt them down and beat them. Come up behind someone with a tyre advantage as small as two laps and he'll get past, in a way that is not always easy to explain, but comes down to his innate feel for the tyre and his greater wisdom and guile, and his superlative race-craft.

Russell, though, has a better view of a race in which he is not in direct on-track competition with someone – separated by a pitstop, for example – perhaps because of the extra time he spends in the simulator, where Mercedes pumps him with information.

Toto Wolff knows that if the new Mercedes is a much more competitive beast this season he might have a busier time dealing with his drivers



It's all down to the car


All of which makes the prospect of 2023 all the more enticing. How will they shape up if Mercedes is able to return to full competitiveness? How will their relationship develop if they are competing for the title?

How will Wolff manage any tensions that emerge? Will Hamilton, out of contract at the end of the season, make good on his statement last autumn that he would sign a new deal? All are questions that remain to be answered.

Russell says that he is going to be approaching his second year at the team the same as his first, regardless of whether the car is capable of winning or not. While acknowledging that Hamilton and Verstappen have more experience at the front than him, he says he feels ready to fight for a title.

"If you go out and you put it on pole and win every race," Russell says, "you'll be world champion. You've just got to focus on smaller details, and it's in your own hands."

Back in Austin, Hamilton was anticipating being outscored by Russell by the end of 2022 – but already laying down a marker for 2023.

"If next season we have a car we're much happier with, we can be more focused on that whole... not having to go crazy with setups," Hamilton said. "Then we can have a better battle. If he's ahead at the end of the season, I don't really feel anything about it. We're not in the championship. We are fourth and sixth. If it was first and second, it's different." 

Andrew Benson is BBC Sport's chief F1 writer



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60 FIGURE

As he attempts to win a third consecutive world championship, here are some of Max Verstappen's key numbers...



THREE

YEARS YOUNGER THAN PREVIOUS RECORD HOLDER SEBASTIAN VETTEL WHEN HE BECAME THE YOUNGEST-EVER GP WINNER IN 2016, AGED 18 YEARS 228 DAYS

ZERO FOR EIGHT

No victories for Max from the opening race of the eight seasons he's raced in Formula 1

21.47%



Max's win percentage from 35 victories out of 163 starts, placing him 10th on the all-time list. Lewis Hamilton's percentage stands at 33.22% and Fernando Alonso's at 9.01%

One hundred and forty-six points



ahead of second-placed Charles Leclerc in the 2022 championship standings, the second-biggest margin of victory after Sebastian Vettel's 2013 margin of 155 over Fernando Alonso

14

days after making his F1 debut he scored his first F1 points, in the 2015 Malaysian GP, making him F1's youngest-ever points scorer at 17 years and 180 days

CRGBOY007

Max's gamertag in the FIFA online video game in January 2019, when he was ranked 19th best player in the world in the Ultimate Team mode...



5557

miles covered as the leader of a world championship GP across 57 different races

ONE HUNDRED AND FIFTY-SEVEN

starts to claim 30 GP wins. Michael Schumacher managed the same number of victories in only 109 races



2028

When Max's current contract with Red Bull ends, he will be in his 13th season driving for the Milton-Keynes based team



17y 166d Verstappen's age when he started the 2015 Australian GP, making him the youngest-ever driver to start a world championship Formula 1 race

35-7

The wins advantage Max holds over his Red Bull team-mates

FOUR

Max is one of four sons of former F1 drivers to win a GP, alongside



Damon and Graham Hill...



Gilles and Jacques Villeneuve...



and Keke and Nico Rosberg

2.3 IN THE NICO TIME

IN FORMULA 1, WHEN YOU'RE OUT, YOU'RE OUT – UNLESS YOU'RE NICO HÜLKENBERG. HE MIGHT HAVE HAD MORE FAREWELL TOURS THAN STATUS QUO, BUT THERE'S A COMPELLING REASON TEAMS KEEP HIS NUMBER IN THE COMPANY ROLODEX...

WORDS LUKE SMITH PICTURES  motorsport
IMAGES





THE COMEBACK KING

2023 is shaping up to be the year of the comeback. Flip phones are all the rage again, David Tennant is set for a (brief) return as *Doctor Who*, and TV school drama *Waterloo Road* will ring the bell for a new class after an eight-year hiatus. It's like the clocks have rewound to 2010.

So, what better time for F1's serial comeback king to make his return to the grid? Nico Hülkenberg is, in the words of Take That (another act which had a successful second coming), back for good, joining Haas for his first full season of racing since being axed by Renault at the end of 2019.

Newcomers to F1 may only know of Hülkenberg through his depiction in *Drive to Survive* as the grid's perennial nearly man, holding the unwanted record of the most grand prix starts (181) without a podium finish. When he was dropped by Renault to make way for Esteban Ocon, most felt he'd had his chance in F1 ▶



Hülkenberg was with Renault for three seasons from 2017-2019 before being dropped, and it looked like being his last full-time race seat in F1



and largely failed to make the most of it. He was a safe pair of hands, but not the man who would really make the difference.

Yet in his time away, Hülkenberg's stock, strangely, only rose. Stand-in appearances

for Racing Point in 2020 when both Sergio Pérez and Lance Stroll were sidelined by Covid-19 threw Hülkenberg an unexpected opportunity which he made the most of, the high point coming when he qualified third for

the 70th Anniversary Grand Prix. The 'Hülkenback' phenomenon was born, revived when he again featured for 'Team Silverstone' – by then Aston Martin – in Bahrain and Saudi Arabia last year in place of Sebastian Vettel. The solid performances at late notice served as a reminder to the F1 world that Hülkenberg still had what it took to race at the highest level.

Despite his 'supersub' appearances, Hülkenberg wasn't hankering to return full-time. He felt in need of a break and to disconnect a bit from F1. He carved out a settled life for himself, getting married and becoming a father. There was an enjoyment for life without the stresses that come with racing in F1, dovetailing reserve driver duties for Aston with TV work, and even turning down chances in other categories.

"I was happy," Hülkenberg says. "I had some distance and a breather from it. I wasn't stressing or thinking about it too much." If his time racing properly in F1 was over, then so be it.

But as the 2022 season neared its halfway point in the summer months, something changed: Hülkenberg wanted to get back in F1. "It sort of crept back, the desire to come back on the grid, to go racing, to kick ass!" he says.



In 2022 Hulkenberg made two 'supersub' appearances at Aston, in Bahrain and Saudi Arabia, for a Covid-stricken Sebastian Vettel



When he stepped in for Sergio Pérez for two races in 2020, Hülkenberg qualified his Force India an amazing third for the 70th Anniversary GP

“And then the discussions started.”

It was Hülkenberg who made first move, calling up Haas team principal Guenther Steiner over the summer. As the driver-market jigsaw began to fall into place, it was clear that Mick Schumacher’s future at Haas was looking bleak, making it a viable open seat. Haas always maintained it wouldn’t rush into any decision; its list of candidates ran to double digits at one stage. Antonio Giovinazzi was leading the race for the seat, only to blow his chance with a clumsy practice crash in Austin. It’s little coincidence that around the same time, talks with Hülkenberg began to accelerate.

“It got more concrete and serious, and I was getting more optimistic and confident that we could agree a deal,” Hülkenberg recalls. On the Wednesday before the Abu Dhabi GP he landed in Dubai to find a contract waiting for him that sealed his F1 return. The announcement he would be back full-time in 2023 came the next day.

Hülkenberg was happy to play to the ‘Hülkenback’ trend his stand-in performances had spawned, announcing his return with a series of memes on Instagram which had joked about him being a replacement for girlfriends, footballers and even world leaders such as Boris Johnson and Joe Biden. “It’s quite funny how enthusiastic and how creative they are, coming up with all these things,” Hülkenberg says.

“Social media over the last few years since I left

has just grown more and more and exploded, and is a very present part of F1.”

The growth of social media and F1 itself points to just how much has changed since Hülkenberg has been away – and how long it has been. Nico admitted after his test day with Haas in Abu Dhabi that his neck felt sore, having gone so long without the unmatched physical stresses of F1 machinery. So why did Haas think a 35-year-old driver who had not raced full-time for three years would be its best bet for 2023, particularly after investing the previous two seasons in Schumacher’s development?

“Experience,” says Steiner. “He was in F1 a long time. He was with teams in the midfield for a long time, so he knows how they work, how to make them better. We looked at it: wherever he was, the team always made progress. We hope that’s our aim, to do that as well here.”

Steiner is correct to point to Hülkenberg’s record with midfield teams. Haas will be Nico’s fifth team in F1 after stints at Williams, Sauber, Force India and Renault, a wealth of experience that can be of benefit to Haas. He consistently punched above his weight through this time, even coming close to a Ferrari seat at one stage. His stock only started to drop at Renault upon Daniel Ricciardo’s arrival. Then at his peak, the Australian was simply a cut above what Hülkenberg could produce.

Moving for Hülkenberg also points to the lack

of faith Haas had in Mick Schumacher. Year one might have been a write-off owing to the lack of car development, but there was no excuse for the huge gap between Schumacher and Kevin Magnussen through 2022, nor the mistakes or crashes. Tensions also arose at points when Mick didn’t follow the team’s instructions, notably in Austria when he was told not to fight on-track with Magnussen but did so anyway. Steiner admits that even if Schumacher, not Magnussen, had scored pole in Brazil, it wouldn’t have been enough to save his seat.

The Haas project appealed to Hülkenberg after its upswing last year. Although the VF-22 car got just one major update all season, it remained a competitive car through much of the campaign. The arrival of new title sponsor MoneyGram will take Haas up to the budget cap, allowing it to properly invest for the future.

“It’s obviously a team with potential,” says Hülkenberg. “2021 was very tough. They bounced back to eighth [last season] and I think there’s still room for improvement. There’s things we can do better as a team. I’m here because I want to extract that.”

It marks a big change of direction for Haas, going from two rookies with Schumacher and Nikita Mazepin to Magnussen and Hülkenberg, who have 322 starts between them, in two years. But there was always a feeling of ‘needs must’ in the past for Haas, especially on the sponsorship ▶



“YOU’VE GOT TO BE HAPPY, FRESH AND IN THE GOOD MINDSET. IF YOU GET INTO A CYCLE WHERE YOU DON’T HAVE THAT, THEN IT GETS TOUGH”

front. It’s something Steiner recognises.

“Two years ago, we were in a different position,” he says. “Now we’re in a different position again; a much better position now.”

Pairing Magnussen and Hülkenberg is not without its concerns, most of which relate to a media pen incident in Hungary in 2017. After the race, Hülkenberg interrupted Magnussen’s TV interview to call him “the most unsporting driver on the grid”, to which Magnussen famously replied: “Suck my

Hülkenberg had decided he was open to a return to F1 in mid-2022. His experience was a key factor in Haas giving him chance to do just that

balls, honey!” It’s a quote that stuck, much to Magnussen’s subsequent annoyance.

The duo didn’t speak for some time, but renewed contact in Bahrain last year. Hülkenberg bounded up to Magnussen in the airport and went straight in with “suck my balls!” to break the ice. It did the trick. “He found it quite funny and amusing,” says Nico, who anticipates a healthy working relationship. “I have absolutely no worries working and racing alongside him. We’re both adults, we respect each other and we’ll race for the team. So no problems whatsoever.”


Magnussen is on the same page, having made clear to Steiner early on that he had zero issues

with Hülkenberg as a possible team-mate. They even share common ground as two of only three dads who will be racing this year, and both suggest they can share advice about nappy brands for their young kids. But they won’t force a friendship that isn’t there.

“I don’t think you need to be best pals,” says Magnussen. “There’s no pressure to build something away from the track. I respect him as a driver. That’s the only thing that matters.”

Magnussen’s success with Haas last year can be an inspiration to Hülkenberg. Magnussen was also at peace with his F1 career having ended, only to be pulled back in and hit a new peak with pole in Brazil. Kevin has spoken of how the break from F1 did him good, taking away some of the pressure he felt to perform and injecting a new-found love for the series. A similar freshness could work wonders for Hülkenberg.

“A lot is up in here,” says Nico, tapping his head. “You’ve got to be happy, fresh and in the good mindset. If you get into a cycle where you don’t have that, then it gets tough. Then uncomfortable questions come, and performance, it’s just like a negative circle. So if you break away from it, become fresh, it’s good and healthy.”

F1 will get a happy, healthy Hülkenberg who has relit his fire when he lines up on the grid in Bahrain. And while his podium-less record will always be easy fodder for his critics, the experience and knowledge he brings may be exactly what Haas needs to continue its revival. 



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2.4 FORMULA 1'S AMERICAN DREAM

THE ABSENCE OF AN AMERICAN DRIVER HAS BEEN ONE OF THE FEW OBSTACLES TO F1'S REMARKABLE GROWTH IN THE USA. LOGAN SARGEANT MIGHT NOT HAVE BEEN EXPECTING TO JOIN THE RANKS QUITE SO SOON, BUT HE'S DETERMINED TO SEIZE THE MOMENT

WORDS LUKE SMITH PICTURES  motorsport
IMAGES

ARGENT

THE DESIRE TO CRACK AMERICA has been guiding Formula 1's direction ever since Liberty Media took over the series in 2017. With three US races planned for this year, booming TV figures and an influx of American sponsors, you would be forgiven for thinking it's mission accomplished.

But especially in the *Drive to Survive* era where the personalities of the drivers have become so central to F1's global image, without an American driver on the grid, there was always going to be room for improvement. ▶



Sargeant surprised Williams with his potential, after only joining the team's young driver programme at the end of the 2021 season



Enter Logan Sargeant, Williams' new signing for 2023. When the lights go out in Bahrain, he will become the first American to race in F1 since Alexander Rossi's five-race sojourn with Marussia in 2015, and follow Scott Speed in 2007 as the latest driver to fly the flag full-time.

The fact his arrival into F1 has come at the same time as the American boom is something Sargeant puts down as a "happy coincidence" and he won't let that weigh on him. "Hopefully I can represent [America] well and make them proud," he says. "But I don't think it's any extra pressure to be honest."

It's an opportune time for F1 to get an American on the grid, but don't go thinking Sargeant's graduation from Formula 2

is purely because of his nationality. He's been a stand-out talent since go-karting, and only narrowly missed out on the Formula 3 title back in 2020 to fellow 2023 F1 rookie Oscar Piastri, widely heralded as the next big thing. It was around this time Sargeant's career hit a funding roadblock, leaving him to explore options in sportscar racing and then return to F3 with the lowly Charouz team.

But by the end of 2021, he had joined Williams' young driver programme and had a plum F2 seat with Carlin in the bag for 2022. Sven Smeets, the sporting director of Williams, had a plan to evaluate Sargeant over two seasons in F2 before then considering his F1 credentials – only for that to change.

"Very quickly," Smeets tells *GP Racing*, "we started to see the potential that we maybe didn't have to do two seasons."

Even so, Sargeant was never the number one choice for the Williams seat. When the writing was on the wall for Nicholas

Latifi quite early in 2022, the initial plan was to sign Piastri on loan from Alpine, which deemed Williams to be the best proving ground for the young Australian. This wasn't a proposition the Piastri camp was all that keen on and, internally at Williams, some figures also had their doubts. As one insider put it: "Why spend two years on Alpine's F1 junior when we have our own one to look after?"

Sargeant hit his stride in F2 around the same time the Piastri contract saga began to unravel last summer. Back-to-back feature race wins at Silverstone and Spielberg, the former being a dominant display from pole, thrust him into title contention. Behind the scenes, Williams started to advance talks with Sargeant's management, who left him in the dark so he could focus on his F2 campaign.

"I was kept out of the loop on that," Sargeant recalls. "I wasn't aware of that until after Monza. That was when it pretty much became concrete, as long as I got my super licence."

The super licence conundrum had already caused compatriot Colton Herta to lose his bid for an AlphaTauri seat, and Sargeant's was far from guaranteed. That didn't stop Williams boss Jost Capito from announcing in Austin that Sargeant would get the drive so long as he met the 40-point threshold, later saying it would have been "unfair" to keep other hopefuls like Mick Schumacher and Antonio Giovinazzi hanging on. Capito acknowledges the timing of the announcement in Austin was no coincidence, showing a desire to maximise the American angle in a move that undoubtedly pleased the US-based owner of Williams, Dorilton Capital.

Having lost a decent haul of points due to a mix of reliability woes and, at Zandvoort, letting emotions get the better of him after a bad start, Sargeant entered the F2 season finale at risk ►

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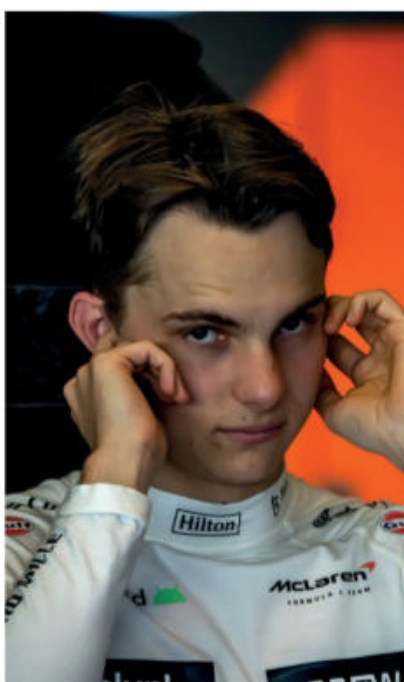
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The one that got away: Oscar Piastri

Some at Williams weren't sold on the wisdom of investing time and resources on another team's 'young driver'. And as it transpired, Piastri and his management viewed the prospect of being 'loaned' to Williams with all the enthusiasm of a cat sniffing dismissively at an unappealing comestible.

The 2021 Formula 2 champion, managed by compatriot Mark Webber, duly hit the eject switch from Alpine and its driver-development programme, taking advantage of less-than-diligent contractual arrangements. Piastri will line up alongside Lando Norris at McLaren this season; though that team has lost some of the ground it clawed back in recent years, it remains a more credible midfield prospect than Williams – both right now and for the near future.



Got a better offer: Nyck de Vries

It's a plot ripped from the pages of a movie script: Nyck de Vries was having a coffee and getting ready to entertain some VIPs when he got the call to report to the Williams garage and qualify the FW44 in place of Alex Albon, who was sidelined with appendicitis. De Vries had long since reconciled himself to a different career trajectory than former junior-category rivals Albon, Carlos Sainz and Pierre Gasly.

While his impressive 'supersub' performance at Monza might have put de Vries in the frame as a potential replacement for outgoing Williams driver Nicholas Latifi, the Dutchman was thinking bigger. A speculative phone call to Red Bull 'driver advisor' Helmut Marko enabled him to slot into the seat about to be vacated by Gasly.



Never a possibility: Fernando Alonso

Alpine boss Laurent Rossi's master plan to loan Oscar Piastri out to Williams for a year or two, then potentially slot him into Alonso's seat, fell at the first hurdle when Alonso chafed at only being offered a one-year contract. Though it was known Nicholas Latifi would be shown the door at Williams, Alonso had no interest in driving for a backmarker team and engineered himself into Aston Martin as soon as Sebastian Vettel's imminent retirement was announced.

In doing so Alonso triggered the sequence of moves which left Sargeant as one of the few viable options open to Williams.

Robert Holmes



Sargeant was given four FP1 runs and the Abu Dhabi post-season test last year to help him get better acclimatised to F1 ahead of his debut

of falling short of the super licence threshold. But he felt "at peace" with the scenario and was therefore able to shrug the pressure off, itself an encouraging show of his mindset.


"I knew if we executed the way we could and had the same pace that we've had all year, that everything would be fine," he says. The same could not be said of Smeets, who admits he was "very nervous for [Sargeant] at the start of the weekend," only for his fears to be allayed once Sargeant had cleanly got through qualifying and the Saturday sprint, before clinching fourth in the championship on Sunday – and with it, the required super licence points.

With just three days of pre-season testing per team, there is a small window for Sargeant to get up to speed. Williams tried to ease the learning curve with four FP1 runs at the end of last year, the Abu Dhabi test and a deal with Alpine for Sargeant to test an old car in the winter. It has all helped get Sargeant ready for the physical reality, an area in which Smeets "could really see there was a huge improvement."

Williams' philosophy with Sargeant won't change upon his F1 graduation. Smeets would like to see a repeat of the "very quick steps" Logan made through F2, but is also conscious that any rookie must go through some "tough moments" when they debut. So what is the target? "Progression," says Smeets. "Take this season to learn, and then be full on for '24."

By then, F1 will hope Sargeant has cemented himself on the grid and given the fans in Miami, Austin and Las Vegas a home favourite to root for. But being 'the American driver' isn't an identity Sargeant is looking to play on. He's been based out of London for the past six years – there'll be no repeat of Michael Andretti's doomed commuting plan in 1993 – and isn't dwelling on any extra scrutiny he may face. "As long as I prepare the best I can physically, mentally, put my time in at the factory in Grove and do everything I possibly can to be the best driver I can be, then I have to live with that," he says. "Hopefully, that's good enough to stay in F1 for a long time."

Sargeant could be a pivotal figure in F1's American dream. But to achieve that, he needs to be a success; simply making up the numbers won't excite US interest. Doing more than that with Williams will be a tough ask, particularly in year one, though this is clearly a multi-year commitment.

In the words of famed US army General George S. Patton: "Americans love a winner, and will not tolerate a loser." If Sargeant can hoist the star-spangled banner atop the podium one day, an entire nation will salute him... 



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WHILE THE ASTON MARTIN F1 TEAM HAS HAD SEVERAL DIFFERENT COATS OF PAINT DOWN THE YEARS, ITS FACTORY IS SHOWING ITS AGE – WHICH IS WHY OWNER LAWRENCE STROLL IS SPENDING £250M ON A NEW ONE, AS PART OF HIS FIVE-YEAR PLAN FOR CHAMPIONSHIP GLORY

WORDS STUART COOLING PICTURES  AND ASTON MARTIN

CHAPTER 3. ASTON'S DESIGN FOR LIFE

CONSTRUCTION TIME AGAIN

It's not much of a stretch to say that any *GP Racing* reader who has had building work done will be painfully aware that the process generally costs twice as much and takes twice as long as envisaged. Sometimes more. It's an unwritten, unspoken rule which bedevils any construction – not least the controversial HS2 railway line, whose long-delayed path *GP Racing* traverses as we break orbit from Brackley *en route* to a site where another grand design is emerging piece by piece from this area's muddy *terroir*.

Lawrence Stroll had been a Formula 1 team owner for less than a year – and was several months away from swooping in to rescue the financially troubled Aston Martin marque – when in May 2019 he announced plans to build a new factory on the site of the ex-Jordan facility he had just acquired. The project's roadmap outlined a moving-in date of summer 2021. F1 might be a fast-moving, technically demanding, deadline-driven sport but even it isn't immune to outside forces: Stroll's acquisition of Aston Martin, the first pandemic lockdown just as the diggers were getting ready to move in and break ground, plus the inevitable changes of plan pushed the project back.

What is now the Aston Martin F1 team *should* move in during May this year, a month containing three grands prix, and even then the build will be a long way from completion. This organisation is nothing if not ambitious.

"We think we can manage it properly," says team principal Mike Krack. "It was key we build the current car here [the original factory] and then move over when that is done. At the end of the day, 14 days up and down will not change the world, but I think we will make it on time..."

The team founded in 1991 as Jordan Grand Prix has long since outgrown its original site and now conducts much of its extended business in a ragtag assortment of prefabricated cabins and rented space in the neighbouring industrial estate, across the road from the gates of

Silverstone. To enable that business to continue right up until the big move, two of the three planned new buildings are being erected on either side of the original factory, which will then be demolished to make way for the third after the team moves out.

Blowing in the wind

Stroll finally broke ground 18 months later than planned, in September 2021, in a choreographed photo shoot also featuring Sir Anthony Bamford, a fellow car collector as well as chairman of team sponsor JCB. In the interim plans had evolved; Stroll had hired ex-McLaren man Martin Whitmarsh as CEO and been persuaded by chief technical officer Andrew Green to add a windtunnel to the site at a cost of over £150m. Originally the plan had been to continue renting time in the Mercedes tunnel, a short commute down the A43 to Brackley. Shortly afterwards Stroll launched a bond scheme on the London Stock Exchange to raise £250m to fund construction of the campus.

Construction has proceeded under the superintendence of Guy Austin, who was talked out of retirement to help deliver the project after progress stalled during the first months of the pandemic. This is by no

means Austin's first racing facility rodeo. It's humorous coincidence that he answers to Whitmarsh; the McLaren Technology Centre is one of the few British-based F1 HQs erected without Austin's involvement ("Ron wanted me to sign an exclusivity clause," he chuckles).

At Ridge Partners, Austin worked on various developments to Red Bull's factory since it was the property of Stewart Grand Prix in the 1990s, built Alpine's factory at Enstone and its more recent subterranean CFD facility, and oversaw constructions for the likes of Lola, Prodrive, TWR Arrows and BAR-Honda. He was also responsible for the original Jordan F1 factory, built very much to a budget just over 30 years ago and now looking its age.

It was Austin who delivered the final nudge to raze the original Jordan factory rather than retain the outer shell. "I said, 'Do you really want this 30-year-old thing in the middle? It's going to need a lot of work done and

This is how the facility should look when finished, with the helipad neatly hidden at the back of the new buildings





This is 'the street' which runs the length of the main building. The design office, which will be open-plan, is on the left



it’s not really fit for purpose anymore,” he explains. The final building will accommodate the on-site catering facilities for all staff as well as a fitness centre, conference space, a new cutting-edge simulator and a purpose-built space for the now *de rigueur* in-house esports team.

Progress in the building on the far side which will house the windtunnel has naturally been slower, given the working area requires massively strong foundations to support the infrastructure. Supporting it in the relatively soft earth on site required hundreds of concrete piles to be driven into the ground. Even once running it will require care to set up and calibrate, which isn’t expected to happen until the middle of 2024. Aston Martin’s 2025 car will be the first to feature input from the new tunnel, which will feature such cutting-edge niceties as laser doppler anemometry.

“THERE’S NO DOUBT IT WILL BE A WORLD-CLASS FACILITY AND HAVING ACCESS TO THAT 24/7 IF REQUIRED IS OBVIOUSLY VERY IMPORTANT. HAVING YOUR OWN FACILITY MEANS YOU CAN DO OTHER EXPERIMENTS AS WELL”

DAN FALLOWS

“There’s no doubt it will be a world-class facility,” says technical director Dan Fallows, “and having access to that 24/7 if required is obviously very important. As we improve, and our windtunnel runs availability that we have from the Aerodynamic Testing Restrictions goes down, clearly we wouldn’t be spending as much time in the tunnel, but having your own facility means you can do other experiments

as well. Which is invaluable, and something we don’t necessarily have the luxury of doing at the moment while sharing a tunnel with another team.

“Inevitably when you build a windtunnel, you have to go through a commissioning process to determine that it’s going to give you the numbers you expect to see. We’re fortunate enough to be testing in the Mercedes windtunnel which is a very high-quality facility, so we need to make sure our new facility is giving results which are consistent with those. And that does take a certain amount of time.

“But there are things we can do to speed up that process. Obviously the target is to get in there as soon as we can.”

The numbers game

One theoretical advantage Aston Martin has in future-proofing the campus is that F1’s budget cap places a natural limitation on how many people can be employed on site. The campus plans have been tailored to a headcount of around 700 people, a number which is unlikely to grow significantly. Car parking space – or lack thereof – ranks among the chief bugbears at other F1 facilities which have vastly outgrown the scope of the original plans. Even the award-winning McLaren Technology Centre, purpose-built at the turn of the century, plays host to beastly traffic jams on the nearby A320 and a daily bunfight over parking. The company even runs a minibus to Woking station – and, when McLaren Applied Technologies was part of the group, it was forced to open a new office in central London to cater for high-value staff who simply refused to work on the outskirts of Woking.

These calculations have also informed the landscaping in and around ▶

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Construction of the first building, aided by some kind weather, has been rapid and the team hopes to be in at some point in May of this year

the campus, where footpaths and a running track will loop around green spaces including a number of functional lagoons. Rainwater running off the roof of the buildings, the car park asphalt and Mr Stroll's helipad has to be delicately managed back into the ecosystem.

"Obviously we're introducing a lot of flat, impermeable surfaces into a space which was once mostly earth," says Austin. "It's important to be a responsible constructor and a good neighbour. It's not enough to be a big local employer. Complying with the building regulations, constructing a campus that's sympathetic to its environment, going above and beyond our obligations are all part of being good neighbours. You wouldn't want villages further down the valley to flood every time it rains..."

Inside, the 160-metre-long main building has also been designed to put people first. A large open vestibule (described by Austin as "the street") runs the length of the building with an upper floor connected by walkways. The roof features a vast array of glass panels which will admit natural light. Another criticism of the MTC is that while the 'boulevard' facing the lake features an almost seamless sweep of glass (indeed, former boss Ron Dennis was unfeasibly pleased with the slimline frames which permitted this), the actual offices are set back, meaning the majority of the poor benighted drones who labour within do so entirely illuminated by artificial sources.

The upper floor will host the design office in one open-plan space for the first time. When *GP Racing* asks Fallows how he expects this to impact the working dynamic and creativity in the design office, he is understandably enthusiastic.

"I think it'll change it significantly," he says. "It's a factor of, we've got this small factory here and these modular buildings that you probably see into the side where we have some people who are not necessarily designing parts of the car at the moment, but they are very connected to our design ►



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process. And having them not in the same room makes it slightly more difficult to communicate with them.

"I've been in a big, open-plan office before with the ability to be able to walk around and talk to people very easily, and it makes a huge difference in terms of those interactions, particularly those serendipitous interactions where you can have a chat with somebody, you chat about one thing and go on to lots of other things, and they often end up being the most creative conversations. That's what we're trying to build, really."

"The fact that you can talk to people without having to arrange meetings, it facilitates the dialogue massively," says Krack. "The remote locations that we have, so you either need to pick up the phone or organise something, sometimes this is a natural barrier for more exchange. And the other thing is logistics, it will be massively different and massively easier."

RED BULL, HAVING STAKED CLAIM TO YEARS OF F1 DOMINATION FROM AN INDUSTRIAL ESTATE IN MILTON KEYNES, HAS LONG SINCE PROVED THAT A TEAM DOESN'T NEED TO SIT IN AN AWARD-WINNING PIECE OF ARCHITECTURE TO BE COMPETITIVE

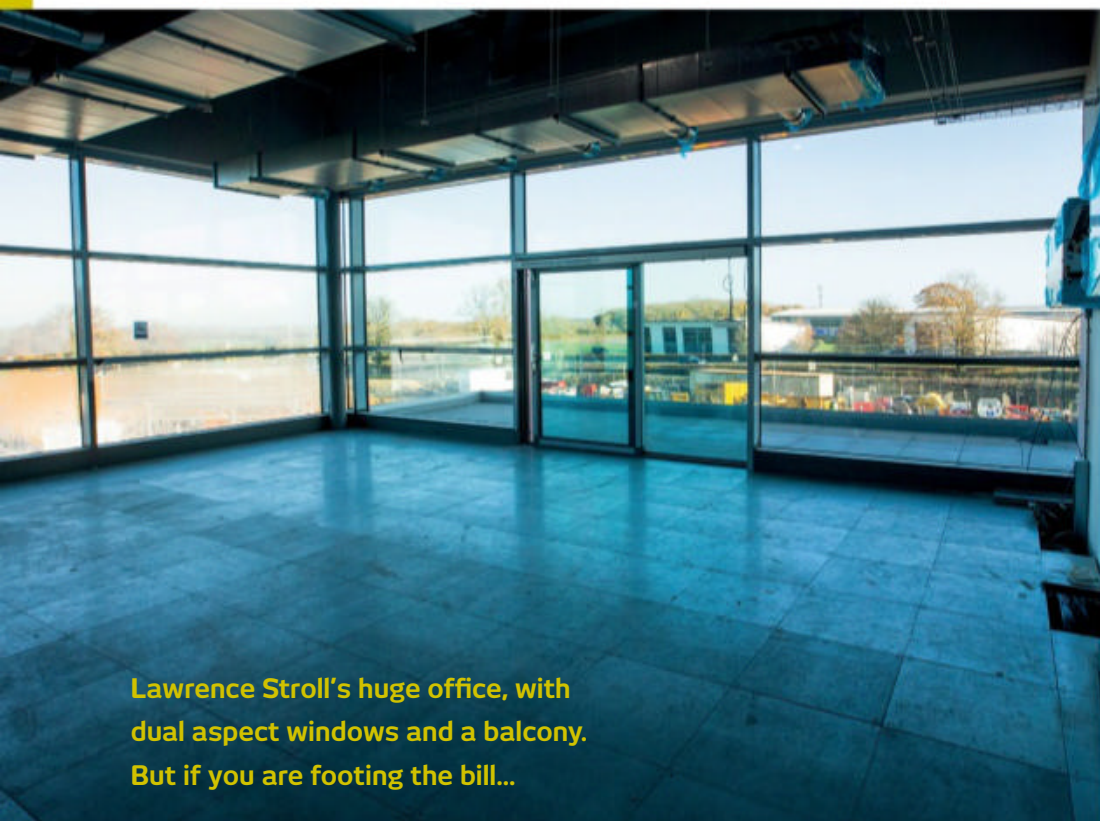
The deadline approaches

During our tour it's impossible not to be slightly amused by the dimensions of Mr Stroll's office, which not only occupies a corner plot with windows on each side and a sizeable balcony, but is also an order of magnitude larger than Whitmarsh's neighbouring pitch. There will be no doubting who is in charge and who pays the bills.

As the construction phase nears its end – for building one at least – the next challenge will be to facilitate the change in occupancy seamlessly. This will involve further capital expense on furnishings and infrastructure which can't occupy two different spaces simultaneously. Two new autoclaves will be installed ahead of the move along with a new five-axis CNC machining



The entrance to the imposing new first stage of the project. The whole facility will, the team hopes, help attract more high-quality staff



Lawrence Stroll's huge office, with dual aspect windows and a balcony. But if you are footing the bill...

centre. New servers to underpin the IT infrastructure will also need to go in several weeks in advance to acclimatise to operating conditions.

Assuming no last-minute slippages in the schedule – and, fortunately, the weather has been unusually kind – one Friday in May those working on site will clock off from the old Jordan factory, go about their business over the weekend, then take up desks in the new building on the Monday.

It's a process Stroll and Whitmarsh are impatient to complete. Bringing everything together under one roof, they hope, will enable the team to function better as a human unit as well as potentially unlocking efficiencies which will improve Aston Martin's ability to work within the budget cap – building more components in-house rather than outsourcing, for instance.

Red Bull, having staked claim to years of F1 domination from an industrial estate in Milton Keynes, has long since proved that a team doesn't need to sit in an award-winning piece of architecture to be competitive. Nevertheless there is always an element of competitiveness between organisations on this front, and not just owing to hubris or corporate ego; having a great place to work can help to attract the most high-quality staff. So will Aston Martin's factory be the best yet in F1?

"Easy to answer," says Krack. "Yes." 

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2 April	Cadwell Park	The Alan Healy Memorial Cadwell Stages	14/15/16 July	Brands Hatch	HSCC Legends of Brands Hatch
7/8 April	Donington Park	Masters Historic Race Weekend	15 July	Oulton Park	Ford Power Live
8/9 April	Brands Hatch	British Truck Racing Championship	21/22/23 July	Brands Hatch	Bennetts British Superbike Championship
8 & 10 April	Oulton Park	British GT and GB3 Championships	22 July	Oulton Park	Tunerfest North
22/23 April	Donington Park	Kwik Fit British Touring Car Championship	28/29/30 July	Oulton Park	Historic Gold Cup
29/30 April	Donington Park	Donington Historic Festival	29/30 July	Donington Park	CRMC Classic Motorcycle Festival
29/30 April/1 May	Oulton Park	Bennetts British Superbike Championship	6 August	Brands Hatch	Mini Festival
1 May	Cadwell Park	Modified Live	12/13 August	Donington Park	Convoy in the Park – British Truck Racing
6/7 May	Brands Hatch	Kwik Fit British Touring Car Championship	13 August	Brands Hatch	Festival Italia
6/7 May	Cadwell Park	Historic Wolds Trophy	13 August	Cadwell Park	Cult Classics
13/14 May	Cadwell Park	Vintage Motorcycle Club Championships	19 August	Oulton Park	U.S. AutoShow
19/20/21 May	Donington Park	Bennetts British Superbike Championship	20 August	Donington Park	Tunerfest Midlands
20/21 May	Snetterton	Kwik Fit British Touring Car Championship	26/27 August	Donington Park	Kwik Fit British Touring Car Championship
27/28 May	Brands Hatch	Masters Historic Festival	26/27/28 August	Cadwell Park	Bennetts British Superbike Championship
27/28 May	Donington Park	British GT and GB4 Championships	3 September	Brands Hatch	Festival of Porsche
3 June	Oulton Park	BMW Sommerfest	9/10 September	Brands Hatch	British GT and GB3 Championships
4 June	Brands Hatch	Brands Britannia	15/16/17 September	Oulton Park	Bennetts British Superbike Championship
11 June	Brands Hatch	Tunerfest South	16/17 September	Snetterton	British Truck Racing Championship
17/18 June	Brands Hatch	American SpeedFest 10	17 September	Brands Hatch	Ford Power Live
17/18 June	Oulton Park	Kwik Fit British Touring Car Championship	24 September	Brands Hatch	Go Japan!
17/18 June	Snetterton	British GT and GB3 Championships	23/24 September	Cadwell Park	Vintage Motorcycle Club Championships
18 June	Cadwell Park	Vintage Motorsport Festival	29/30 Sep/1 Oct	Donington Park	Bennetts British Superbike Championship
30 June/1/2 July	Donington Park	Motul FIM Superbike World Championship	7/8 October	Brands Hatch	Kwik Fit British Touring Car Championship
1 July	Oulton Park	Supercar Pageant – Featuring GT Cup	13/14/15 October	Brands Hatch	Bennetts British Superbike Championship
1/2 July	Brands Hatch	Super Touring Power Festival	21/22 October	Donington Park	British GT and GB3 Championships
7/8/9 July	Snetterton	Bennetts British Superbike Championship	22 October	Snetterton	Modified Live
8 July	Brands Hatch	Bernie's V8s And Historic Outlaws	4 November	Oulton Park	Neil Howard Stage Rally and Fireworks
8 July	Oulton Park	Autos de France	4/5 November	Brands Hatch	British Truck Racing and Fireworks
9 July	Donington Park	Vintage Motorsport Festival	19 November	Cadwell Park	Stage Rally and Fireworks



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RED BULL'S PENALTY SHOOTOUT



The cost cap breach penalty
could hamper Red Bull's ability
to defend its titles in 2023

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THE MOST SUCCESSFUL
TEAMS BY REDUCING
THEIR AERO RESEARCH
RESOURCES. RED BULL'S
HAVE BEEN CUT EVEN
MORE FOR AS A PENALTY
FOR BREAKING THE
BUDGET CAP. BUT DOES
THE PUNISHMENT HIT
HARD ENOUGH?

WORDS ALEX KALINAUCKAS
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IT GIVES AN ADVANTAGE TO OUR COMPETITORS, WHICH IS WHY THEY WERE PUSHING SO HARD FOR A DRACONIAN PENALTY

CHRISTIAN HORNER



CHRISTIAN HORNER, NATURALLY, WASN'T happy with the extent to which his Red Bull squad was punished late last year for breaching the 2021 cost cap – the first year of Formula 1's precious new financial restrictions put to the test immediately. Red Bull's rivals, equally naturally, weren't happy either – feeling the punishment hadn't gone far enough. The FIA, having handed out the penalty once Red Bull had entered into an Accepted Breach Agreement (ABA) for what constituted a 'minor' overspend breach, acknowledged the contrasting positions.

In these circumstances a good compromise means all parties end up equally unhappy, which is what the FIA achieved. But the situation is more complicated, chiefly because F1's nature means any advantage Red Bull gained by going £1.8m over the 2021 cost cap limit of \$145m could very well still be felt in the coming campaign – and even seasons to come. Alternatively, the penalty it's now serving could actually harm Red Bull over an even longer period.

The full penalty issued last October is this: a 10% reduction of Red Bull's aerodynamic testing allowance for 12 months and a \$7million fine. Crucially, the fine is separate to the cost cap – so Red Bull will still be able to spend the full \$142.4m allowed for 2022 and \$135m for 2023. And by accepting an ABA, Red Bull removed the risk of an even harsher punishment being handed down had the case gone to the FIA's Cost Cap Adjudication Panel and potentially higher. This is significant because, as per the FIA's judgement, had Red Bull "applied the correct treatment within its Full Year Reporting Documentation of [its] Notional Tax Credit" then in fact it would have overspent by *just* £432,652. Red Bull also took issue with other parts of the FIA's findings – famously its 2021 catering spend, but also the rule change regarding how car parts can be carried over for heritage use after the team's accounts submission was made and calculations surrounding sick pay. But Horner says Red Bull entered into the ABA because "we felt it's in everybody's interests to say, 'we close the book.'"

Verstappen's titles in question?

By accepting the ABA, Red Bull made certain it would avoid the potential points deduction or cost-cap-figure reduction options a Cost Cap Adjudication Panel might have considered at the next legal level. For the avoidance of doubt, there was next to no chance of Max Verstappen being



The financial penalty of a \$7m fine for breaching the cost limit won't affect Red Bull's ability to spend in 2023 as it is separate from the cap

stripped of his 2021 title even if Red Bull had gone to the next stage, since such penalties are applied to current and future campaigns rather than being meted out retrospectively.

Such clarifications are important because some of the more deranged quarters of F1's online fandom immediately began agitating for the 2021 title to be readdressed in Lewis Hamilton's favour. There was also plenty of social media clamour over the ABA process itself – that Red Bull was supposedly 'picking its punishment' – despite this being clearly enshrined as an option in the rules. For the FIA, it's an important one since it means the quick conclusion Horner points out can be reached, but these come with the understanding that the genuinely 'draconian' penalty options are removed.

So, Verstappen's two F1 titles are, legally speaking, untouched by this scandal. The first will forever be tainted by the Abu Dhabi saga (not his fault), while the second included this whole sorry cost cap mess. But what comes next for Max and his team? The \$7million fine is but a scratch for Red Bull – bar the reputational damage of accepting it was guilty of a regulations breach – but the sporting handicap Horner fears has handed a clear gain to main rivals Ferrari and Mercedes is much more problematic. It will be a central theme for the upcoming campaign, plus,

potentially, additional seasons too.

As outlined in our table (see p68), Red Bull has lost 10% of its aerodynamic testing allowance for most of 2023. The restriction on how much and how fast it can run its windtunnel systems and use its Computational Fluid Dynamics (CFD) software will expire on 26 October. But Red Bull won't just be able to go back to the full whack of its systems come the end of the 2023 season and the critical early development phase for its 2024 challenger. This is thanks to F1's first attempt at a minor form of performance balancing being added to the Aerodynamic Testing Restrictions.

The penalty spot

F1 has eschewed such unsophisticated (although nevertheless effective) drags on car performance such as adding success ballast or 'Balance of Performance' technical adjustments, as deployed in the World Endurance Championship. Instead, it got very *F1* by adding a sliding scale of aero restriction allowances to the existing rules back in 2021. Then, it set fifth place as the middle point where the team that finished fifth in the 2020 constructors' championship (Alpine) would be allowed to stay at the established limit on windtunnel and CFD usage, for all of which the

teams must submit covering data to the FIA for auditing within six Aerodynamic Testing Periods [ATPs] of nine, eight, eight, ten, eight and nine weeks – spread through the year with the longest incorporating the summer break. In 2021, the scale split the reduced or increased allowance by 2.5% for a place. This meant Mercedes started off with a 90% allowance of its permitted use in 2020, while Williams could go to 112.5%.

For 2022, this system was beefed up – with the gaps between the teams increasing to 5% and the constructors' winner going down to 70% of the typical allowances and the last-placed competitor allowed up to 115%, with seventh place (Aston Martin for the start of 2023) at the existing 100% mark. So, for the coming season as the 2022 constructors' champion, Red Bull should have been at that 70% mark for its windtunnel operations and CFD usage. But, with the cost cap penalty, that all comes down to 63%.

In terms of a real-world impact of the penalty, Red Bull should have been allowed to run its windtunnel 224 times in each ATP but will now get just 202. For comparison, as the 2022 runner up, Ferrari can conduct 240 runs. This is a gain for the Scuderia of nearly 20% in real-world application (so, not just its ATR allowance percentage minus Red Bull's). Mercedes is set to gain 54 windtunnel runs per ATP compared with Red Bull. When it comes to CFD usage, Red Bull is down 140 test items compared with what it should have been able to model in each 2023 ATP (1400), while Ferrari can conduct 1500 simulations and Mercedes 1600. At 359 windtunnel runs and 2,300 CFD items which can be simulated, Williams can test nearly double what Red Bull can in the first half of 2023.

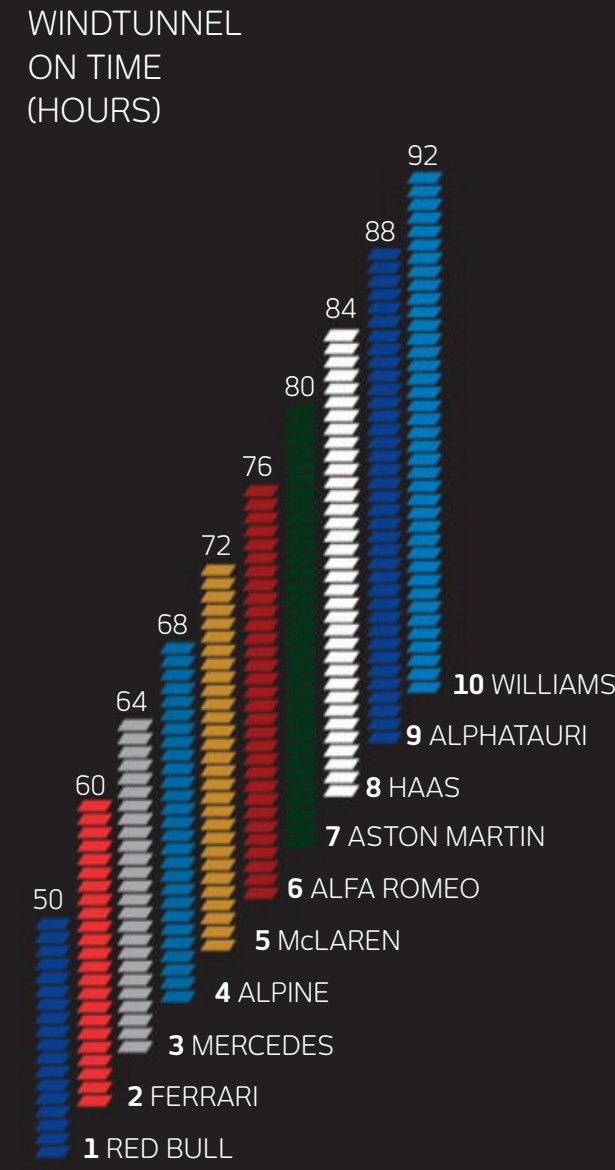
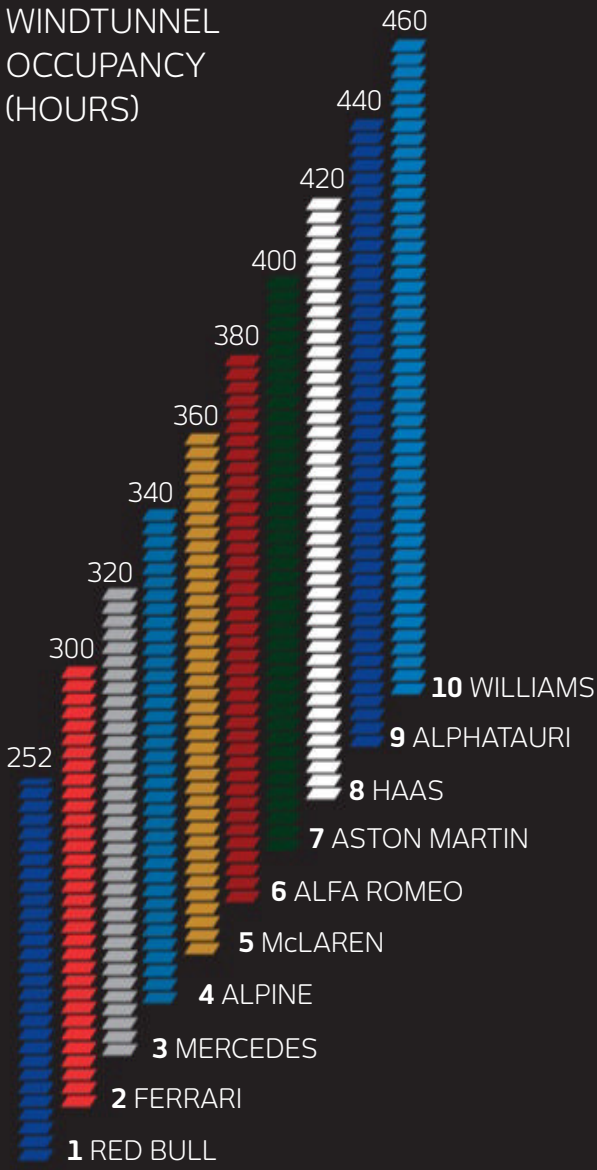
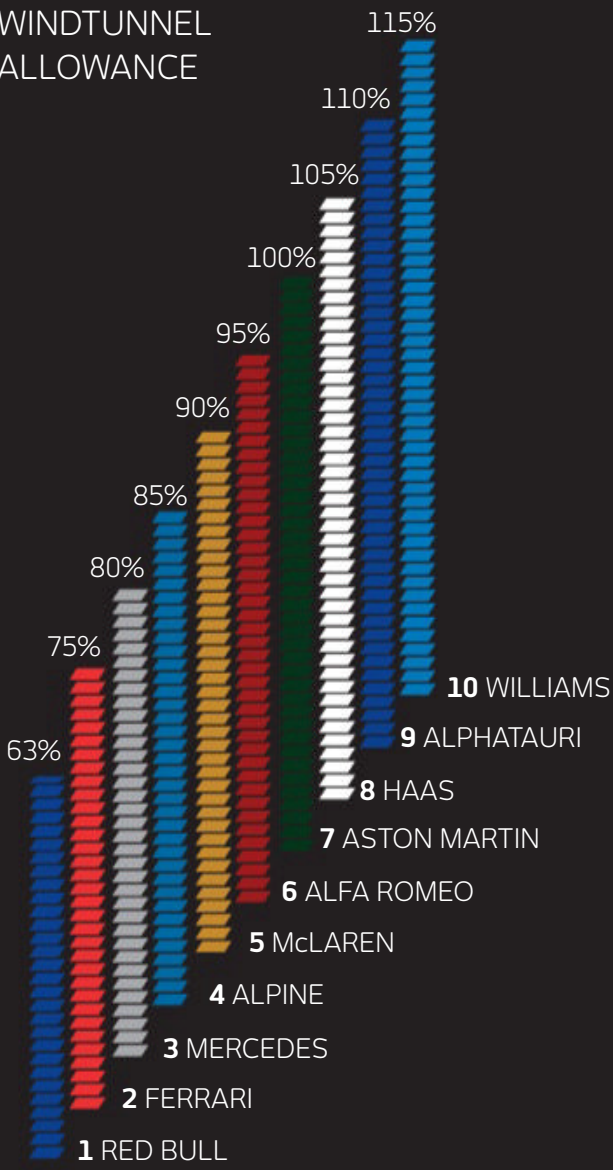
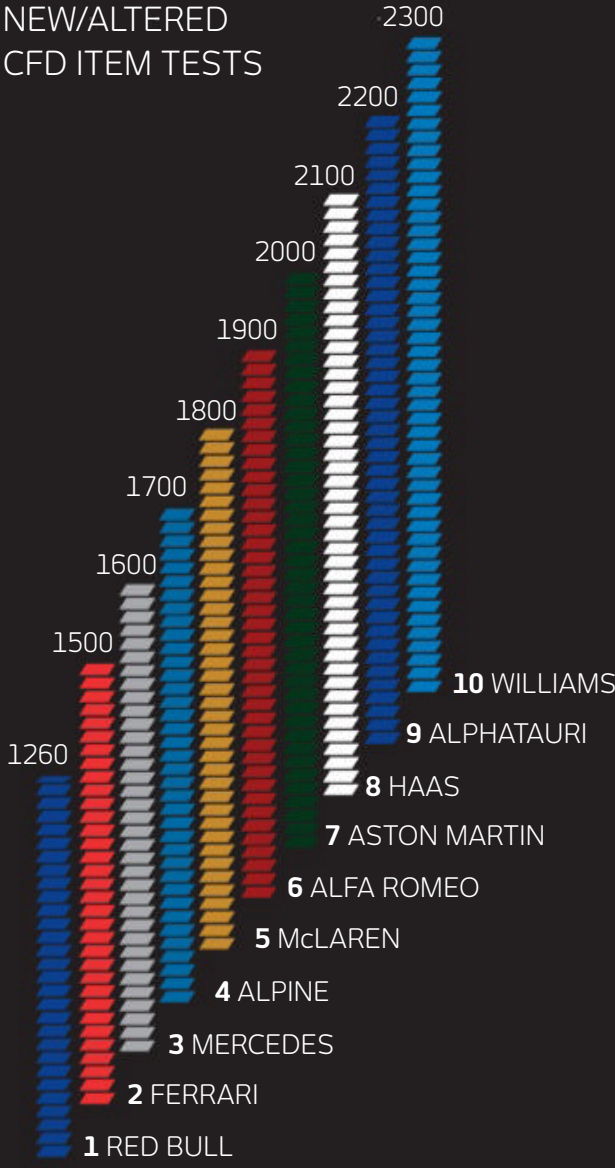
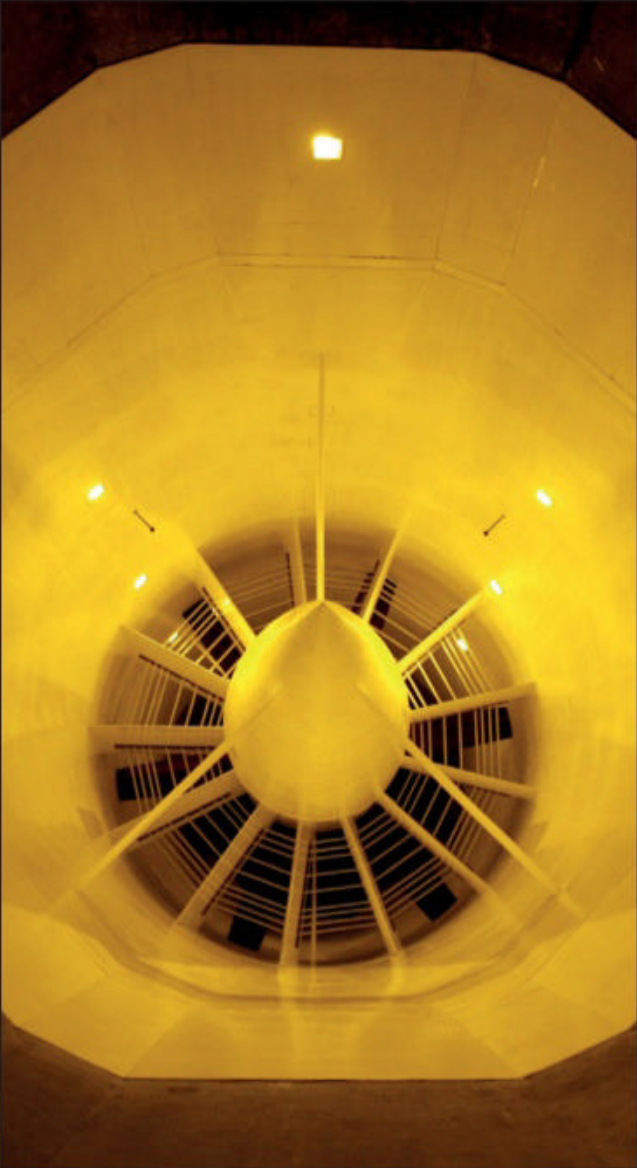
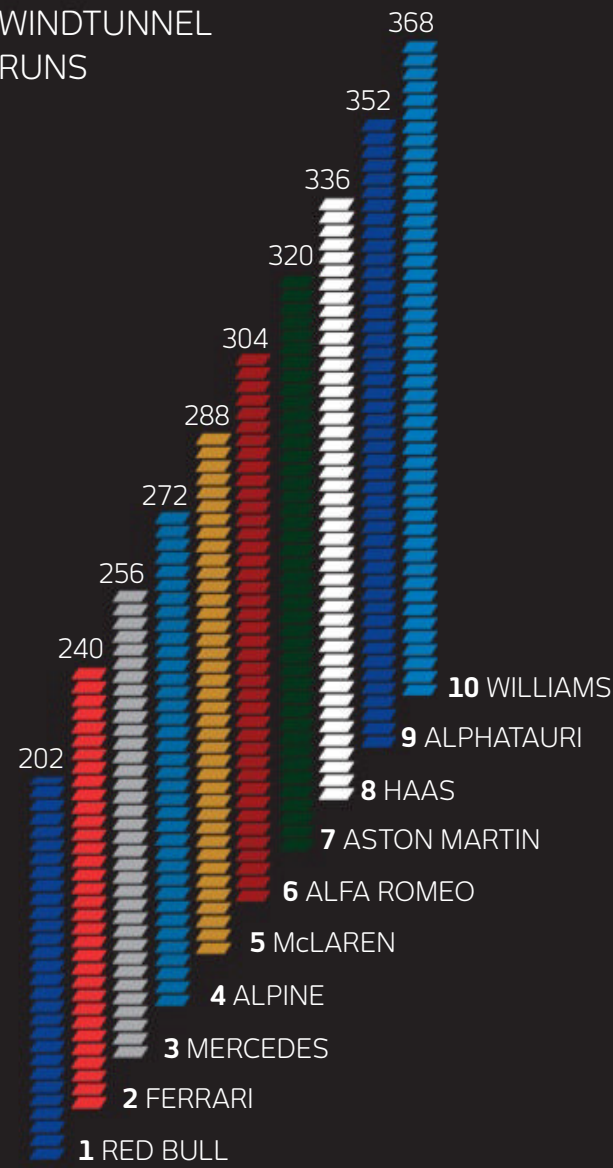
That's the first of several important caveats with these figures. As it did in 2021 and 2022, the sliding scale will change for each team at the halfway stage of the calendar year – the start of 2023's third ATP – based on their constructors' championship position at that stage. But Red Bull will continue to lose 10% of whatever allowance it has earned by this point until 26 October. It should also be noted that the penalty concurrently covers how long Red Bull can run with its windtunnel speed going higher than 15m/s, plus the duration of how long its tunnel is running at a lower speed – 5m/s – with any further drop not counting towards the allowance. These two figures are covered by the 'Windtunnel Wind On Time' and 'Windtunnel Occupancy' figures on page 68. Red Bull also faces the same 10% cut when it comes to the formula by which the FIA allows teams' CFD systems to spend time assessing the results of the simulation running. ▶

IN TERMS OF A REAL-WORLD IMPACT OF THE PENALTY, RED BULL SHOULD HAVE BEEN ALLOWED TO RUN ITS WINDTUNNEL 224 TIMES IN EACH TESTING PERIOD BUT WILL NOW GET JUST 202

RELATIVE VALUES: HOW RED BULL'S PENALTY FITS IN

*Red Bull's 2023 allowances have been rounded to the nearest integer, as per F1's rules

*Allowances will change for each team on 1 July 2023 based on CCP at that stage, with Red Bull's ongoing 10% reduction applying until 26 October



Falling down

Outside Red Bull, there is a sense the penalty is little more than a slap on the wrists. In all likelihood it's more than that but, at the same time, its impact won't be sending Red Bull tumbling down the grid. The aero testing restrictions will have been felt in the design process for its 2023 car, which must incorporate the higher floors and diffuser changes designed to eliminate porpoising – not that that was much of an issue for Adrian Newey's design team. But the squeeze will be felt when it comes to the upgrade programme for Red Bull's new challenger and the initial stages of design for its 2024 car too.

The real problem is it's going to be very hard to definitively see just how much Red Bull is harmed by its cost cap penalty. While Red Bull is indeed being held back, its rivals can make their own gains. Mercedes team insiders feel there was a 0.3-0.4s performance loss sealed into the concept of its flawed W13 car which it hopes it

The 10% reduction in Red Bull's aero testing time for most of 2023 could mean more on-track evaluation using things like flow-vis paint

Deep impact, or gone in 60 seconds?

The first-ever penalty for breaching F1's cost cap will definitely have a sporting impact. The question, inevitably, is by how much.

"If you look at the other teams, they will say we have been light [on Red Bull]," FIA president Mohammed Ben Sulayem said last year. "And the penalty? Some of them want them to be hanged and they want to see blood. And the [guilty] teams themselves see it as huge on them. So, where do you [fairly] draw that?"

Red Bull saw things thusly: "It is an enormous amount," said Horner. "That represents anywhere between quarter and half a second worth of laptime." Horner also lamented his team's "relic of the Cold War" windtunnel – refurbished early this century but still the oldest in F1 – which means the effect of the ATR squeeze would be magnified since it takes longer to get up to the highest permitted speeds compared with newer systems. This suggestion must be balanced against the general aero might of Red Bull's cars since it hit the front of the grid in 2009...

Ferrari railed against what is viewed as imbalance between what it suggested Red Bull had been able to gain by spending "€2 million [extra]", according to racing director Laurent Mekies, who added: "We at Ferrari think that this amount is worth around a couple of tenths [per lap] and so it's easy to understand that these figures can have a real impact on the outcome of


THE FIA HAD TO ACT TO PROTECT THE COST CAP. IT'S NO EXAGGERATION TO SAY IT HAS BEEN PIVOTAL IN F1'S CURRENT BOOM, GIVING TEAMS FINANCIAL STABILITY WHICH HAS MADE THEIR VALUES ROCKET

the races, and maybe even a championship."

At Mercedes, team boss Toto Wolff admitted Red Bull's penalty was considered "too little" but chose to focus on praising the FIA showing "strong governance". His director of trackside engineering, Andrew Shovlin, suggested the pace impact Horner fears for Red Bull's 2023 car would be more like "a tenth" or "maybe two-tenths at the upper end".

The FIA had to act. It's no exaggeration to say the cost cap has been pivotal in F1's current boom, giving teams financial stability which has made their values rocket. Without a penalty in this instance, the principle would have been badly undermined, potentially fatally weakened: the outcome of the FIA's interpretations in assessing Red Bull's accounts was noted by every team. Should a similar breach over the 2022 cost cap be revealed this year, although a precedent has been established, it should be expected a harsher penalty would be applied given the cost cap's newness was a factor in the FIA's judgement.

has unlocked this off-season. Ferrari gains just by fully addressing the reliability and strategy issues that beset its 2022 campaign, let alone improving its car package. Then there's the impact of the design tools and systems all teams have spent years implementing – Red Bull isn't going to lose such capability, it will just have to be even more efficient in its operations until late October. And, finally, while it will argue the immaturity of the latest ground-effect rules means it could be making bigger gains were it not for its aero testing handicap, Red Bull will go into 2023 drawing on running what was proved to be by far the best car on the biggest spread of track types in 2022.

That should cement its place as the pre-season favourite heading into the 2023 campaign now so near. But, should things indeed be closer than the walkover Red Bull managed in 2022, Red Bull will loudly point to the ATR hit. And if 2023 proves to be 2022's second chapter, its rivals will say the FIA was too lenient in its first cost cap penalty. That's just how the 'Piranha club' works... 

THANKS TO A BLIZZARD OF HIRINGS, FIRINGS AND SHUFFLINGS DURING THE WINTER, OVER HALF THE TEAMS ON THE GRID NOW HAVE BOSSES WHO HAVE BEEN IN POST FOR A YEAR OR LESS. IS FORMULA 1 ADOPTING FOOTBALL'S RENT-A-MANAGER CULTURE? AND WHAT GOOD CAN COME OF IT, GIVEN THAT THE TWO MOST SUCCESSFUL OUTFITS ON THE GRID SINCE 2010 HAVE TWO OF THE LONGEST-SERVING TEAM PRINCIPALS?

FORMULA 1'S REVOLVING DOOR

WORDS MARK GALLAGHER PICTURES  AND SHUTTERSTOCK



3.3 THE MAGIC MANAGEMENT ROUNDAABOUT



Christian Horner (2005–present)

The round of leadership changes announced during the off-season underlined the degree to which Formula 1 abhors stasis. But even seasoned observers were shocked to see the broom sweep through Ferrari, Williams, Sauber and McLaren.

Going into the first race of the new season only four team principals hold the role they did in 2021. Toto Wolff, Christian Horner, Guenther Steiner and Franz Tost will find themselves sitting with some familiar faces in unfamiliar

shirts, plus a couple fresh to the challenge of running a Formula 1 team.

Christian Horner, Formula 1's most experienced team boss, may well reflect on the changes he has seen since joining Red Bull as

a fresh-faced 31-year old in 2005. Then it was the likes of Ron Dennis, Frank Williams and Eddie Jordan whom he joined in team meetings. Now it's going to be Andrea Stella, James Vowles and Mike Krack.

These leadership changes are entirely due to the way the teams are now owned and structured. The true power lies with the team owners who can hire and fire according to the degree of support and scrutiny which they apply to their team principals.

The exception is Toto Wolff, the only boss



Jean Todt (1993-2007)



Stefano Domenicali (2008-2014)



Maurizio Arrivabene (2015-2018)



Marco Mattiacci (2014)

Last man standing: Christian Horner (far left) has seen five Ferrari team principals come and go since he joined Red Bull in 2005



Mattia Binotto (2019-2022)

who co-owns the team he runs. Everyone else is essentially hired, although some are rather more embedded with their owners than others.

Six of the team principals have a direct boss within the structure of their team. Someone, a CEO or chairman, to whom they report.

“There are some in F1 who would rather not be team principal because it means you can avoid the flak when things go wrong, take the credit when things go well,” said one former team boss.

It’s also a trend for team principals to be engineers, an indication that owners and their

CEOs now see the team principal role as being essentially technical in nature. We need to go back 25 years to pinpoint the shift, to early 1998.

Ken Tyrrell had just sold the Tyrrell Racing Organisation to former ski instructor Craig Pollock’s brainchild, British American Racing – and, somewhat inevitably, they fell out. Ken quit before the season started. Tyrrell would later morph into BAR, Honda, Brawn and the Mercedes team of today.

In November of the same year Jordan Grand Prix was part-sold to a private equity company,

Warburg Pincus, while Jackie Stewart would shortly raise the ‘for sale’ sign and offload Stewart Grand Prix to the Ford Motor Company at the end of 1999. That, of course, gave birth to Jaguar Racing, forerunner of Red Bull Racing.

While some owner-managers, such as Ron Dennis and Frank Williams, would hold on well into the noughties, the die was cast as corporate investment extended its reach and influence. Team principals were no longer all-powerful.

Jaguar Racing’s team principals had a shorter shelf life than a set of ultra-soft tyres: ►

the leadership turnstile rapidly spun through Wolfgang Reitzle, Neil Ressler, Bobby Rahal, Niki Lauda, John Hogan and Tony Purnell. Each talented but none given the time, money or freedom to deliver.

It's a lesson not all have learned.

Ferrari goes into 2023 with its fifth team principal in a decade. Stefano Domenicali was followed by Marco Mattiacci, Mauricio Arrivabene, Mattia Binotto and now Frédéric Vasseur. It's unlikely that Ferrari chairman John Elkann, scion of the Agnelli dynasty, takes any pleasure from the Scuderia emulating premierships in football where the average tenure for managers stands at 2.2 seasons.

Stability doesn't guarantee success, of course. But in the right hands it creates the opportunity for a team to invest in the right areas, attract the best talent and develop a winning process.

"Performance is fundamentally defined by the process which the team uses to reduce lap time via a mix of coherent modelling involving vehicle dynamics, aerodynamics and the simulator," says Neil Martin, former head of strategy at McLaren, Red Bull and Ferrari.

"The team principal's role is to attract the best talent, to motivate and create a positive culture within which people can flourish. Stability is important because once you have a process that works you can also have decent succession planning. Staff changes will have less impact."

Ferrari had a winning process in place during the Michael Schumacher era under the leadership of Jean Todt, Ross Brawn and Rory Byrne.

STABILITY IN ITSELF DOESN'T GUARANTEE SUCCESS. BUT IN THE RIGHT HANDS IT CREATES THE OPPORTUNITY FOR A TEAM TO INVEST IN THE RIGHT AREAS, ATTRACT THE BEST TALENT AND DEVELOP A WINNING PROCESS

Brawn imported that approach to win both world championships with his eponymous team in 2009, establishing the foundations for Mercedes with significant input from Bob Bell. With Bell and his successors, Paddy Lowe and James Allison, the team demonstrated that Mercedes' systems worked.

Meanwhile Ferrari has been unable to overcome the dominance unleashed by Red Bull and Mercedes since achieving its now-distant constructors' titles in 2007 and 2008, the low points being winless seasons in 2014, 2020 and 2021. Binotto's success in returning the Scuderia to winning form last year seemed like a breakthrough, yet Ferrari's CEO Benedetto Vigna described second place in the constructors' championship as "first of the losers" (a sentence once also uttered by Ron Dennis).

The reliability problems which afflicted the Ferrari F1-75, notably when Charles Leclerc was leading in Spain and Azerbaijan, were compounded by public strategy errors in Monaco, Silverstone and Hungary. When the F1 circus

arrived in Monza for Ferrari's home race the rumblings about Binotto's future had started.

Even though they know little about the engineering processes required to produce a championship-winning car, star drivers can often have a disproportionate influence over impressionable owners. The suggestion from Italy was that a disconsolate Leclerc and his management, headed by Nicolas Todt, were lobbying to have Frédéric Vasseur brought in from Sauber. A palace coup was in progress.

In 2015 Todt and Vasseur established ART Grand Prix, the super-successful junior formulae team with which Leclerc won the 2016 GP3 title. The Monegasque further cemented his relationship with Vasseur at Sauber in 2018.

Initially Ferrari denied any change would happen, but there's no smoke without fire and on this occasion the smoke was rising, Vatican-like, to herald a new leader. Vasseur's move is by far the most notable and political, its outcome determining the future prospects for F1's most famous team at a time of intensified competition. ▶

SAUBER



Andreas Seidl



Frédéric Vasseur

The appointment of Andreas Seidl as CEO is a shrewd move by Sauber Motorsport as it ramps up ahead of Audi's entry in 2026. The German is no stranger to Hinwil, having worked on BMW's F1 programme between 2000 and 2009, while his stints as director of race operations and then team principal of Porsche's hybrid LMP1 programme marked him out as a highly capable team leader.

Frédéric Vasseur's former role of team principal is being split, a trend we've witnessed in a number of teams. Seidl's task is to optimise

performance during the balance of the current regulations while putting in place everything required to ensure Audi can challenge for the championship as early as possible. Alessandro Alunni Bravi, a former lawyer who has been on the Sauber board since 2017 and was promoted to managing director last year, has been named 'team representative'. While this peculiar title alludes to him being a team principal but without the power, it's understood Alunni Bravi's remit will focus on Sauber's interactions with other stakeholders.

FERRARI



Frédéric Vasseur



Mattia Binotto

Frédéric Vasseur finds himself in the arguably the most high-profile, high-pressure team principal role in F1. He's not CEO, that role being held by Benedetto Vigna, with whom he is said to be in constant contact. Appointed in 2021, Vigna was less than impressed with Ferrari in 2022.

Under Mattia Binotto Ferrari produced one of the quickest cars of the year, one which brought Charles Leclerc a 46-point championship lead after three races, before reliability, operational and strategy mistakes pulled away the foundations of the

Scuderia's challenge.

Vasseur's task will be to ensure that the technical team can elevate the car's performance further and develop a race car capable of withstanding the impressive consistency displayed by Red Bull. With Mercedes confident that it will not suffer a repeat of last season, Ferrari has to push to the next level and Vasseur must ensure that those embarrassing technical failures, hesitant strategy calls and chaotic pitlane incidents become a thing of the past.

Team principals in Australia in 2017. Only Steiner, Wolff, Horner (third, fourth, fifth from left) and Tost (second from right) remain in their job



Rumours in Italy were that Nicholas Todt (left), manager of the team's star driver Leclerc (right), lobbied to have Vasseur brought in at Ferrari



McLAREN



Andrea Stella

Former 'executive director, racing' Andrea Stella has big shoes to fill at McLaren since his predecessor, Andreas Seidl, was credited with helping the team recognise the need to undertake significant capital investment, a new windtunnel and simulator key among them. The good news is that Stella, who will continue to report to CEO Zak Brown, knows the overall direction of travel within the team. He aims to continue where Seidl left off as well as looking for additional opportunities for the team to improve.



Andreas Seidl

McLaren was beaten into fourth place in the constructors' championship by Alpine last year. Stella will want to reverse a trend in which the team has retreated from third to fourth and then fifth in the all-important prize-money stakes. The arrival of new recruit Oscar Piastri will give him the challenge of helping a rookie gel alongside the impressive Lando Norris in the hope that McLaren can battle the likes of Alpine on a more equitable basis following the disappointment of the Daniel Ricciardo years.

WILLIAMS



James Vowles

Jost Capito so looked the right man for the job when he joined Williams in 2021. VW's former director of motorsport was an early recruit by Dorilton Capital following its 2020 takeover. That he was gone within two years came as a shock. Extraordinary to think Williams entered 2023 with vacancies in the roles once held by founders Frank Williams and Patrick Head. Former Mercedes strategy director James Vowles is nothing if not courageous in taking on the task of turning around the once-great



Jost Capito

team. Despite Toto Wolff's public support of the move, Vowles was unable to take up his new position until 20 February. One of his tasks will be to import some Mercedes' winning processes. He must also deploy a management style strong enough to 'win over the dressing room', ensuring the team's culture, morale and focus are united behind a common goal. Dorilton chair Matthew Savage will want to see Vowles return Williams to a credible contender, both on-track and commercially.

FRÉDÉRIC VASSEUR TO FERRARI



Vasseur has the biggest new job of the lot with Ferrari

JAMES VOWLES TO WILLIAMS



Vowles will be looking to move Williams back up the grid

That Andreas Seidl got the nod to move seamlessly across to replace Vasseur at Sauber came as no surprise, a reputation forged at Porsche being ideally suited to Audi's F1 ambitions. His McLaren role has been the perfect preparation and the transfer, reputedly brokered via a direct approach to McLaren CEO Zak Brown from Sauber owner Finn Rausing, was executed professionally and amicably.

Andrea Stella's promotion at McLaren has surprised some. The Italian engineer is highly experienced and a capable manager, but there is a sense the team was caught off-guard by Seidl's decision to leave, demanding a fast, internal appointment to show that it's business as usual.

The changes at Williams appear more critical, a failure of the leadership structure created less

ANDREAS SEIDL TO SAUBER



Seidl, with Sauber's new 'team representative' Alunni Bravi, has a longer-term goal

THE QUESTION AS TO HOW THESE RECENT CHANGES WILL WORK OUT DEPENDS ON HOW MUCH TIME TEAM OWNERS GIVE THEIR NEW RECRUITS TO DELIVER

than two years ago. The fact that both team principal Jost Capito and technical director Francois-Xavier Demaison exited the business in December is hard to present as anything other than a debacle. Dorilton Capital's recruitment of James Vowles as team principal may be inspired but not without risk.


While Vowles is highly regarded engineer with 20 years of experience at Mercedes' Brackley base, the move to Williams is a major challenge

for someone who has never led an F1 team with all the leadership challenges that entails. Particularly a team which needs to be turned around and has proved resistant to such change.

Ultimately the question as to how these recent changes will work out depends on how much time team owners give their new recruits to deliver. The accepted wisdom is that it takes 3-5 years to unlock a team's potential, but even that is tight.

Going forward, further changes to the team

principal line-up are likely to be an inevitable part of F1's make-up. Contracts will come up for renewal, individuals may opt to move and owners will apply pressure to perform.

At a time of unprecedented growth in F1, the politics and power play at the top will not diminish. Instead, in this relentless, unforgiving arena some team principals will flourish, while others wither under the irresistible weight of shareholder expectation. 

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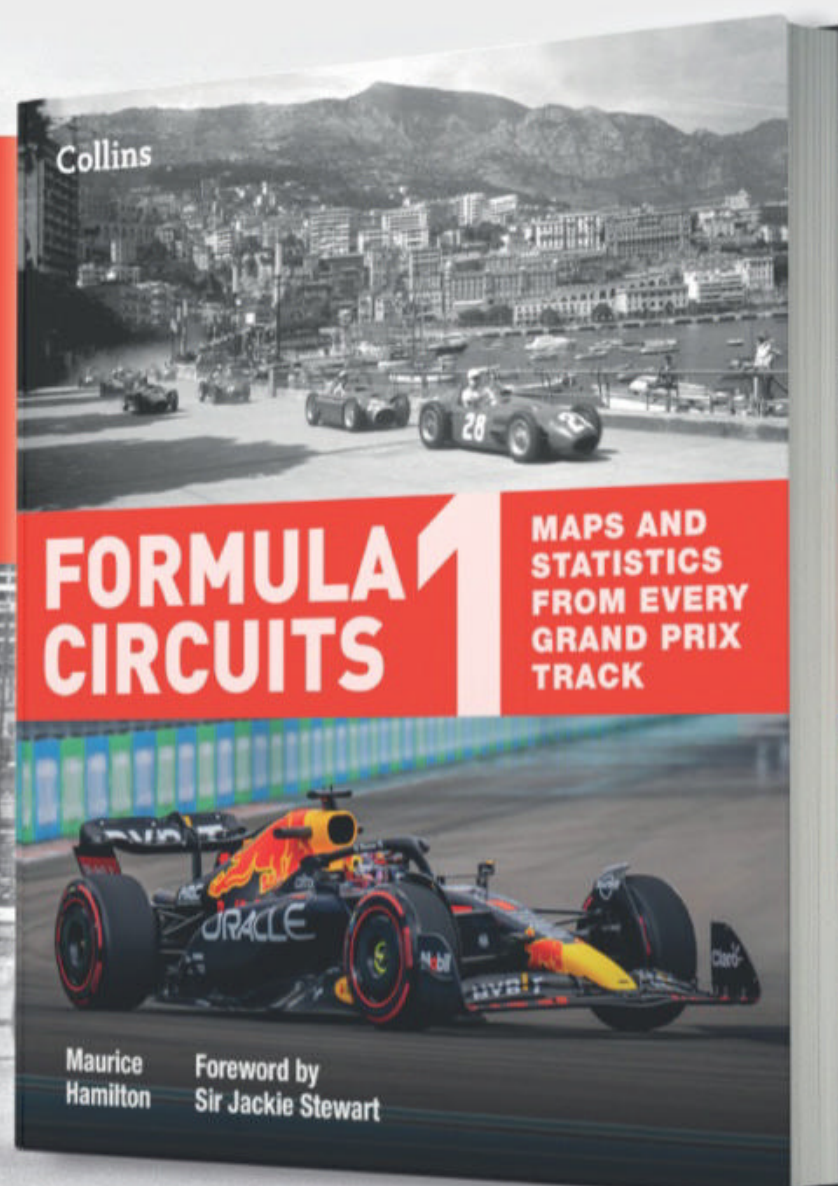
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WORDS OLEG KARPOV PICTURES  **motorsport**
IMAGES RED BULL AND LAS VEGAS GP

CHAPTER 4 FORMULA 1'S BIGGEST GAMBLE

4. FORMULA 1'S BIGGEST GAMBLE

The first attempt to bring F1 to Las Vegas wasn't a success. A twisty and demanding track in the Caesars Palace car park, combined with the heat, made drivers literally throw up. Just ask Nelson Piquet. On his way to fifth in the 1981 Caesars Palace GP which secured him the title, the Brazilian deposited the remnants of his lunch in his cockpit, then struggled to recover for another 15 minutes after the chequered flag.

It wasn't all bad, of course.

"The good part was Caesars Palace itself!" Marc Surer, who took part in both races in Las Vegas in the early '80s, tells *GP Racing*. "It was easy: you walk out of the hotel, and you're in the paddock. It was even possible to go from the paddock

directly to the pool. So after driving, when you were hot, you walked in your overalls to the pool, got changed, and jumped into the water.

"There were celebrities, too. I met Paul Newman. Diana Ross had the show, and all the drivers were invited backstage, which was nice.

She also gave the trophies, if I remember it right."

She did, indeed. And Michele Alboreto, who won the second and final edition of the F1 Caesars Palace GP in 1982, even got to kiss the 'Female Entertainer of the Century' on the podium.

But that was as good as it got.

"Well, I mean, we all were excited to go to Vegas," Surer recalls, "but when you saw the setup... That was just a joke. F1 in a parking lot? You can't do that. And this destroyed everything because there was no fascination... It was like watching a go-kart race; you see the cars go up and down again and again between the walls. And because of the heat, there were a lot of crashes. I remember Patrick Tambay had an accident just in front of me. The front end of his car was gone, it was in two pieces, and I saw his



It was crucial that the circuit for the new GP would race down the famous Vegas 'Strip' and the launch event in November (left) showed why





A stunning visual spectacle has to be a crucial element of the Las Vegas GP according to race CEO Renee Wilm

local time on the Saturday night. And there's hardly any better place for it than Las Vegas.

"It was extremely important to us at Liberty and F1 that we race on the Strip, at night, with all of the spectacle of the Vegas lights, including the Bellagio fountains," Renee Wilm, CEO of the Las Vegas Grand Prix, tells *GP Racing*. "We wanted to be able to race by the fountain; that was the key for us. And then how you develop the track around that part of the Strip really became a matter of engineering and safety regulations. And that's where Tilke came in to help us finish out the design of this dream."

The Vegas race is intended to be another step in the conquest of America, one of Liberty-owned F1's great success stories. The inaugural Miami GP last May showed just how far F1 had

come in this direction compared with the attempts of the previous century. The paddock at the venue next to the Hard Rock Stadium could hardly accommodate all the celebrities. The Vegas race is set to top that.

"When Liberty Media bought the sport seven years ago, this was our intent: we wanted to bring Formula 1 into the fibre of American culture," says Wilm, who, in addition to being in charge of one of Liberty Media's most ambitious

"WE WANTED TO BE ABLE TO RACE BY THE FOUNTAIN; THAT WAS THE KEY FOR US. AND THEN HOW YOU DEVELOP THE TRACK AROUND THAT PART OF THE STRIP REALLY BECAME A MATTER OF ENGINEERING AND SAFETY" RENE WILM

projects since it bought F1, also serves as the company's chief legal officer and chief administrative officer.

"We wanted to expand the American fan base, diversify the demographics, [attract] younger fans, more women fans, and more diverse fans. So this is the combination, I would say, of a lot of really good intentions, and, you know, some luck along the way, some good decisions, such as [launching the] Netflix [*Drive to Survive* series] and opening up the sport to social media, and then just a lot of hard work behind the scenes.

"When you couple that with bringing our race to the sports and entertainment capital of the world here in North America, it's just going to be an epic event." ►



The 1981 and 1982 races (above, and below, left) were a classic case of how not to put on a race in a country with a small F1 audience

legs hanging out of the cockpit. He was so lucky to walk away from it without broken bones."

The two grands prix in Las Vegas provided a humbling lesson for those who believed the mere act of staging races here would build F1's audience in the USA. Instead it barely registered a ripple.

"There were hardcore F1 fans," Surer recalls. "But it was really just a handful. When we went into the city, nobody knew about it. We could walk around and nobody recognised us. Even

guys like Nelson or [Carlos] Reutemann, who was also fighting for the championship, were just seen as casino clients, like all the others."

Tearing up the strip

When Formula 1 returns to Sin City this November after an absence of more than 40 years, things will be different. Very different.

Instead of a car park, F1 cars will race along the iconic Las Vegas Boulevard – the famous Strip – in front of the Bellagio fountains, on a proper street circuit designed by Hermann and Carsten Tilke, who have realised similar projects in Singapore and Baku. This will also be F1's first night race in the United States, starting at 10pm

F1 has skin in the game

You may view such language as hyperbole – after all, it's Renee's job to promote the event – but this is a huge undertaking for F1's commercial rights holder. For the first time, Liberty is acting as the promoter of a race, taking on the risks – including the financial ones – of running it.

Liberty's investment in the project has already reached several hundred million dollars, a massive departure from the established 'you pay – we come and race' model. F1's owner has spent \$240 million just to buy land in the heart of Las Vegas – less than a mile from the Bellagio fountains – for the construction of the pit building complex and paddock. In total, between the land purchase and the paddock construction, F1 is expected to spend around \$500 million.

Imagine telling Bernie Ecclestone he would have to spend half a billion of his own money to buy the land and build the circuit for a grand prix – which he would also have to pay to host...

The stakes are high. For this bet to pay off, Liberty had to get everyone on board, from local authorities to hotels and casinos. And that's another hallmark of the Las Vegas Grand Prix. Local businesses – the biggest hotels – are among the key stakeholders. They are embedded because they intend to be among the ultimate beneficiaries.

For those responsible for building the track, this presents another challenge – a tough one even for the experienced hands at Tilke.

"What's the difference compared with other street tracks?" says Carsten Tilke. "It's the unique stakeholders we have here and the fact that everything needs to stay open. The logistics, all this is a big part. Street circuits, in general, are never easy. But here we have the biggest hotels in the world, and they are directly at the track."

With 150,000 hotel rooms located on the Strip, Tilke and the track's main contractor, Miller Project Management, will have to ensure that access to these rooms is not only maintained, but also trouble-free.

"Vegas is different from Singapore, for example," adds Terry Miller, whose company oversees the track and paddock build. "Singapore shuts down, and the race happens. Here we've got to keep everything going. Every property has to remain open; we have to maintain service and safety access for every property. They have to stay open and operate. And it's unique from that standpoint even for a street circuit."

"WE HAVE A MILLION [FREE] MEAL PROGRAMME, WHICH WE REACHED [THE FUNDING GOAL FOR] WITHIN 24 HOURS OF LAUNCHING. AS A RESULT, WE'VE GIVEN OUT MEALS TO LOCAL HIGH SCHOOL FAMILIES WHO MAY FIND THEMSELVES IN NEED" **RENEE WILM**

Building bridges

Not only does the construction project include the installation of several pedestrian and vehicle bridges, it must be executed in a way that doesn't disrupt the usual flow of life and business. As a result, construction will take place in stages. Work on the pit building started last summer, as soon as Liberty completed the land purchase. It's planned to be open year-round to Formula 1 fans and to become an additional tourist attraction for Vegas.

The dismantling of the existing road surface will begin in the spring and a new, F1-compliant road surface will be laid in its place. This work should be completed by early autumn. The construction of the grandstands and fan zones will take place in parallel from June onwards, and the track barriers will be installed in early October. The race organisers have pledged to keep the roads open – albeit with occasional lane closures – throughout.

Las Vegas itself is also on board. Even for this city, the party Formula 1 is throwing here promises to be massive.

"One of the great things Formula 1 brings to any geography where it races is economic development," says Wilm. "So, not only are we creating a ton of jobs this year as we build out the property we acquired, we're also going to be creating opportunities economically year round – to make it the home of Formula 1



Bright lights, big city. The Vegas circuit will be a tricky build, given that everything around it must stay open during construction

in North America. And that's going to stir economic development for local businesses. We're working with smaller local businesses. Terry works with a lot of subcontractors. So, it's really important to us to give back to the community where we're racing.

"We estimate, based on advice from our economic advisors, that we're going to bring over \$1.2 billion of revenue to the state through our racing. Additionally, through our pre-registration campaign, instead of taking deposits for tickets, which most sporting events in America do, we took a different tack, and we asked everyone to donate \$7.77 to



be put on a priority list to have the availability to buy tickets – that donation went into our foundation. And our foundation is distributing those funds to the community, to areas where it really makes a difference. We have a million [free] meal programme, which we reached [the funding goal for] within 24 hours of launching this event. As a result, we’ve given out meals to local high school families who may find themselves in need.

“It’s a very different approach we’re taking in Vegas than maybe some of the other promoters are taking, but we really want to become part of the fibre of Las Vegas.”

A capital idea

Formula 1 also comes to Las Vegas at the right time, as the city seeks to establish itself as the new sports capital of North America. Just a few months after F1, in February 2024, Vegas will also host the Super Bowl.

“What I’ve always seen in Vegas is a remaking of Vegas every five to ten years,” says Miller. “This is another one of those moments. It has in the past few years become known for its sports, world-class sports, and this [F1 race] adds to that. To put it in the heart of what is Las Vegas was just genius. And all the properties,

again, are all arm-in-arm, working towards making this thing happen.

“And it’s funny because without naming names, there have been conversations I’ve been in where comments have been made, ‘Well, you know, first year, you may not hit it exactly right.’ And every property says, ‘That’s not how we do it in Vegas. We have to hit it right that first year.’ We can tweak it the next year, but it’s got to be right the first year. And that’s the mentality of everything they’ve ever done around their properties. I think we struck gold in terms of the Las Vegas environment.”

Of course, simply throwing a big party isn’t ►

4. FORMULA 1'S BIGGEST GAMBLE

F1's goal here. It doesn't just want to recoup its investment in Las Vegas; it also wants to make a profit by acting as a de facto race promoter.

This event will be an exception in terms of its audience. General admission 3-day tickets start at \$500 and there are packages priced at several thousand dollars, while last November the Wynn Las Vegas resort announced a \$1million option – a package for six that includes every conceivable service F1 can offer in conjunction with the gambling capital of the world.

"It's Vegas," smiles Wilm, "and the casinos have a lot of really wealthy clientele in their databases. If this is something they can build around our race, then we're happy to bring them that value. I'm sure they're going to be quite successful with their selling!"

The pit and paddock buildings (right), constructed on land purchased by Liberty, will be open all year round

Build it and they will race

Amid the hurly burly of commerce it can be easy to forget F1 is also a sport, but putting together a track capable of delivering good racing was also important to those in charge – because it will define perceptions of the whole event. The engine of the spectacle will be Las Vegas Boulevard where the almost two-kilometre-long straight will be laid out, ending with a 90-degree left-hander. Together with the first turn, it will provide the kind of main overtaking opportunity that was lacking on the 1981/82 circuit.

"I think you just cannot compare these two tracks," says Tilke. "We'll have a proper race circuit. It will be a very fast track. We have four main acceleration zones, and the biggest one is Las Vegas Boulevard, with a 1.8km straight. So we'll have a lot of slipstream action. We widened the track before the corners, too, so we have more overtaking possibilities and better visibility [for the drivers]. I think we'll see an interesting and cool race."


"I'm sure they'll do a much better job this time," says Surer. "Bernie was just desperate to get his foot into the United States. Whenever he got a chance to have a race in the US, no matter what, he did it."

"IT WILL BE A VERY FAST TRACK. SO WE'LL HAVE A LOT OF SLIPSTREAM ACTION. WE WIDENED THE TRACK BEFORE THE CORNERS, TOO, SO WE HAVE MORE OVERTAKING POSSIBILITIES AND BETTER VISIBILITY [FOR THE DRIVERS]. I THINK WE'LL SEE AN INTERESTING AND COOL RACE" **CARSTEN TILKE**

We raced at places like Phoenix, for example, where we drove around like in a ghost town. Nobody was there.

"Liberty are much more professional. They know how to do these things. And they'll do a much better job in Vegas, for sure."

The Las Vegas GP is destined to become the flagship F1 event of the year. If it is successful, some believe it could even change the economic model of the series. Who knows if Liberty will want to act as a promoter for other races if it does manage to generate \$500m in revenue from the inaugural Vegas race – as is its target, according to a recent *Financial Times* report.

What is certain is that F1 and Vegas will create a spectacle unlike any other in the history of the world's most popular racing series, or the city itself. Even if Diana Ross won't be handing out trophies and kissing the winner this time. 



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TEAMS AND CIRCUITS

While many driver line-ups remain the same, F1 welcomes back Nico Hülkenberg as well as introducing rookies Oscar Piastri and Logan Sargeant. There's a bit of a new look to the calendar, too...



CAPPED BUT NOT INCAPABLE

Creator of Formula 1's fastest car in 2022, Red Bull will need to juggle its resources to minimise the impact of its budget-cap penalty

So, what's going to prevent Red Bull Racing winning both championships in 2023? Answers to that one generally evoke the supernatural: a plague of locusts in the design office; or a hellmouth opening beneath the race bays. The more excitable members of F1's fanbase produce even more marginal possibilities: Max Verstappen quitting racing to concentrate on slam poetry, or someone building a faster car.

The only reason jaws are not agape at Red Bull's 2022 performance is that we've become inured to the sight of F1 having a dominant team. 17 wins from 22 is a pretty stark statistic though, especially in a year the team

began under a cloud of reliability problems, while also contending with an overweight car.

It's not surprising Red Bull got past its early season woes: in-season development has been a great strength. That development prowess has, however, often been offset by starting from a low base. On those occasions Red Bull started the season from a position of strength, it's been much more difficult to catch. Max's record number of wins and record number of points in 2022 certainly suggests a position of strength. This does not bode well for the competition.

If you want to look for the glimmer of hope, then perhaps the form of Sergio Pérez is the weak

link. Checo bagged 40 per cent of Red Bull's points in '22 and was pipped to second in the drivers' championship by Charles Leclerc. It's not a disaster but there's definitely a scribbled remark of 'could do better' on his report card. Red Bull wants a second driver who is fast enough to pick up the pieces when Verstappen has an off-day,

but not quick enough to irritate the star driver – but if the title fights are closer this year, Pérez will have to take more points off Red Bull's rivals. The presence of Daniel Ricciardo holding the drinks isn't going to make life any easier for the Mexican.

What may cause Red Bull problems is the reduction in windtunnel hours, where the regular penalty for success has been supplemented by another for breaching the cost cap in 2021. Realistically, the bulk of work for 2023 would have been completed before the reduction kicked in. But that doesn't rule out pain if the development race continues beyond the summer break.

2015

The only year Red Bull has failed to win a race after its maiden victory in 2009

The RB1 was launched in true Red Bull style at a party ahead of the 2005 Australian GP



A fresh-faced Christian Horner (with then-colleague Guenther Steiner) in 2005

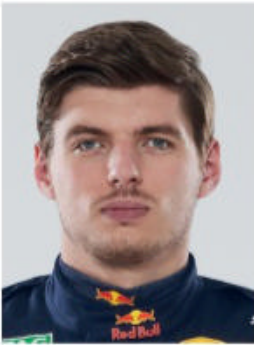


Verstappen takes the plaudits from the adoring Zandvoort crowd, one of his 15 wins in 2022

2012 was the third consecutive drivers' title for Sebastian Vettel and a similar run of constructors' championships for the team. A fourth title double in 2013 marked the end of the peak Vettel years



DRIVER LINE-UP

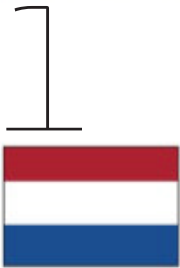


MAX VERSTAPPEN

Born 30 September 1997 (age 25)
Place of birth Hasselt, Belgium
Race engineer Gianpiero Lambiase
Instagram @maxverstappen1

F1 HISTORY

Debut Australia 2015
Starts 163
Wins 35
Other podiums 42
Poles 20
Fastest laps 21
Titles 2 (2021, 2022)
2022 position 1st



The reigning world champion heads into 2023 favourite to claim a third consecutive crown. With a record 15 wins last season, he was the class of the field and his performances reflected a new-found maturity – he no longer feels that he has to ‘win’ every track session. But events in Brazil suggested simmering tensions exist behind the scenes with team-mate Pérez.

CAREER HIGHLIGHT

Wrapping up his second title comfortably with four races of the 2022 season still remaining proved he’s the new alpha male in Formula 1.



GP RACING VERDICT

The Red Bull will once again be the car to beat, but Max might find more of a threat from a resurgent Mercedes. Watching him try to hold off Hamilton *and* Leclerc will be fun.

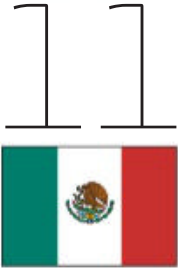


SERGIO PEREZ

Born 26 January 1990 (age 23)
Place of birth Guadalajara, Mexico
Race engineer Hugh Bird
Instagram @schechoperez

F1 HISTORY

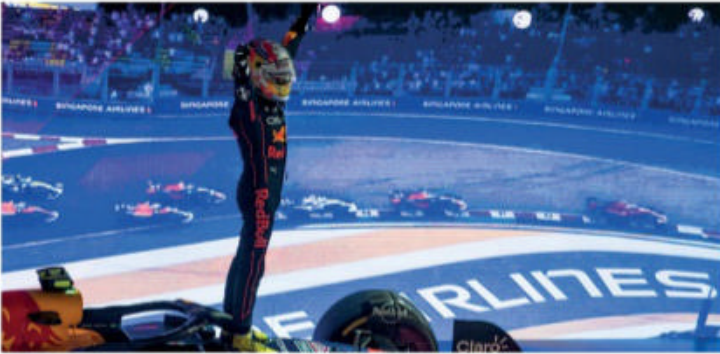
Debut Australia 2011
Starts 235
Wins 4
Other podiums 22
Poles 1
Fastest laps 9
Best position 3rd (2022)
2022 position 3rd



Winning the Sakhir Grand Prix at the end of 2020 gave Sergio Pérez a lifeline to stay in F1 and he was soon picked up by Red Bull for the following season. Over the past two years the Mexican has achieved what previous incumbents – Pierre Gasly and Alex Albon – failed to do: stay close enough to Max to help him win races and also be in a position to take points off championship rivals.

CAREER HIGHLIGHT

‘Checo’ is arguably the best street-track racer in F1: his win in Singapore last year was brilliant, to add to his Monaco and Baku victories.



GP RACING VERDICT

While he may not like it, Pérez needs to remember that Verstappen is top dog in this team. He needs to avoid putting himself first, like he did in Monaco last year.

RED BULL AT A GLANCE

Debut Australia 2005
Races started 347
Wins 92
Poles 81
Fastest laps 84
Points 6,388
Drivers’ titles 6
Constructors’ titles 5

TEAM INFO

Base Milton Keynes, UK
Chassis Red Bull RB19
Power unit RBPT-H002
Website redbullracing.com
Social media @redbullracing

KEY PERSONNEL

CEO Oliver Mintzlauff
Team principal Christian Horner
Chief technical officer Adrian Newey
Sporting director Jonathan Wheatley
Head of race engineering Gianpiero Lambiase

LAST FIVE YEARS

2022 1st
2021 2nd
2020 2nd
2019 3rd
2018 3rd

FAST FACTS

17

From Singapore 2012 Sebastian Vettel was the only Red Bull driver to win a grand prix, taking 17 until Daniel Ricciardo broke his streak when he triumphed for the team in Canada in 2014

RESULTS IN 2022

Total points scored 759

1st place

2nd place

3rd place

Points-scoring races

Pole positions

Fastest laps

DNFs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1st place																						
2nd place																						
3rd place																						
Points-scoring races																						
Pole positions																						
Fastest laps																						
DNFs																						



SECOND PLACE ISN'T ENOUGH

After 14 years without a title, Ferrari axed its boss – despite the Scuderia's most impressive showing since 2019. This is a team used to winning



There was one Ferrari boss who was never going to be sacked, of course: Enzo himself



There were four wins in 2022 (above) but it wasn't enough for Ferrari chiefs

The Scuderia's long history in F1 (left, and right) always adds extra pressure



Ascari in action in 1950. Ferrari is the only team to have competed in all 73 seasons

Ferrari had a good 2022. It won four races and took 12 pole positions, not enough to seriously challenge Red Bull and Max Verstappen but so much better than the previous two seasons. It was enough to move Ferrari from third to second in the constructors' championship while, perhaps

25%

of the 16 races led by a Ferrari in 2022 were converted into race wins

more importantly, starting the new regulatory era on the right track. It also added a new contract for Carlos Sainz, guaranteeing a settled team to make best use of the recently reconstructed foundations. Yep, the future was looking good at Maranello. Then it was out with the team principal... 'cos *Ferrari*.

F1's longest-serving team has form in self-destruction. Its competitiveness has traced a jagged line of soaring peaks and baffling troughs through the decades, usually against a background of internal politics and disarray. 2022 wasn't the first time Ferrari flunked the championship despite having one of the best cars on the grid, and it decidedly won't be the last.

This is how the Scuderia rolls: progress is irrelevant; titles are all that matters. Realistically, there isn't much incoming boss Fréd Vasseur can do about the 2023 car, other than hope his predecessor's design team has found a way to retain the scintillating one-lap pace of the F1-75 in a package that

150

Carlos Sainz's maiden win came on his 150th F1 start

works better across a race distance. Vasseur may also want to address some of the more unusual strategy choices the Scuderia took in 2022 – though in this regard the devil really is in the detail.

Ferrari made some bizarre on-track decisions in 2022 but this is the curse of having a car that's nearly good enough: you're too quick to meekly settle for second best, not quick enough to win while racing by the numbers. You're the team that has to try the long shots.

So, which way is it going to go for Ferrari in 2023? The Scuderia will equal its record 15-season constructors' dry spell (between 1983 and 1999) if it doesn't come good this year...

DRIVER LINE-UP



CHARLES LECLERC

Born 16 October 1997 (age 25)

Place of birth Monte Carlo, Monaco

Race engineer Xavier Marcos Padros

Instagram @charles_leclerc

F1 HISTORY

Debut Australia 2018

Starts 102

Wins 5

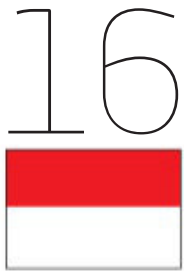
Other podiums 19

Poles 18

Fastest laps 7

Best season 2nd (2022)

2022 position 5th



For raw speed Leclerc is one of the most gifted racers on the grid, despite the mistakes that creep into his driving. A combination of poor strategies and unreliability left him frustrated at various times last year. Spinning out of the lead of the French GP was undoubtedly the nadir. Mattia Binotto is no longer around to give him a telling off, so the hope is he'll be happier under Frédéric Vasseur's leadership.

CAREER HIGHLIGHT

Back-to-back poles and wins at Spa and Monza in his second season in Formula 1 (and first with Ferrari) will never be forgotten.



GP RACING VERDICT

Leclerc will want to put last year's misdemeanours behind him and three wins from nine poles must be improved on. He has the speed, but needs support from his team.



CARLOS SAINZ

Born 1 September 1994 (age 28)

Place of birth Madrid, Spain

Race engineer Riccardo Adami

Instagram @carlossainz55

F1 HISTORY

Debut Australia 2015

Starts 162

Wins 1

Other podiums 14

Poles 3

Fastest laps 3

Best season 5th (2021,2022)

2022 position 5th



Now competing for his fourth different outfit in F1, Carlos Sainz looks more settled at Ferrari than in his previous teams. With charm and a bright mind, Sainz will want to build on last year's campaign. He was 62 points off Leclerc, with just a solitary win, despite three pole positions. Mistakes in the early races dented his confidence and he struggled to match Leclerc on outright pace. Deserves more luck in 2023.

CAREER HIGHLIGHT

Pole and victory at Silverstone for the British GP last year – in which he critically managed fuel and tyre wear perfectly – remains his only race win in 162 starts.



GP RACING VERDICT

The sight of Ferraris running through gravel traps or hitting the wall was fairly common last year. Sainz has to be more consistent to scoop up points if Leclerc hits trouble.

FERRARI
AT A GLANCE

Debut Monaco 1950

Races started 1052

Wins 242

Poles 242

Fastest laps 259

Points 10,167.77

Drivers' titles 15

Constructors' titles 16

TEAM INFO

Base Maranello, Italy

Chassis

Ferrari SF-23

Power unit

Ferrari 066/10

Website

ferrari.com

Social media

@ScuderiaFerrari

KEY PERSONNEL

KEY PERSONNEL

Chairman/CEO

John Elkann

Team principal

Frédéric Vasseur

Technical director

(chassis)

Enrico Cardile

Racing director

Laurent Mekies

Chief engineer, vehicle

concept

David Sanchez

LAST FIVE YEARS

2022 2nd

2021 3rd

2020 6th

2019 2nd

2018 2nd

FAST FACTS

5

The number of races in 2022 before Charles Leclerc lost the championship lead

RESULTS
IN 2022

Total points scored 554

1st place

2nd place

3rd place

Points-scoring races

Pole positions

Fastest laps

DNFs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1st place																						
2nd place																						
3rd place																						
Points-scoring races																						
Pole positions																						
Fastest laps																						
DNFs																						



SILVER ARROWS, GOLDEN OPPORTUNITY

After a rare fallow season in 2022, Mercedes is set for a comeback – with one of the spiciest driver line-ups on the grid

After eight successive titles, it came as something of a relief to all but the most ardent fans to see Mercedes finally fall off the constructors' championship perch to which it had previously been nailed. It remains to be seen, however, whether *Pax Merc* is deceased or merely resting after a prolonged squawk – all of which makes the Silver Arrows by far the most interesting team to watch at the start of 2023.

Before Christmas, during a bout of public musing, Helmut Marko declared Mercedes as the most likely threat to an extended Red Bull hegemony. Whether that was a firmly held belief or simply the good Doctor warming Ferrari's chestnuts

over an open fire doesn't really matter, since it chimed with sense that Merc had turned a corner in the second half of 2022. That there was an improvement isn't in doubt; how robust it really was is difficult to discern, given the wild, track-specific oscillations in performance such as finishing 1-2 at Interlagos then barely threatening the podium seven days later in Abu Dhabi.

So which Mercedes is going to turn up in 2023? In days past, when British American Tobacco bought the declining fragments of the Tyrrell Racing Organisation and shipped the lot up to Brackley, overpromising and under-delivery prevailed. Merc's takeover proved transformative for both team culture

and engineering quality so a revival narrative feels more likely. While George Russell's São Paulo tour de force was the team's only on-track victory last year, perhaps of greater significance was its PR win in the court of public (and FIA) opinion, prompting small but significant changes to the technical regulations. The measures are designed to moderate the amount of bouncing/porpoising and, given Mercedes'

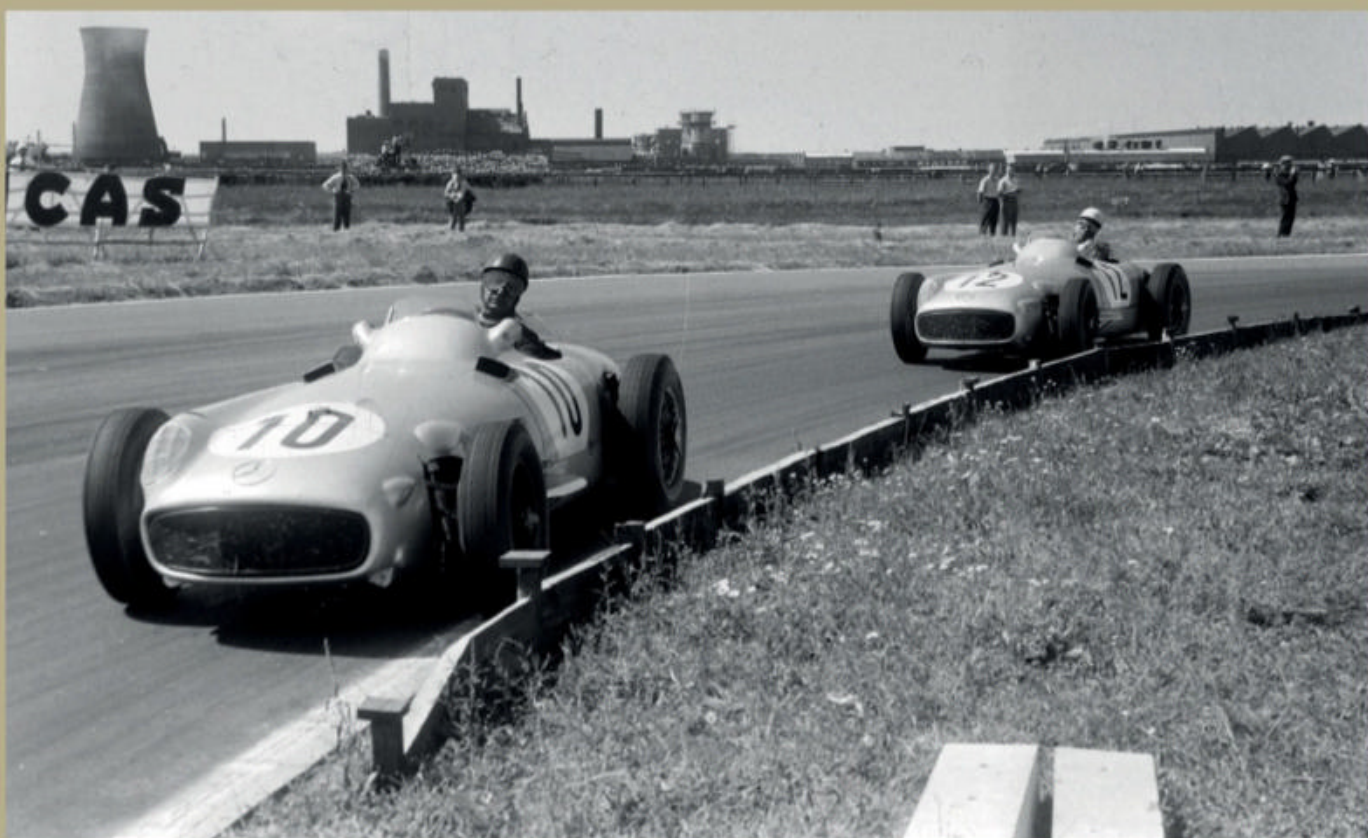
well-documented travails with the sometimes 'undriveable' W13, it's likely to benefit more than its rivals – though in truth, helmet-cam footage from any 2022 driver was enough to make the viewer wince.

If Mercedes gets on top of that particular issue, then the headache Toto Wolff has to worry about switches from the biomedical to the managerial. It didn't matter that Russell and Lewis Hamilton were closely matched in 2022 because they weren't scrapping over anything of substance. That won't be the case if there's a title fight. It'll require careful supervision from senior staff in Brackley and plenty of warm popcorn for everyone at home.

66

laps led by George Russell in the Brazilian GP, when he claimed his maiden F1 win

Mercedes dominated first time around in F1 with Fangio and Moss before pulling out of the sport after the Le Mans disaster



On the grid in Abu Dhabi in 2022, a season the team will be anxious to move on from



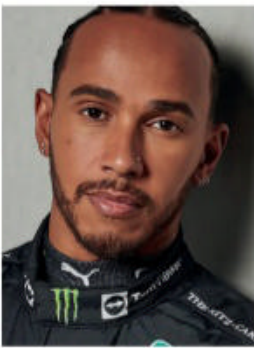
Bouncing affected Mercedes more than most teams during 2022 (left)

Brazil (right) was the one really bright spot for the team in 2022 when it finished 1-2



Mercedes will be desperate to add to its trophy cabinet after a rare off-year

DRIVER LINE-UP



LEWIS HAMILTON

Born 7 January 1985 (age 38)
Place of birth Stevenage, UK
Race engineer Peter Bonnington
Instagram @lewishamilton

F1 HISTORY

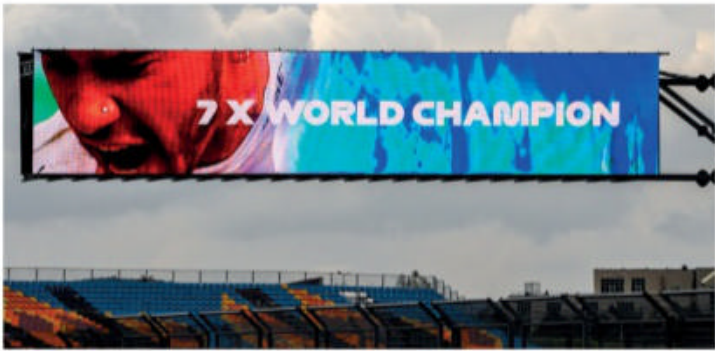
Debut Australia 2007
Starts 310
Wins 103
Other podiums 88
Pole 103
Fastest laps 61
Titles 7 (2008, 2014-15, 2017-19, 2020)
2022 position 6th



Before last season, Lewis Hamilton had only been out-scored by a team-mate twice in his 16-year F1 career: by Jenson Button in 2011 (by 43 points) and by Nico Rosberg (five points in 2016). While there were extenuating circumstances – see p32 – George Russell put 35 points on Lewis in 2022. Was that another blip, or is it a sign of things to come for the season ahead? Pass the popcorn.

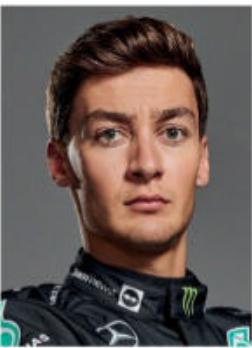
CAREER HIGHLIGHT

The record books are re-written every time he steps into a racing car. Seven titles, 103 wins, 103 poles, 61 fastest laps and counting.



GP RACING VERDICT

Mercedes follows a healthy policy whereby its drivers are free to race each other. Lewis will be relentless in his efforts to assert himself over Russell.



GEORGE RUSSELL

Born 15 February 1998, (age 25)
Place of birth King's Lynn, UK
Race engineer Riccardo Musconi
Instagram @georgerussell63

F1 HISTORY

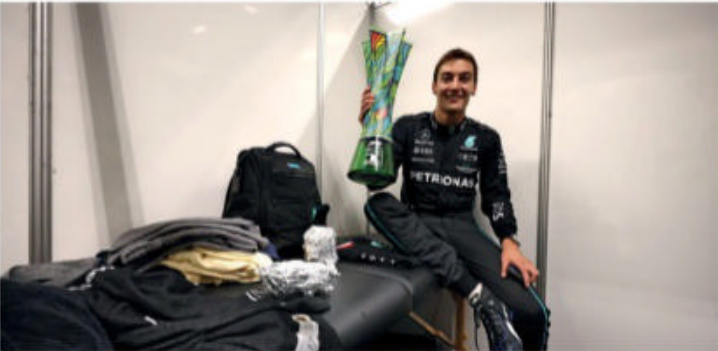
Debut Australia 2019
Starts 82
Wins 1
Other podiums 8
Poles 1
Fastest laps 5
Best season 4th (2022)
2022 position 44th



Some pundits questioned the wisdom of an ambitious young driver competing against a seven-time world champion with the same machinery. But George proved them wrong by excelling against Hamilton in 2022. His talent stood out during his years at Williams and last year proved he could repeat those performances at the head of the field. Incredibly consistent, he should be buoyed for the up-coming campaign.

CAREER HIGHLIGHT

Winning his first race in São Paulo last year – after withstanding the pressure from his team-mate – was one of the performances of the season.



GP RACING VERDICT

Plucky Russell will be full of confidence going into 2023 and if Mercedes builds a car capable of winning regularly, we could see fireworks between the two Silver Arrows drivers.

MERCEDES AT A GLANCE

Debut France 1954
Races started 271
Wins 125
Poles 136
Fastest laps 100
Points 6,952.64
Drivers' titles 9
Constructors' titles 8

TEAM INFO

Bases Brackley and Brixworth, UK
Chassis Mercedes F1 W14
Power unit Mercedes M14 E
Website Mercedesamgf1.com
Social media @MercedesAMGF1

KEY PERSONNEL

Chairman Markus Schäfer
CEO/Team principal Toto Wolff
Technical director Mike Elliott
Sporting director Ron Meadows
Chief engineer Andrew Shovlin

LAST FIVE YEARS

2022 3rd
2021 1st
2020 1st
2019 1st
2018 1st

FAST FACTS

11

consecutive seasons that Mercedes has recorded at least one win, one pole and one fastest lap

Two circuits in 2023 – Miami and Zandvoort – that Hamilton has raced at, but not won on in F1

RESULTS IN 2022

Total points scored 515

1st place

2nd place

3rd place

Points-scoring races

Pole positions

Fastest laps

DNFs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1st place																						
2nd place																						
3rd place																						
Points-scoring races																						
Pole positions																						
Fastest laps																						
DNFs																						

FORMULA 1'S FRENCH CONNECTION

Renault's first F1 car was well known for blowing up. Its team now flies under different colours but the smoke signals are still there



Alpine is still striving to bridge the gap to the top three manufacturers

'Team Enstone' began as Toleman (left), and had great success in 2005/06 (right)



The Alpines were often able to outrag the McLarens in 2022, but were quite fragile

2022 yielded a significant increase in the number of successful overtakes, thus satisfying the primary goal of closer racing. Where the revised rules have failed – or at least, failed to date – is in closing up the field. If anything, the gap widened between F1's top three teams and the midfield, which left Alpine as the works team on the wrong side of a yawning chasm. At least it was leading that particular best-of-the-rest category, since fourth place was the best return for 'Team Enstone' since 2018, when it was racing as Renault.

Although Renault can trace its F1 history back to 1977, its most profitable periods have come in association with the team which

entered F1 as Toleman in 1981, garnering success with Michael Schumacher's second world title in 1995 (as engine supplier when Benetton owned the team), then again in 2005-06 with Fernando Alonso (under full Renault ownership). Once one of the sharpest operators on the grid, the team suffered a critical brain drain in the 2010s after being offloaded to a venture capitalist group who ran out of cash. Since buying it back in 2016, Renault has discovered that repairing the damage requires more than just new investment and a fresh coat of paint.

Now rebranded as Alpine, only one of the team's DNFs in 2022 was the result of accident damage,

making the A522 one of F1's most fragile cars – though this was less of a bug, more of a feature. Power had been prioritised over reliability in response to engine-freeze regulations which (theoretically) only permitted durability-related developments.

Those with a longing for old-skool F1 will have been pleased to see the anaemic Renault lumps of recent years replaced with

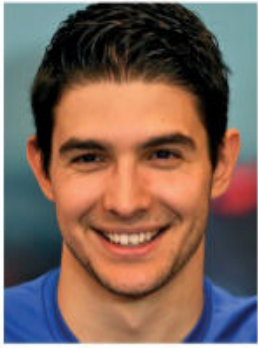
81

points scored in each of the two seasons Fernando Alonso was with Alpine

something which had plenty of power but also the added drama of never knowing when it was going to explode. Time and time again in 2022 fans were able to enjoy the sight of an Alpine pulling away on the straights from a Mercedes-powered McLaren, while keenly watching for tell-tale signs of white smoke, often followed by images of Alonso stalking back to the pits.

342 points separated Alpine from third and that gap isn't going to be bridged in a single winter. The effect of the team's driver line-up is a matter open to interpretation, too. Pierre Gasly deserves something better than languishing in Red Bull's reserves but how well he'll gel with Esteban Ocon is unknown.

DRIVER LINE-UP



ESTEBAN OCON

Born 17 September 1996 (age 26)

Place of birth Évreux, France

Race engineer Josh Peckett

Instagram @estebanocon

F1 HISTORY

Debut Belgium 2016

Starts 111

Wins 1

Other podiums 1

Poles 0

Fastest laps 0

Best season 8th (2017, 2022)

2022 position 8th



At a little over six feet, Esteban Ocon isn't your typical-looking racing driver. But his extra height means the Frenchman is very picky with his weight. Hailing from rural Normandy, Ocon is renowned for his never-give-up attitude both on and off the race track. While he might have Toto Wolff as an ally, he's not afraid to have a run-in with a team-mate even if it incites the wrath of his team bosses.

CAREER HIGHLIGHT

Holding off Sebastian Vettel to claim an unlikely – yet fully deserved – victory in a rain-hit Hungaroring in 2021 is his only F1 victory to date.



GP RACING VERDICT

Ocon is facing one of his old karting rivals. He and Gasly had a falling out but say there has been a rapprochement. If things become heated on track, will the goodwill last?



PIERRE GASLY

Born 7 February 1996 (age 27)

Place of birth Rouen, France

Race engineer Karel Loos

Instagram @pierregasly

F1 HISTORY

Debut Malaysia 2017

Starts 108

Wins 1

Other podiums 2

Poles 0

Fastest laps 3

Best season 7th (2019)

2022 season 14th



After eight years associated with the Red Bull Junior Team – which took the Frenchman all the way to parent team Red Bull for 12 races in 2019 – a new chapter begins this year with his move to Alpine. Gasly was unfortunate to be demoted so ruthlessly back to AlphaTauri (née Toro Rosso) but with no obvious way back to Red Bull, it was the right time for him to find an alternative seat in F1.

CAREER HIGHLIGHT

One year after his demotion, Gasly brilliantly won the Italian Grand Prix and later that evening received a phone call from the French President.



GP RACING VERDICT

The combination of two French *pilotes* for the Alpine *équipe* will keep the nationalistic fans of *Les Bleus* happy. But both drivers will need to maintain the *entente cordiale*.

ALPINE
AT A GLANCE

Debut Britain 1977

Races started 444

Wins 36

Poles 51

Fastest laps 33

Points 2,105

Drivers' titles 2

Constructors' titles 2

TEAM INFO

Bases Enstone, UK
& Viry, France

Chassis

Alpine A523

Power unit

Renault E-Tech RE23

Website

alpine-cars.co.uk/f1-team

Social media

@AlpineF1Team

KEY PERSONNEL

Chairman/CEO

Laurent Rossi

Team principal

Otmar Szafnauer

Chief technical officer

Pat Fry

Sporting director

Davide Brivio

Technical director

Matt Harman

LAST FIVE YEARS

2022 4th

2021 5th

2020* 5th

2019* 5th

2018* 4th

*as Renault

FAST FACT

44

Alpine starts by Ocon, three more than with Force India

4770 race laps completed by Alpine over the course of 2022

RESULTS
IN 2022

Total points scored 173

1st place

2nd place

3rd place

Points-scoring races

Pole positions

Fastest laps

DNFs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1st place																						
2nd place																						
3rd place																						
Points-scoring races																						
Pole positions																						
Fastest laps																						
DNFs																						



ESCAPING THE BAGGAGE OF HISTORY

While McLaren remains Formula 1's third most successful constructor, it's only won one grand prix since 2012...

If you could tear your eyes away from the sight of Max Verstappen stamping his pseudo-competition into the dirt last year, the most compelling teams battle was the dust-up over fourth between Alpine and McLaren. The Papaya Massive narrowly lost out on the honour of being best-of-the-rest – but did manage to steal the driver Alpine had lined up to take over from Fernando Alonso, Oscar Piastri.

Fittingly after such an act of opportunistic burglary, this year will be the 60th anniversary of Bruce McLaren setting off on his clandestine operation to form his own racing team while competing in F1 with Cooper. In the intervening years his eponymous team has

given us some of F1's most iconic liveries, employed some of the most charismatic and quick drivers in history, and conjured up technological tours-de-force which have crushed the opposition.

Those glory days are now a distant speck in the rear-view mirror and it'll be a tough task to move back up the table in 2023. In no particular order, McLaren will be bedding in a rookie driver, dealing with a more compact midfield (assuming Aston Martin keeps its end-of-season form going), and adjusting to life with a new team principal. The latter shouldn't present too large a hurdle: Andrea Stella has been an integral part of the senior management that's overseen McLaren's resurgence

from the slump during the great Honda misadventure.

Having a techie team principal with a strong race-engineering background should be valuable for McLaren, which needs to develop a car that's more consistent than its predecessor. 2022's aerodynamic reboot produced some highly track-

specific performances, and nowhere was that more apparent than at McLaren, where the MCL36 was bouncing from top six finish to Q1 elimination on a race-by-race basis. While Lando Norris coped much better than Daniel Ricciardo, both drivers were complaining about inconsistencies at corner entry, and too much mid-corner understeer.

While McLaren made progress in this regard, it's still going to be the consuming issue at the start of 2023, which makes this an interesting time to introduce a rookie. Piastri is a low-risk gamble though. He's a serial champion in the junior formulae but doesn't command the expectation that was attached to Ricciardo's big name and salary.

McLAREN WON
15/16
RACES IN 1988



Ron Dennis welcomes Lewis Hamilton to the team. Lewis is still McLaren's last champion



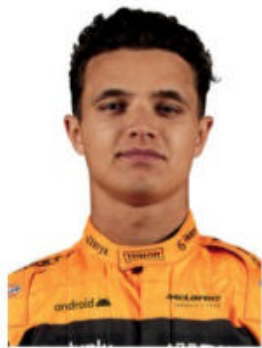
McLaren has a long, storied history in F1, starting with founder Bruce (above)

James Hunt (left) and Ayrton Senna (right) also brought glory to the team



McLaren spent last year battling with Alpine for fourth place, a fight it narrowly lost

DRIVER LINE-UP



LANDO NORRIS

Born 13 November 1999 (age 23)
Place of birth Glastonbury, UK
Race engineer Will Joseph
Instagram @landonorris

F1 HISTORY

Debut Australia 2019
Starts 82
Best result 2nd
Podiums
Poles 1
Fastest laps 5
Best season 6th (2021)
2022 position 7th



It's a mark of Lando's quality that he was the only driver not competing for Red Bull, Ferrari or Mercedes to score a podium last year. It came at Imola, a circuit he excels at. Remember he nearly secured a front-row start there the year before (which resulted in another podium finish). This season Norris will have started over 100 races but, while he's no longer a fresh-raced rookie, he's still only 23.

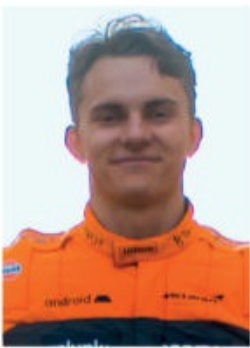
CAREER HIGHLIGHT

Norris oh-so-nearly converted pole position at the 2021 Russian Grand Prix into a maiden F1 win, until a pesky rain shower scuppered his drive.



GP RACING VERDICT

It would be a brave man who bets against Norris having a sizeable edge over his rookie team-mate. Lando's key target, though, is the top step of the podium.



OSCAR PIASTR

Born 6 April 2001 (age 21)
Place of birth Melbourne, Australia
Race engineer Tom Stallard
Instagram @oscarpiastri

F1 HISTORY

Debut Bahrain 2023
Starts N/A
Best result N/A
Podiums N/A
Poles N/A
Fastest laps N/A
Best season N/A
2022 position N/A



One look at his junior record proves he has the credentials to race in the top flight. He won three championships in three seasons: Formula Renault Eurocup, F3 and F2 and then was the subject of a legal wrangle with Alpine last year. McLaren has hired a number of rookies in the past: Norris, Kevin Magnussen, Stoffel Vandoorne and, of course, Lewis Hamilton. So Piastri has a lot to live up to.

CAREER HIGHLIGHT

He was brilliantly unflappable on the day he clinched the F3 title in a hectic weekend at Mugello, when a number of drivers could have won.



GP RACING VERDICT

With no-nonsense advice coming from manager Mark Webber, Piastri won't be intimidated by the step up. But beating Norris will be an altogether different task.

McLAREN AT A GLANCE

Debut Monaco 1966
Races started 924
Wins 183
Poles 156
Fastest laps 161
Points 6,307.5
Drivers' titles 12
Constructors titles 8

TEAM INFO

Base Woking, UK
Chassis
McLaren MCL60
Power unit
Mercedes M14 E
Website
mclaren.com
Social media
@McLarenF1

KEY PERSONNEL

Chairman/CEO
Zak Brown
Team principal
Andrea Stella
Technical director
James Key
Sporting director
Randeep Singh
Chief engineer
TBA

LAST FIVE YEARS

2022 5th
2021 4th
2020 3rd
2019 4th
2018 6th

FAST FACTS

Oscar Piastri will become the

15th

Australian to start a race in Formula 1

80 races from 1973 to 1978 had at least one McLaren M23 in it

EIGHTH

The position Lando Norris has started a GP from the most

RESULTS IN 2022

Total points scored 159

1st place

2nd place

3rd place

Points-scoring races

Pole positions

Fastest laps

DNFs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1st place																						
2nd place																						
3rd place																						
Points-scoring races																						
Pole positions																						
Fastest laps																						
DNFs																						



HANGING ON FOR THE FOUR RINGS

Sauber has form in starting seasons with a quick car, then falling behind in the development race. That will have to change before Audi moves in



Sauber entered Formula 1 for the first time in 1993 with JJ Lehto (pictured), Karl Wendlinger and the neat C12



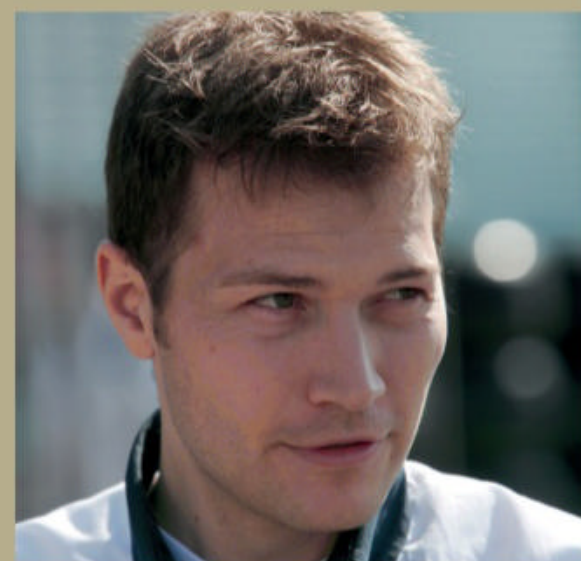
When BMW bought Sauber in 2006 the team move up a gear in terms of performance



Räikkönen and Heidfeld with the C20 (right), another decent Sauber



Hülkenberg (left) sneaked into the top 10 in the drivers' standings in 2013



New CEO Seidl spent four years with Sauber as part of his work for BMW in Formula 1

On the face of it, the Sauber-operated Alfa Romeo team had a quietly effective 2022. Sixth in the constructors' championship is a rise of three places on 2021 and Sauber's best result since the late 2000s, when the blue-and-white propeller of BMW was above the door, while Valtteri Bottas was Hinwil's first driver to sneak into the top ten of the drivers' standings since Nico Hülkenberg in 2013.

It is, however, tough to imagine the Swiss outfit hanging on to that spot in 2023. While sixth was nosebleed-city for a team that's spent most of the last decade skulking around the lower reaches of the table, in another sense it was

vintage Sauber: launching with a competent, tidy car, scoring well in the early exchanges, then falling away alarmingly as others got their acts together. Think of the neat C12 of 1993, or the radical twin-keel C20 of 2001 which introduced Kimi Räikkönen to F1; Sauber can race, or it can develop, but seemingly not both at the same time.

Even by these standards, the numbers last year were a little alarming. The team essentially went into freefall mid-season, scoring just four of its 55 points after the halfway mark. If F1 teams were memes, Alfa Romeo in 2022 would be a man jauntily walking down a street, whistling a happy tune, then

standing on a rake.

So, what's going to happen in 2023? Well, no good deed goes unpunished, and Alfa's reward for a good start to 2022 was to lose its team principal to Ferrari. Extracting Andreas Seidl from McLaren a couple of years ahead of schedule mitigates the potential damage from that, but the first job for Sauber's one-time head of trackside ops is

13

out of 73 F1 world championships where Alfa Romeo has been listed as a constructor

to figure out how to get more out of Zhou Guanyu. 40% of the team's points total is reckoned a decent benchmark for the second driver, but Zhou managed just 11% last year. He gets a free pass for being a rookie, but he's got to step up.

The presence of Seidl is, of course, an indicator of the shape of things to come. Some people hoard fridge magnets or vintage soda siphons, Sauber seems to collect luxury German car marques; and, sooner or later, Audi's influence will start to make itself felt with personnel and budget. It could be destabilising, might be a comfort... but in 2023 it probably won't have any influence at all.

DRIVER LINE-UP



VALTTERI BOTTAS

Born 28 August 1989 (age 33)
Place of birth Nastola, Finland
Race engineer Alex Chan
Instagram @valtteribottas

F1 HISTORY

Debut Australia 2013
Starts 200
Wins 10
Other podiums 57
Poles 20
Fastest laps 19
Best season 2nd (2019, 2020)
2022 position 10th



During his Mercedes years Bottas lived a hand-to-mouth existence, offered only one-year contract extensions. It was a different story when he moved to Alfa on a multi-year deal at the start of 2022. Without the pressure of constantly fighting for his future, he was able to relax and let his natural talent come to the fore. Fans have also noticed him displaying a cheekier side to his character on social media.

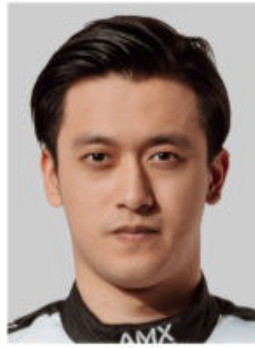
CAREER HIGHLIGHT

Anytime you outqualify and out-race Lewis Hamilton is a proud moment for any driver. Ten times Valtteri won for Mercedes in 2017 to 2021.



GP RACING VERDICT

Having the measure of Zhou will be easy, a harder task will be to impress new CEO Andreas Seidl and to hope he can be a candidate when Audi formally takes over in 2026.



ZHOU GUANYU

Born 30 May 1999 (age 23)
Place of birth Shanghai, China
Race engineer Jörn Becker
Instagram @zhouguanyu24

F1 HISTORY

Debut Bahrain 2022
Starts 22
Best result 8th
Podiums 0
Poles 0
Fastest laps 1
Best season 18th (2022)
2022 season 18th



It must be galling for Zhou to be the fastest driver to ever hail from China, but to not enjoy the prestige of competing in a Formula 1 race at his home circuit. Due to the on-going Covid debacle in the People's Republic, the Shanghai event has been axed for another year, so Zhou will have to prove his quality and retain his seat in F1 in the hope the Chinese GP is back on the calendar for 2024.

CAREER HIGHLIGHT

Zhou took four wins en route to third place in Formula 2 in 2021, in a field featuring highly rated Oscar Piastri and Robert Shwartzman.



GP RACING VERDICT

Zhou survived the worst accident of 2022 when his C42 was up-ended at Silverstone. He needs to keep his car pointing in the right direction more in 2023.

ALFA ROMEO AT A GLANCE

Debut Britain 1950
Races started 192
Wins 10
Poles 12
Fastest laps 15
Points 345
Drivers' titles 2
Constructors' titles 0

TEAM INFO

Base Hinwil, Switzerland
Chassis Alfa Romeo C43
Power unit Ferrari 066/10
Website sauber-group.com/motorsport/formula-1/
Social media @alfaromeof1

KEY PERSONNEL

CEO Andreas Seidl
MD and team representative Alessandro Alunni Bravi
Technical director Jan Monchaux
Sporting director Beat Zehnder
Chief engineer Xevi Pujolar

LAST FIVE YEARS

2017 6th
2021 9th
2020 8th
2019 8th
2018 8th*
 *as Sauber

FAST FACTS

1983

The last time that an Alfa Romeo recorded the fastest lap in a grand prix until Zhou Guanyu's achievement in the rain-shortened Japanese race in 2022

RESULTS IN 2022

Total points scored 55

1st place

2nd place

3rd place

Points-scoring races

Pole positions

Fastest laps

DNFs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1st place																						
2nd place																						
3rd place																						
Points-scoring races																						
Pole positions																						
Fastest laps																						
DNFs																						



TIME FOR STROLL TO SPRINT

A winner in its days as Jordan, Aston Martin has yet to click despite huge investment from Lawrence Stroll – he'll be getting impatient...

Aston Martin best exemplifies the notion that change, if it happens at all in F1, happens slowly. Lawrence Stroll's consortium took over the team midway through 2018, promising big things. Four and a half years later, the promise remains intact. Aston Martin continues to bumble around the midfield: good races, bad races; capable of causing a headache to the front runners or trailing home at the rear. Investment at Silverstone in state-of-the-art facilities has been the consuming focus of the team – but sooner or later that needs to translate into results.

There are signs, at least according to Stroll, that it's already happening. His review of 2022 argued Aston Martin's spritely second half of the

season – recovering after a very poor start – wouldn't have happened in a previous era. The stats bear out the first bit of that: Aston was ninth and adrift in the constructors' championship at the mid-point, then scored in nine of the final 11 races to finish P7, missing sixth on countback. If the green machine can marry that capacity for in-season development with a decent launch car, then it's easy to imagine a meaty midfield battle between Aston, McLaren and Alpine for the ambiguous honour of being best-of-the-rest.

Of course, that will require the drivers to deliver. Sebastian Vettel's decision to retire set in motion one of the more remarkable merry-go-rounds of recent years, though its

impact on Aston was negated by the kidnapping of the evergreen Fernando Alonso. He will do the business on track and give the team the best benchmark from which to gauge its progress. He isn't the destabilising force often portrayed: in the garage he's a good team player and gives excellent feedback. Granted, that'll arrive without the varnish the more diplomatic Vettel may have applied, but it isn't going to do Aston Martin any harm.

3

times in 358 grands prix Alonso is recorded as not starting the race, one each in 2001, 2005 and 2017

The problem is the other car. If 2023 isn't going to turn into the Fernando Alonso show, then Lance Stroll needs to deliver as well. Last year he didn't. Vettel, in his valedictory tour, slapped his younger team-mate around, scoring more than double the points despite missing the first couple of races.

Now in his seventh season, Stroll is in his prime. His feet are well and truly under the table at Silverstone after five years and this is his time to shine, assume the mantle of team leader, and usher the old man gently into retirement. Nobody's honestly expecting that – but if Aston is to realise its potential, then Stroll has to be giving Alonso the sort of competition he received from Esteban Ocon at Alpine last year.



The team that started life as Jordan became Aston Martin at the start of the 2021 season



Lawrence Stroll (left) has invested big time in Aston and will be expecting results...

Alonso joined Aston for the end of the season test in Abu Dhabi (right)



The new facilities at Silverstone are nearing completion and should be ready by May

DRIVER LINE-UP



FERNANDO ALONSO

Born 29 July 1981 (age 41)
Place of birth Oviedo, Spain
Race engineer Chris Cronin
Instagram @fernandoalo_oficial

F1 HISTORY

Debut Australia 2001
Starts 355
Wins 32
Other podiums 66
Poles 22
Fastest laps 23
Titles 2 (2005, 2006)
2022 position 9th



When he takes to the Bahrain grid to make his 356th start in F1, Fernando Alonso will have raced for half of the teams in the field (in some guise or other). Despite turning 42 this summer, the Spaniard shows no sign of either slowing down or losing motivation. However, the fear is that a lacklustre season could lead to potential friction between star man and senior management (and the team's all-powerful owner).

CAREER HIGHLIGHT

Two world championships in the height of the dominant Michael Schumacher era (in 2005 and 2006) brought fresh energy to Formula 1.



GP RACING VERDICT

It's remarkable Alonso hasn't won since Spain 2013. He deserves to step onto the top of the podium again, but will need a helping of luck in a rain-struck, chaotic race.



LANCE STROLL

Born 29 October 1998 (age 24)
Place of birth Montréal, Canada
Race engineer Ben Michell
Instagram @lance_stroll

F1 HISTORY

Debut Australia 2017
Starts 122
Best result 3rd
Podiums 3
Poles 1
Fastest laps 0
Best season 11th (2020)
2022 position 15th



You have to wonder what the future holds for Lance Stroll. He's not about to switch away from his father-owned team any time soon. And clearly the investment into Aston Martin's new facilities will improve the performance of the car. But if that fails to materialise, will he continue driving to end up somewhere between 13th and 18th (his last two championship finishing positions) for years to come?

CAREER HIGHLIGHT

Stroll was pipped to line when he was overtaken by Valtteri Bottas in Baku, 2017, but still managed to score his first (of three) podiums.



GP RACING VERDICT

There's a more difficult task for Stroll on the other side of the Aston garage in 2023. Alonso may have fewer titles than former occupant Vettel, but is a more formidable force.

ASTON MARTIN AT A GLANCE

Debut Holland 1959
Races started 49
Wins 0
Poles 0
Fastest laps 0
Points 132
Drivers' titles 0
Constructors' titles 0

TEAM INFO

Base Silverstone, UK
Chassis
 Aston Martin AMR23
Power unit
 Mercedes M14 E
Website
 astonmartinf1.com
Social media
 @AstonMartinF1

KEY PERSONNEL

Chairman
 Lawrence Stroll
Team principal
 Mike Krack
Chief technical officer
 Andrew Green
Technical director
 Dan Fallows
Sporting director
 Andy Stevenson

LAST FIVE YEARS

2022 7th
2021 7th
2020* 4th
2019* 7th
2018* 7th
 *as Racing Point

FAST FACT

62
 years between Roy Salvadori's second on the grid at Aintree for the 1959 British GP and Sebastian Vettel's second-place finish in Baku in 2021

RESULTS IN 2022

Total points scored 55

1st place

2nd place

3rd place

Points-scoring races

Pole positions

Fastest laps

DNFs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1st place																						
2nd place																						
3rd place																						
Points-scoring races																						
Pole positions																						
Fastest laps																						
DNFs																						



FERRARI'S NOT-QUITE B-TEAM

This American outfit's close ties with Maranello means it attracts scrutiny when things go well on track. Not that they have done for a while



Magnussen and Schumacher lifted Haas to eighth in the constructors' championship last season



Hülkenberg jokes with Steiner (centre) in 2019. Magnussen plainly doesn't get it...



The team initially planned to enter F1 in 2015 but switched to 2016 (right)

The F1 team's US base is in Kannapolis (left), alongside the NASCAR operation



Haas's links with Ferrari were a little more obvious in the team's first season in F1

Haas is currently F1's second-most interesting American team which, considering it's the only one that's going to be on the grid, is indeed damning with faint praise. Haas tends to fly under the radar (except on Netflix, thanks to Guenther Steiner's potty mouth) until it has a good season, at which point it becomes Paddock Enemy Number One. And this could be a good season for Haas.

The most interesting thing about Haas is the business model. The original pitch almost a decade back was to avoid mirroring the uncompetitive arrival of Manor, Hispania and Caterham by using the full extent of the listed-parts criteria to piggy-back off Ferrari

while building up its own design and manufacturing prowess. Eight seasons on, it's gone the other way: no real intent to go it alone but instead evolving the friends-with-benefits dalliance to the point where Haas now has a key, its own drawer and a toothbrush at Maranello. This is convenient for both teams given the strictures of the cost cap, but causes dark muttering from other teams carrying rather more substantial overheads. Expect a continuation of the rhetorical musing on the subject of what being an F1 constructor really means.

It's less of an issue when Haas is bringing up the rear but there's plenty of evidence to suggest the best American team from Banbury

and its Dallara-Ferrari Frankencar is on an upswing. Kevin Magnussen will return stronger after a proper pre-season, while Nico Hülkenberg is simply a better, more experienced driver than Mick Schumacher.

There is a little bit of a frisson attached to this particular driver line-up, given K-Mag once said something a bit rude to Hülk on live television – though anyone scandalized by that sort of post-race

language obviously hasn't recently been to an Under-13s kart race on a Saturday morning.

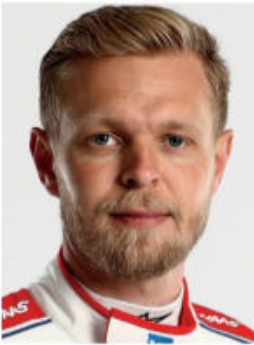
The flip side of the coin is that, after the innovation of '22, 2023 is likely to be a year of iteration – and Haas isn't particularly good at that. Last year, like Alfa Romeo, it got its scoring done in the first half of the season, with just two of the 37 points coming after half-distance.

The team's operating model, while cost-effective, doesn't allow for the all-hands-to-the-pump collective effort that keeps other Formula 1 operations moving forward all year around. If Haas is going to improve on eighth, it's going to have to start the year very strongly.

143

Kevin Magnussen's recorded pole in Brazil came at the 143rd attempt for Haas

DRIVER LINE-UP



KEVIN MAGNUSSEN

Born 5 October 1992 (age 30)
Place of birth Roskilde, Denmark
Race engineer Mark Slade
Instagram @kevinmagnussen

F1 HISTORY

Debut Australia 2014
Starts 141
Best result 2nd
Podiums 1
Poles 1
Fastest laps 2
Best season 9th (2018)
2022 position 13th



Calm and unflappable, Kevin Magnussen has never been a driver that fits the corporate mould, unsuited to stuffy management or red tape. That’s why ‘K-Mag’ has thrived under the leadership of Guenther Steiner. Following Haas’s unsuccessful trial of drivers with either a big surname or a rich dad for a father, Magnussen was absolutely thrilled to be invited back to F1 – having assumed the dream was over.

CAREER HIGHLIGHT

Second on his F1 debut for McLaren in 2014 was pretty special, but so too was that unforgettable moment he took pole for Haas in Brazil.



GP RACING VERDICT

Magnussen has nothing to lose. He can always return to the career he had just embarked on in the US. But it would be special if he could give Haas its first podium.



NICO HÜLKENBERG

Born 19 August 1987 (age 35)
Place of birth Emmerich, Germany
Race engineer Gary Gannon
Instagram @hulkhulkenberg

F1 HISTORY

Debut Bahrain 2021
Starts 181
Best result 4th
Podiums 0
Poles 1
Fastest laps 2
Best season 7th (2018)
2022 position 22nd



Over the Covid years the Hülk was known as a ‘supersub’ – the man at the end of a telephone who could step in at a moment’s notice to replace those unable to race. He deputised for Sergio Pérez at Racing Point and as recently as last year did two races in place of Vettel at Aston Martin. His long-standing friend and physio Martin Poole will ensure the German racer is fighting fit for 2023.

CAREER HIGHLIGHT

Prior to Formula 1, Hülkenberg mastered everything: F3 Euro Series, A1 GP, GP2. And latterly he went on to win the Le Mans 24 Hours in 2015 while still competing in F1.



GP RACING VERDICT

For Hülk there is unfinished business: after 181 starts he is yet to manage a podium, but the team will enjoy the competition between these two hard-nosed figures of F1.

HAAS AT A GLANCE

Debut Australia 2016
Races started 144
Wins 0
Poles 1
Fastest laps 2
Points 237
Drivers’ titles 0
Constructors’ titles 0

Base Banbury, UK;
Kannapolis, USA,
Varano and
Maranello, Italy
Chassis Haas VF-23
Power unit
Ferrari 066/10
Website
haasf1team.com
Social media
@HaasF1Team

TEAM INFO

Chairman
Gene Haas
Team principal
Guenther Steiner
Technical director
Simone Resta
Team manager
Peter Crolla
Chief engineer
Ayao Komatsu

LAST FIVE YEARS

2022 8th
2021 10th
2020 9th
2019 9th
2018 5th

FAST FACTS

39

The number of times Nico Hülkenberg raced in F1 against Mick Schumacher’s father Michael

Mick Schumacher managed three top 10 starts in 2022

RESULTS IN 2022

Total points scored 37

1st place

2nd place

3rd place

Points-scoring races

Pole positions

Fastest laps

DNFs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1st place																						
2nd place																						
3rd place																						
Points-scoring races																						
Pole positions																						
Fastest laps																						
DNFs																						

THE YOUTH CLUB RELYING ON EXPERIENCE

Supposed to develop young drivers into stars, it's come to lean on old hands to score most of its points

Are you one of those people who hoards random stuff against an unspecified future need? If so, you probably understand why Red Bull keeps a spare Formula 1 team in its shed. To the men on the mountain, the Italian outfit is the equivalent of a carpet offcut or that stick you think might be handy for stirring paint: Red Bull no longer seems to know what it needs a second team for, but it's going to leave it propped up in the corner behind the box of Christmas decorations, just in case.

Hiring ex-Merc tester Nyck de Vries, rather than promoting Liam Lawson, suggests an end to the days of AlphaTauri being the finishing school for the Red Bull Junior programme. Likewise, in Sergio

Pérez, Red Bull broke with tradition to recruit from outside the family for the first time since 2007. The talent train, if not derailed, is certainly on a reduced timetable. Some things still hold true, however. Red Bull does gain enhanced political clout on committees and, in the age of the cost cap, enjoys some economies of scale that reduce the costs of the Big Team... but AlphaTauri still feels like a squad not entirely sure of its place in the firmament.

That perhaps was reflected by P9 in the constructors' championship, the worst return since the team acted as Honda's PU guinea-pig in 2018. It was a fairly uninspiring performance, given the AT03 didn't look like a *bad* car. It had 13 top ten

starts but only 10 points finishes, and never got both cars home in the points at the same race.

At least on paper, it's in a weaker position this time out with the experienced and rapid Pierre Gasly gone off to chase the spotlight elsewhere. How that works out in reality is debatable: the Frenchman did score two-thirds of AlphaTauri's points in 2022 but he also increasingly looked like

his heart wasn't really in it. On the other hand, de Vries, 28 and a Formula E World Champion, isn't the typical rookie. He demonstrated that with the drive of the year at Monza, scoring two points on debut with Williams. Helmut Marko has stated he expects the Dutchman rather than Yuki Tsunoda to hold the mantle of team leader – which isn't a ringing endorsement for the Japanese driver beginning his third season at Faenza.

But maybe this is a good thing. Two drivers with something to prove and increasing collaboration with Red Bull Racing might spark a new golden age for AlphaTauri... which actually does sound like the team's old-skool MO.

18

AlphaTauri didn't have either of its cars starting from 18th on the grid during 2021 and 2022



Seb Vettel on his way to the team's first victory at the 2008 Italian GP

Scott Speed locks up in 2007 when he was the last American to race full-time in F1



Sébastien Bourdais tests the first Toro Rosso, the STR01, at Jerez in 2006



In 2018 the team evaluated Honda engines before Red Bull took them up a year later



A second win came the way of the team, now under the AlphaTauri tag, in 2020

DRIVER LINE-UP

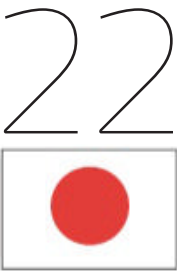


YUKI TSUNODA

Born 11 May 2000 (age 22)
Place of birth Sagamihara, Japan
Race engineer Mattia Spini
Instagram @yukitsunoda0511

F1 HISTORY

Debut Bahrain 2021
Starts 42
Best result 4th
Podiums 0
Poles 0
Fastest laps
Best season 14th (2021)
2022 position 17th



One of the revelations in Season Four of Netflix’s *Drive to Survive* was Yuki Tsunoda’s admission that gym work in the morning “ruined his day”. He was more interested in video games and ordering food. It’s an amusing scene when he leaves his Milton Keynes home behind and moves to Italy to be under the influence of team boss Franz Tost. Under Tost’s strict regime, Tsunoda has upped his game.

CAREER HIGHLIGHT

Back in 2018 the Japanese driver was crowned Honda’s Formula Dream Project champion which accelerated his single-seater path to Europe and ultimately F1.



GP RACING VERDICT

In his first few F1 races, Tsunoda struggled to keep his car out of the wall, despite being quick. With more experience, Yuki has become less temperamental behind the wheel.

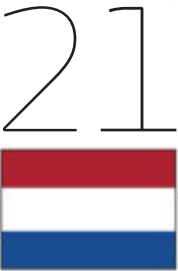


NYCK DE VRIES

Born 6 February 1995 (age 28)
Place of birth Uitwellingerga, Holland
Race engineer Pierre Hamelin
Instagram @nyckdevries

F1 HISTORY

Debut Italy 2022
Starts 1
Best result 9th
Podiums 0
Poles 0
Fastest laps 0
Best season 21st (2022)
2022 position 21st



There was a remarkable statistic which accompanied the Dutchman’s F1 debut at Monza last year, where he was subbing for Alex Albon at Williams. De Vries had already taken part for Aston Martin in practice, thereby becoming the first driver to compete for two different constructors over a race weekend since Graham Hill drove a Brabham in practice and raced for Lotus at Silverstone in 1969.

CAREER HIGHLIGHT

For a solitary Formula 1 race, qualifying eighth and finishing ninth in a Williams was an impressive feat for the 2021 Formula E champion.



GP RACING VERDICT

De Vries has long had the support of Mercedes’s Toto Wolff. Whether he could ever sit in a Silver Arrows in F1 remains to be seen. First job: beat Tsunoda.

ALPHA TAURI AT A GLANCE

Debut Bahrain 2006
Races started 329
Wins 2
Poles 1
Fastest laps 2
Points 784
Drivers’ titles 0
Constructors’ titles 0

TEAM INFO

Base Faenza, Italy
Chassis
AlphaTauri AT04
Power unit
RBPT-H002
Website
scuderia.alphatauri.com
Social media
@AlphaTauriF1

Chairman/CEO
Ahmet Mercan
Team principal
Franz Tost
Technical director
Jody Egginton
Sporting director
Marco Perrone
Chief engineer
Claudio Balestri

LAST FIVE YEARS

2022 9th
2021 6th
2020 7th
2019* 6th
2018* 9th
*as Toro Rosso

FAST FACTS

44

The number of points Japanese drivers Takuma Sato and Yuki Tsunoda have scored in F1, from 90 and 42 races respectively

Nyck de Vries will be the 16th driver to race for AlphaTauri/Toro Rosso

RESULTS IN 2022

Total points scored 35

1st place

2nd place

3rd place

Points-scoring races

Pole positions

Fastest laps

DNFs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1st place																						
2nd place																						
3rd place																						
Points-scoring races																						
Pole positions																						
Fastest laps																						
DNFs																						

HARD WORK AHEAD FOR PAST MASTERS

Once one of F1's most dominant teams, Williams is beset by deep-seated cultural issues. It's going to have to let go of the past

The bad news for Williams in 2022 was that it slipped back from eighth to last in the constructors' championship – but the real disappointment was that barely anybody noticed (with the notable exception of the increasingly disillusioned owner). For a team with such an illustrious backstory, the slide into insignificance continues to be painful to watch.

Among those of a certain age, the sense still pervades that Williams deserves better – but F1 has scant respect for history, and there's a generation of fans who know Williams only as a backmarker. Hardly surprising since the team's last win was an outlier one-off over a decade ago. Having delivered

arguably the most efficient cars of the first ground-effect era, become virtually unassailable at the peak of the turbo years, then perfected active suspension in the 1990s, Williams lost its way and achieved little but cultural stagnation.

New ownership and an injection of capital were supposed to revitalise the team and prevent it going off to live on a lovely farm with Brabham, Lotus and Tyrrell. But new team principal Jost Capito and technical director FX Demaison failed to 'win the dressing room' and expunge the deep-rooted cultural issues, a task which now falls to former Mercedes strategist James Vowles (see p70).

It's not all bad news. While the points don't lie, they are sometimes

guilty of the sin of omission. While Williams was some distance off the back of the lower midfield pack in the standings, it was frequently closer than that in individual races: Williams scored in five of the 22 rounds and was in contention for points at others. It also started in the top 10 five times, which suggests a small improvement relative to the competition could have a big impact.

The caveat there is 'relative to the

competition'. With few technical changes for 2023, evolution rather than revolution is the order of the day, which favours those with a settled team and a clear direction – which isn't the case at Grove. On the plus side Alex Albon, in his second season with the team, will be more capable of knowing what he wants.

That works both ways, however, and it's tough to imagine rookie Logan Sargeant contributing much in the way of directed feedback. Sargeant feels like more of a gamble than fellow rookies de Vries and Piastri, both linked with that seat – but if he has any doubts, he only has to look across the garage. Albon's junior record didn't set the world afire, and he turned out very well.

ONE

GP led by Alex Albon in F1, the 2020 Turkish GP for a single lap



Two years after building its first car, Williams won both drivers' and constructors' titles in 1980



Williams dominated the mid-1990s, winning a total of nine championships from 1992-1997



Spa (right) was one of the times a Williams started from inside the top 10 in 2022

Pastor Maldonado's 2012 Spanish GP victory (left) remains the team's last win



Capito's time as team principal was brief as he failed to address the team's 'culture'

DRIVER LINE-UP



ALEX ALBON
Born 23 March 1996 (age 26)
Place of birth London, UK
Race engineer James Urwin
Instagram @alex_albon

F1 HISTORY
Debut Australia 2019
Starts 59
Best result 3rd
Podiums 2
Poles 0
Fastest laps 0
Best season 7th (2020)
2022 position 19th



It was pleasing to see Albon, one of the most personable drivers on the grid, back in F1 after being dropped by Red Bull. He always had support from the other (non-Mateschitz) side of the fizzy drink empire – the Yoovidhya family – and is proud of his Thai heritage. Last year Albon was stoic to race in the heat and humidity of Singapore following complications with his appendicitis surgery, which led to respiratory failure.

CAREER HIGHLIGHT
Despite a difficult 2020 season with Red Bull, his proudest moment was the first Formula 1 podium he scored (of two) at the majestic Mugello circuit.



GP RACING VERDICT
With Williams now led by James Vowles, it will be curious to see how they work together. The car is unlikely to be a pace-setter, so incremental gains will be crucial.



LOGAN SARGEANT
Born 31 December 2000 (age 22)
Place of birth Fort Lauderdale, USA
Race engineer Gaëtan Jegou
Instagram @logansargeant

F1 HISTORY
Debut Bahrain 2023
Starts 0
Best result N/A
Podiums N/A
Poles N/A
Fastest laps N/A
Best season N/A
2022 position N/A



There was a huge amount of pressure placed on Sargeant's shoulders at the end of last year. Whether it was an ill-advised 'made for TV' moment is hard to say but, after team boss Jost Capito announced Logan would be a Williams driver if he secured enough super licence points, it made the end of his F2 campaign a high-stakes affair. Luckily Sargeant got it over the line, and he'll have a new boss this year.

CAREER HIGHLIGHT
Withstanding the pressure in the Formula 2 Abu Dhabi season finale to take fourth overall, and secure his route into F1, was commendable.



GP RACING VERDICT
Sargeant will probably find the expectation from the US audience overpowering. They might be quick to blame him for poor showings, rather than the car. Needs early points.

WILLIAMS AT A GLANCE

Debut Argentina 1975
Races started 793
Wins 114
Poles 128
Fastest laps 133
Points 3,598
Drivers' titles 7
Constructors' titles 9

TEAM INFO
Base Grove, UK
Chassis
Williams FW45
Power unit
Mercedes M14 E
Website
williamsf1.com
Social media
@WilliamsRacing

KEY PERSONNEL
Chairman/CEO
Matthew Savage
Team principal
James Vowles
Technical director
TBA
Sporting director
Sven Smeets
Chief engineer
Dave Robson

LAST FIVE YEARS
2022 10th
2021 8th
2020 10th
2019 10th
2018 10th

FAST FACTS

769

races have been completed since an American last won a grand prix – Mario Andretti, 1978 Dutch GP

2023 will be the 10th season Williams has been powered by Mercedes engines

RESULTS IN 2022

Total points scored 8

1st place

2nd place

3rd place

Points-scoring races

Pole positions

Fastest laps

DNFs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1st place																						
2nd place																						
3rd place																						
Points-scoring races																						
Pole positions																						
Fastest laps																						
DNFs																						

FORMULA 1 CIRCUITS 2023

With a record-breaking 23 races across five continents, including a new event in the US, it's going to be an action-packed year...

WORDS JAMES ROBERTS PICTURES 



ILLUSTRATIONS: ALAN ELDRIDGE

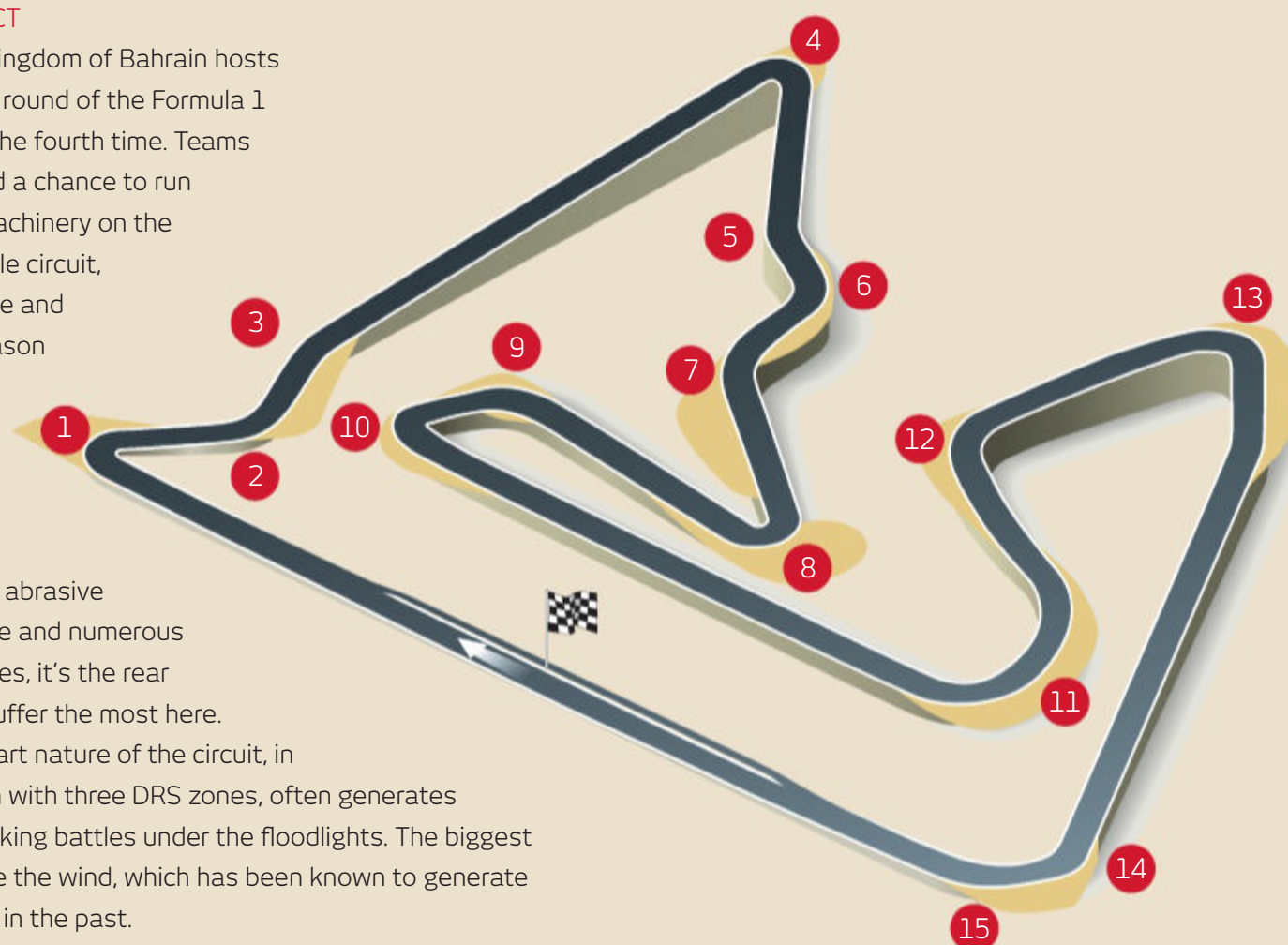
ROUND 1/23

Bahrain Sakhir, 3-5 March

OUR VERDICT

The island kingdom of Bahrain hosts the opening round of the Formula 1 season for the fourth time. Teams will have had a chance to run their new machinery on the tricky 3.3-mile circuit, since the one and only pre-season test takes place at Sakhir the week before.

Owing to an abrasive track surface and numerous traction zones, it's the rear tyres that suffer the most here. The stop-start nature of the circuit, in combination with three DRS zones, often generates good overtaking battles under the floodlights. The biggest worry can be the wind, which has been known to generate sandstorms in the past.



RACE DATA

Circuit name
Bahrain International Circuit
First GP 2004
F1 races held 18
Laps 57
Circuit length 3.362 miles
Race distance
191.530 miles
Direction Clockwise
Winners from pole 8
Race start (UK time) 3pm

LAST RACE HERE (2022)

Winner
Charles Leclerc (Ferrari)
Margin of victory
5.598s
Fastest lap 1m34.570s
Charles Leclerc
Race leaders 2
Pitstops 58
Overtakes 58

ROUND 2/23

Saudi Arabia Jeddah, 17-19 March



OUR VERDICT

Built in record time, the Jeddah Corniche Circuit is a harum-scarum joy ride and this anticlockwise course is not for the faint-hearted. Quick corners, little run-off and high kerbs can lead to trouble – as Mick Schumacher discovered twice in 2022.

The self-proclaimed ‘world’s fastest street circuit’ has produced some dramatic racing, notably the duel between Max Verstappen and Charles Leclerc last year. While more humid than Bahrain, temperatures are cooler after sunset and racing under the floodlights looks spectacular.

ROUND 3/23

Australia Melbourne, 31 March -2 April



RACE DATA

Circuit name
Melbourne Grand Prix Circuit
First GP 1996
F1 races held 25
Laps 58
Circuit length 3.279 miles
Race distance
190.217 miles
Direction Clockwise
Winners from pole 10
Race start (UK time) 6am

LAST RACE HERE (2022)

Winner
Charles Leclerc (Ferrari)
Margin of victory 20.524s
Fastest lap 1m20.260s
Charles Leclerc
Race leaders 1
Pitstops 22
Overtakes 27

ROUND 4/23

Azerbaijan Baku, 28-30 April



RACE DATA

Circuit name

Baku City Circuit

First GP 2016

F1 races held 6

Laps 51

Circuit length 3.730 miles

Race distance

190.169 miles

Direction

Anticlockwise

Winners from pole 2

Race start (UK time) 12pm

LAST RACE HERE (2022)

Winner

Max Verstappen (Red Bull)

Margin of victory 20.823s

Fastest lap 1m46.046s

Sergio Pérez

Race leaders 3

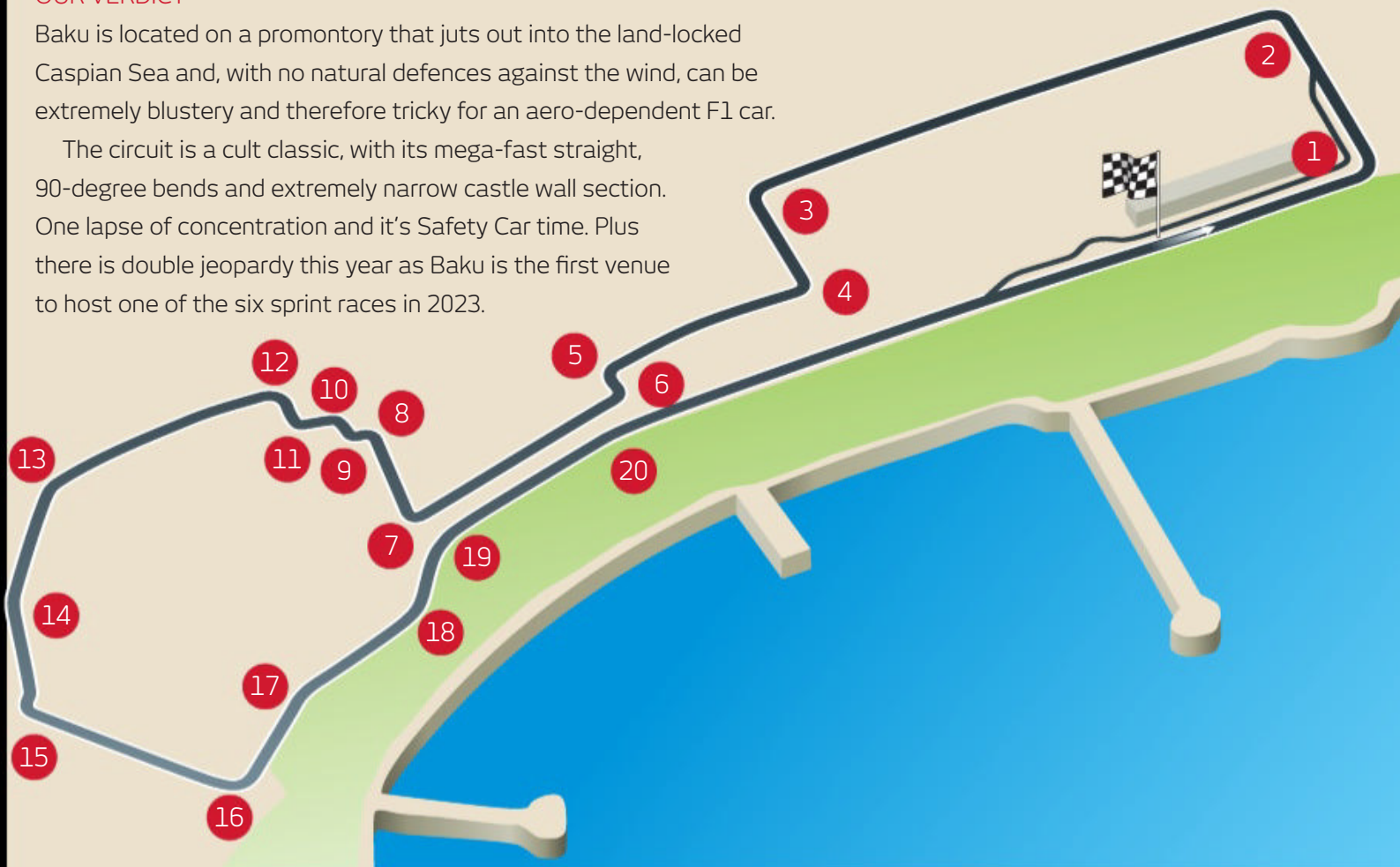
Pitstops 27

Overtakes 22

OUR VERDICT

Baku is located on a promontory that juts out into the land-locked Caspian Sea and, with no natural defences against the wind, can be extremely blustery and therefore tricky for an aero-dependent F1 car.

The circuit is a cult classic, with its mega-fast straight, 90-degree bends and extremely narrow castle wall section. One lapse of concentration and it's Safety Car time. Plus there is double jeopardy this year as Baku is the first venue to host one of the six sprint races in 2023.



ROUND 5/23

Miami Miami Gardens, 5-7 May



OUR VERDICT

The 11th different US venue to host an F1 race caused a bit of a stir when it made its debut last year. This was unlike anything else, with its festival feel and Miami beach club vibes. One hospitality area featured mermaids in resort-

style pools while another housed yachts in a fake dry-dock marina. This race was instantly a sell-out success.

The track weaves around Hard Rock Stadium, home to the Miami Dolphins NFL team. While there were minor issues with the surface the layout itself was well-received.

RACE DATA

Circuit name

Miami International Autodrome

First GP 2022

F1 races held 1

Laps 57

Circuit length 3.362 miles

Race distance

191.584 miles

Direction Anticlockwise

Winners from pole 0

Race start (UK time) 8.30pm

LAST RACE HERE (2022)

Winner

Max Verstappen (Red Bull)

Margin of victory 3.786s

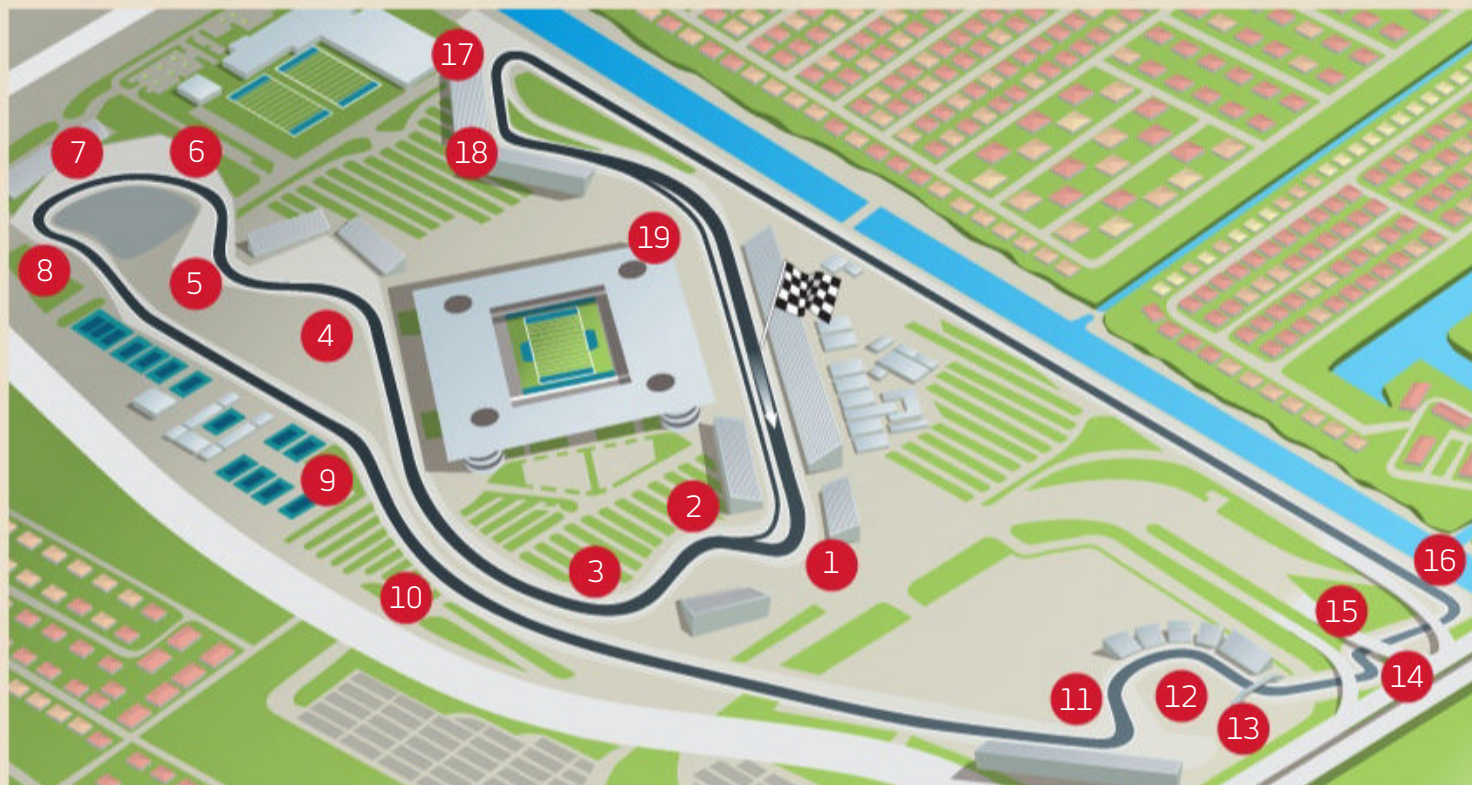
Fastest lap 1m31.361s

Max Verstappen

Race leaders 3

Pitstops 25

Overtakes 45



ROUND 6/23
Emilia Romagna 19-21 May



OUR VERDICT
After falling off the calendar for 14 years, Imola made a welcome return during the Covid-struck year of 2020. Its popularity has led to a regular appearance on the schedule and, coming after a run of new and recent venues, it's great to return to an old school track.
Like Zandvoort and Suzuka, Imola is narrow and devoid of run-off areas. If you make a mistake, it's all too easy to touch the grass and head towards a barrier or gravel trap – as both the Ferrari drivers discovered last year. Nestled in the Emilia Romagna countryside, it's a classic event full of charm.



RACE DATA
Circuit name Autodromo Enzo e Dino Ferrari
First GP 1980
F1 races held 30
Laps 63
Circuit length 3.050 miles
Race distance 192.033 miles
Direction Anticlockwise
Winners from pole 10
Race start (UK time) 2pm

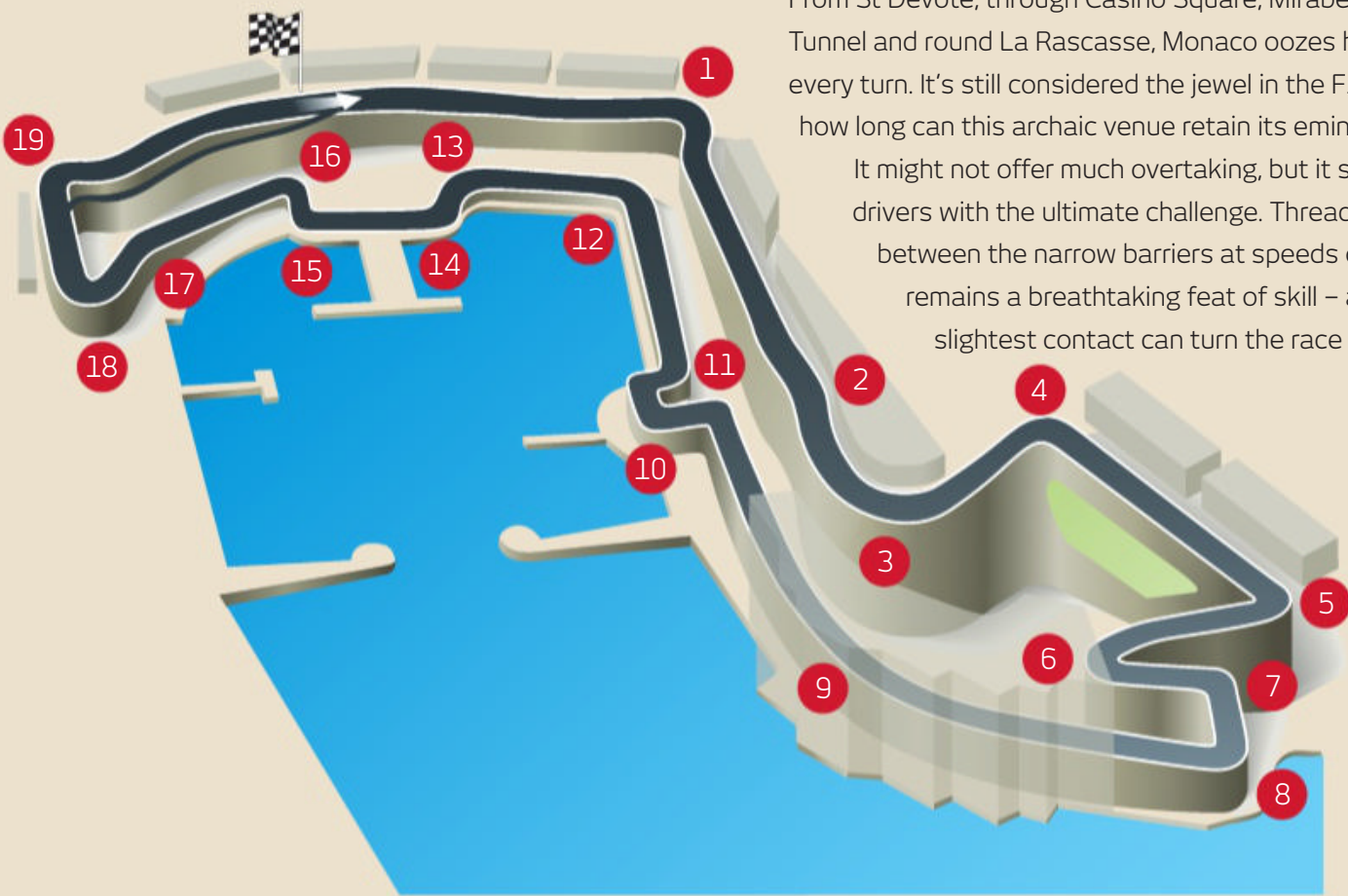
LAST RACE HERE (2022)
Winner Max Verstappen (Red Bull)
Margin of victory 16.527s
Fastest lap 1m18.446s Max Verstappen
Race leaders 1
Pitstops 25
Overtakes 13

ROUND 7/23
Monaco Monte Carlo, 26-28 May



RACE DATA
Circuit name Circuit de Monaco
First GP 1950
F1 races held 68
Laps 78
Circuit length 2.073 miles
Race distance 161.734 miles
Direction Clockwise
Winners from pole 30
Race start (UK time) 2pm

LAST RACE HERE (2022)
Winner Sergio Pérez (Red Bull)
Margin of victory 1.154s
Fastest lap 1m14.693s Lando Norris
Race leaders 3
Pitstops 53
Overtakes 5



OUR VERDICT
From St Devote, through Casino Square, Mirabeau, the Tunnel and round La Rascasse, Monaco oozes history at every turn. It's still considered the jewel in the F1 crown, but how long can this archaic venue retain its eminent position?
It might not offer much overtaking, but it still provides drivers with the ultimate challenge. Threading a car between the narrow barriers at speeds over 140mph remains a breathtaking feat of skill – and the slightest contact can turn the race on its head.

ROUND 8/23

Spain Barcelona, 2-4 June



OUR VERDICT

After Pedralbes and Montjuïc, the current circuit at Montmelo is the third in Barcelona to host the Spanish Grand Prix. First used in 1991, the track has undergone a number of revisions, notably with the chicane placed before the final corner – although there is talk of removing this fiddly left/right in the future. If you want to study the finesse of a modern F1 driver, then stand on the inside of Turn 2 and watch the dynamic change of direction as drivers transition from the left-hander to set themselves up for the long right at T3.

RACE DATA

Circuit name
Circuit de Barcelona-Catalunya
First GP 1991
F1 races held 32
Laps 66
Circuit length 2.905 miles
Race distance
1901.645 miles
Direction Clockwise
Winners from pole 23
Race start (UK time) 2pm

LAST RACE HERE (2022)

Winner
Max Verstappen (Red Bull)
Margin of victory 13.072s
Fastest lap 1m24.108s
Sergio Pérez
Race leaders 4
Pitstops 53
Overtakes 43

ROUND 9/23

Canada Montréal, 16-18 June



OUR VERDICT

Located on the man-made Île Notre-Dame on the mighty St Lawrence river, this island circuit in Montréal is one of the highlights of the year. The key to a quick lap is to get as close to the walls without touching them – run just a little wide and you're immediately in trouble. The infamous 'Wall of Champions' on the outside of the final chicane has seen plenty of carbonfibre in its time.

With easy public transport links to the city, the local residents – traditionally Ferrari fans thanks to Gilles Villeneuve – fill the grandstands to offer a great atmosphere.

RACE DATA

Circuit name
Circuit Gilles Villeneuve
First GP 1978
F1 races held 41
Laps 70
Circuit length 2.709 miles
Race distance
189.685 miles
Direction Clockwise
Winners from pole 20
Race start (UK time) 7pm

LAST RACE HERE (2022)

Winner
Max Verstappen (Red Bull)
Margin of victory
0.993s
Fastest lap 1m15.749
Carlos Sainz
Race leaders 2
Pitstops 32
Overtakes 33

ROUND 10/23

Austria Spielberg, 30 June-2 July



RACE DATA

Circuit name
Red Bull Ring

First GP 1970

F1 races held 37

Laps 71

Circuit length 2.683 miles

Race distance
190.420 miles

Direction Clockwise

Winners from pole 13

Race start (UK time) 2pm

LAST RACE HERE (2022)

Winner
Charles Leclerc (Ferrari)

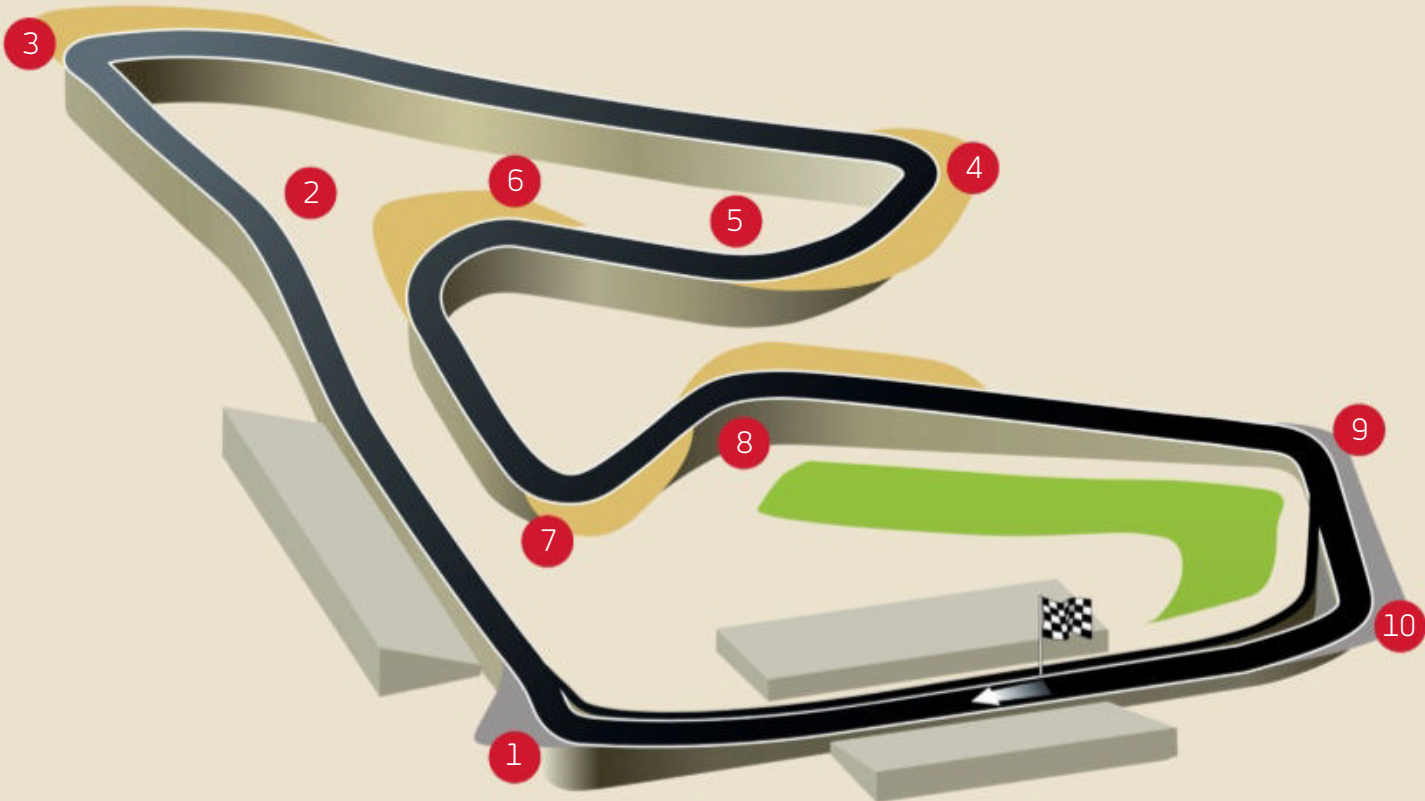
Margin of victory
1.532s

Fastest lap 1m07.275s
Max Verstappen

Race leaders 3

Pitstops 42

Overtakes 52



OUR VERDICT

Because of its 2.6-mile length this track has effectively only nine corners (the kink before the hairpin is counted as the tenth) which makes qualifying extremely tight. Combined with Styrian topography, it means spectators can enjoy a good view of virtually the whole track wherever they sit and most of the fans who flock to the grandstands have made the journey from the Netherlands. Once again, the frenetic nature of racing here has led to it hosting a sprint event this year.

ROUND 11/23

Great Britain Silverstone, 7-9 July



RACE DATA

Circuit name
Silverstone Grand Prix Circuit

First GP 1950

F1 races held 57

Laps 52

Circuit length 3.660 miles

Race distance
190.262 miles

Direction Clockwise

Winners from pole 21

Race start (UK time) 2pm

LAST RACE HERE (2022)

Winner
Carlos Sainz (Ferrari)

Margin of victory 3.779s

Fastest lap 1m30.510s,
Lewis Hamilton

Race leaders 4

Pitstops 47

Overtakes 26



OUR VERDICT

Most of the tickets for this year's British Grand Prix were snapped up in less than a week, such is the popularity of Formula 1 at the present time. From the campsites to the windswept banks, Silverstone offers a race weekend like no other.

Whether it be the Red Arrows air display or the Sky Sports F1 grid frivolities on Thursday evening, the hardy British fans soak up everything that's on offer. It helps that Silverstone boasts one of the most thrilling sequences of asphalt in all of F1. From Luffield through to Stowe, drivers do away with their brake pedal...

ROUND 12/23

Hungary Hungaroring, 21-23 July



OUR VERDICT

In the past 30 years the nature of the Hungaroring has changed. Initially slow and difficult to overtake at – think Thierry Boutsen holding up Ayrton Senna for 77 laps in 1990 – today the average speed is up and so is the overtaking count.

Last year, helped by the DRS zones and the tighter Turn 1, the race had 52 overtakes. In addition the rate of aero development has increased apex speeds – making the Hungaroring a fast and technical challenge.

RACE DATA

Circuit name

Hungaroring

First GP 1986

F1 races held 37

Laps 70

Circuit length 2.722 miles

Race distance

190.530 miles

Direction Clockwise

Winners from pole 16

Race start (UK time) 2pm

LAST RACE HERE (2022)

Winner

Max Verstappen (Red Bull)

Margin of victory

7.834s

Fastest lap 1m21.386s

Lewis Hamilton

Race leaders 5

Pitstops 42

Overtakes 52

ROUND 13/23

Belgium Spa-Francorchamps, 28-30 July



RACE DATA

Circuit name

Circuit de Spa-Francorchamps

First GP 1950

F1 races held 55

Laps 44

Circuit length 4.352 miles

Race distance

191.414 miles

Direction Clockwise

Winners from pole 21

Race start (UK time) 2pm

LAST RACE HERE (2022)

Winner

Max Verstappen (Red Bull)

Margin of victory

17.841s

Fastest lap 1m49.354s

Max Verstappen

Race leaders 3

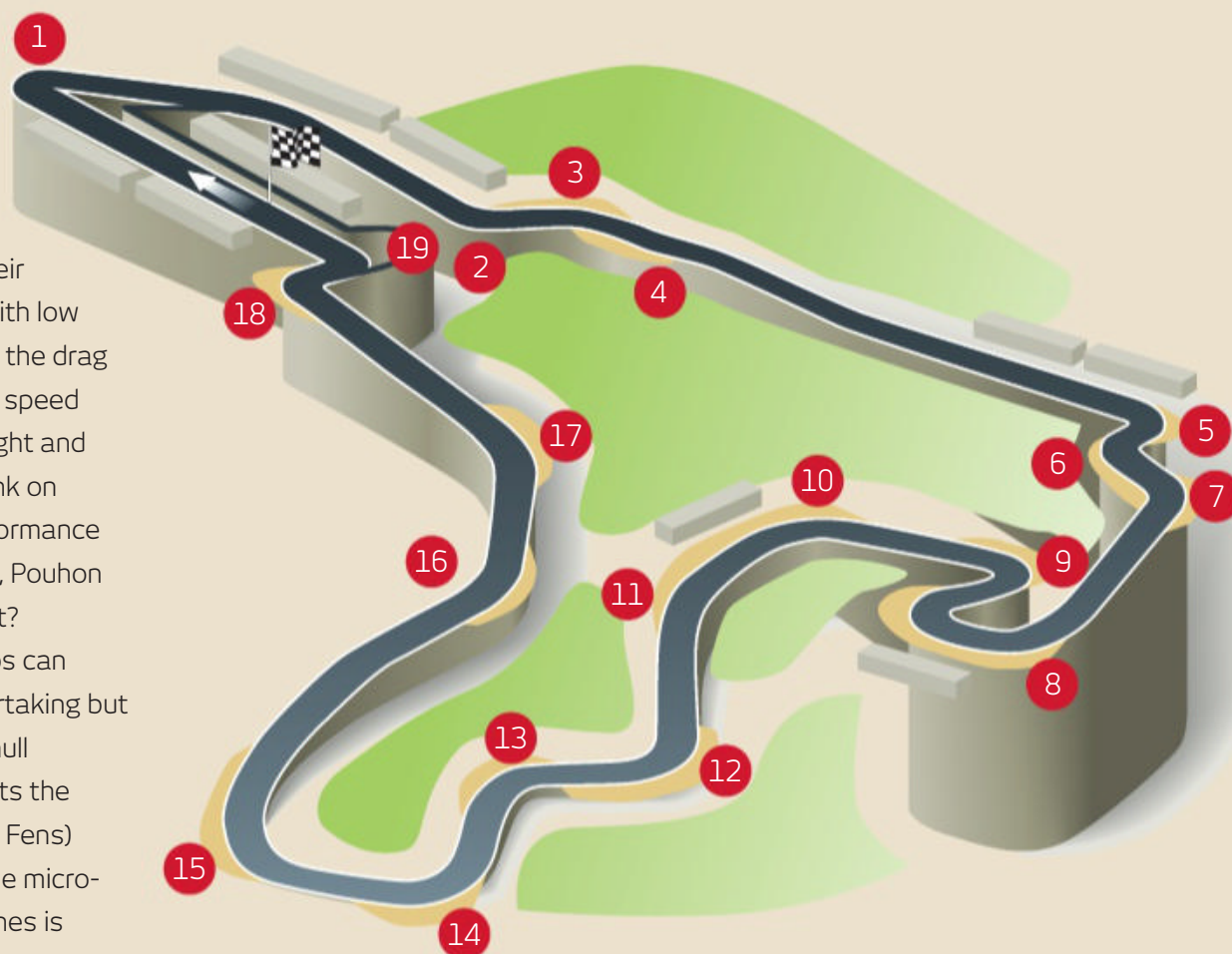
Pitstops 38

Overtakes 49

OUR VERDICT

There is a long-standing engineering conundrum to Spa which still causes boffins to scratch their heads. Run the car with low downforce to reduce the drag and increase the top speed for the Kemmel straight and Blanchimont? Or crank on the wing for the performance through Les Combes, Pouhon and down to Stavelot?

Variances in setups can lead to plenty of overtaking but then all that can be null and void if the rain hits the Hautes Fagnes (High Fens) region of Belgium. The micro-climate of the Ardennes is notorious, even in July.



ROUND 14/23

Netherlands Zandvoort, 25-27 August



OUR VERDICT

Zandvoort is another race on the calendar just a pebble’s throw from the ocean. While the North Sea might not be as glamorous as the Red Sea, the Dutch resort more than makes up for it in beer sales...

Red Bull’s team boss Christian Horner likens the event to spending three days at a rave. The pumping music, passionate fans and party atmosphere is certainly heady. And it’s suitably sustainable as all the spectators turn up to Zandvoort either on bicycles or via the excellent public transport system, with trains direct from Amsterdam.



RACE DATA

Circuit name
Circuit Zandvoort
First GP 1952
F1 races held 32
Laps 72
Circuit length 2.646 miles
Race distance
190.504 miles
Direction Clockwise
Winners from pole 14
Race start (UK time) 2pm

LAST RACE HERE (2022)
Winner
Max Verstappen (Red Bull)
Margin of victory
4.071s
Fastest lap 1m13.652s
Max Verstappen
Race leaders 2
Pitstops 57
Overtakes 18

ROUND 15/23

Italy Monza, 1-3 September



OUR VERDICT

With such a huge crowd last year, the fabled and historic Autodromo was creaking at the seams, leading to traffic chaos that the plotters of *The Italian Job* would have been proud of. But if you can dismiss such irritations, Monza remains an iconic institution that Formula 1 would be much poorer without.

Its high-speed straights, mystical banking and storied history – not forgetting the passion for those ‘bloody red cars’ (to misquote Vanwall’s Tony Vandervell) – makes the Italian Grand Prix one of the highlights on the calendar. If you can, stand at the Variante del Rettifilo on the opening lap.

RACE DATA

Circuit name
Autodromo Nazionale Monza
First GP 1950
F1 races held 72
Laps 53
Circuit length 3.599 miles
Race distance
190.586 miles
Direction Clockwise
Winners from pole 25
Race start (UK time) 2pm

LAST RACE HERE (2022)
Winner
Max Verstappen (Red Bull)
Margin of victory 2.446s
Fastest lap 1m24.030s
Sergio Pérez
Race leaders 2
Pitstops 28
Overtakes 52

ROUND 16/23

Singapore Marina Bay, 15-17 September



OUR VERDICT

There is no other race quite like Singapore on the calendar. The Lion City made a return to the schedule last season following a two-year hiatus owing to Covid. Nowhere else is there such disparity, from the luxury hotels with rooms for thousands of pounds a night in Marina Bay, to the street food in nearby Chinatown.

The circuit is equally diverse, with long straights and tight, twisty bends. There is also a temporary tweak for 2023, to enable construction of a new events venue, involving a 380m straight from Turns 15 to 16.

RACE DATA

Circuit name
Marina Bay Street Circuit
First GP 2008
F1 races held 13
Laps 63
Circuit length 3.062 miles
Race distance
192.913 miles
Direction Anticlockwise
Winners from pole 8
Race start (UK time) 1pm

LAST RACE HERE (2022)

Winner
Sergio Pérez (Red Bull)
Margin of victory
2.595s
Fastest lap 1m46.458s
George Russell
Race leaders 1
Pitstops 21
Overtakes 15

ROUND 17/23

Japan Suzuka, 22-24 September

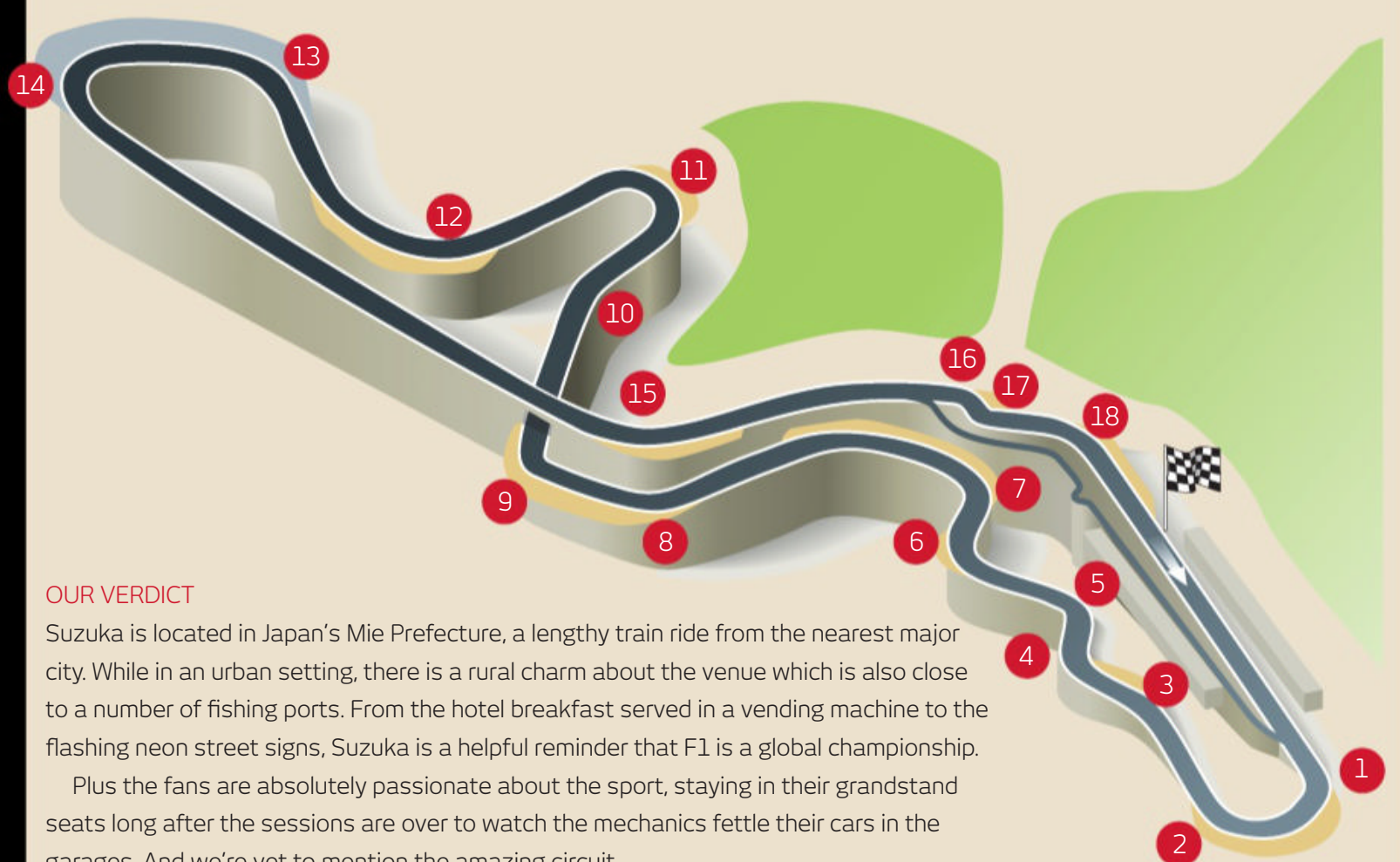


RACE DATA

Circuit name
Suzuka International
Racing Course
First GP 1987
F1 races held 32
Laps 53
Circuit length 3.608 miles
Race distance 191.053
Direction Clockwise
& anticlockwise
Winners from pole 16
Race start (UK time) 6am

LAST RACE HERE (2022)

Winner Max Verstappen
(Red Bull)
Margin of victory 27.066s
Fastest lap 1m44.411s
Zhou Guanyu
Race leaders 2
Pitstops 42
Overtakes 19



OUR VERDICT

Suzuka is located in Japan's Mie Prefecture, a lengthy train ride from the nearest major city. While in an urban setting, there is a rural charm about the venue which is also close to a number of fishing ports. From the hotel breakfast served in a vending machine to the flashing neon street signs, Suzuka is a helpful reminder that F1 is a global championship.

Plus the fans are absolutely passionate about the sport, staying in their grandstand seats long after the sessions are over to watch the mechanics fettle their cars in the garages. And we're yet to mention the amazing circuit...

ROUND 18/23

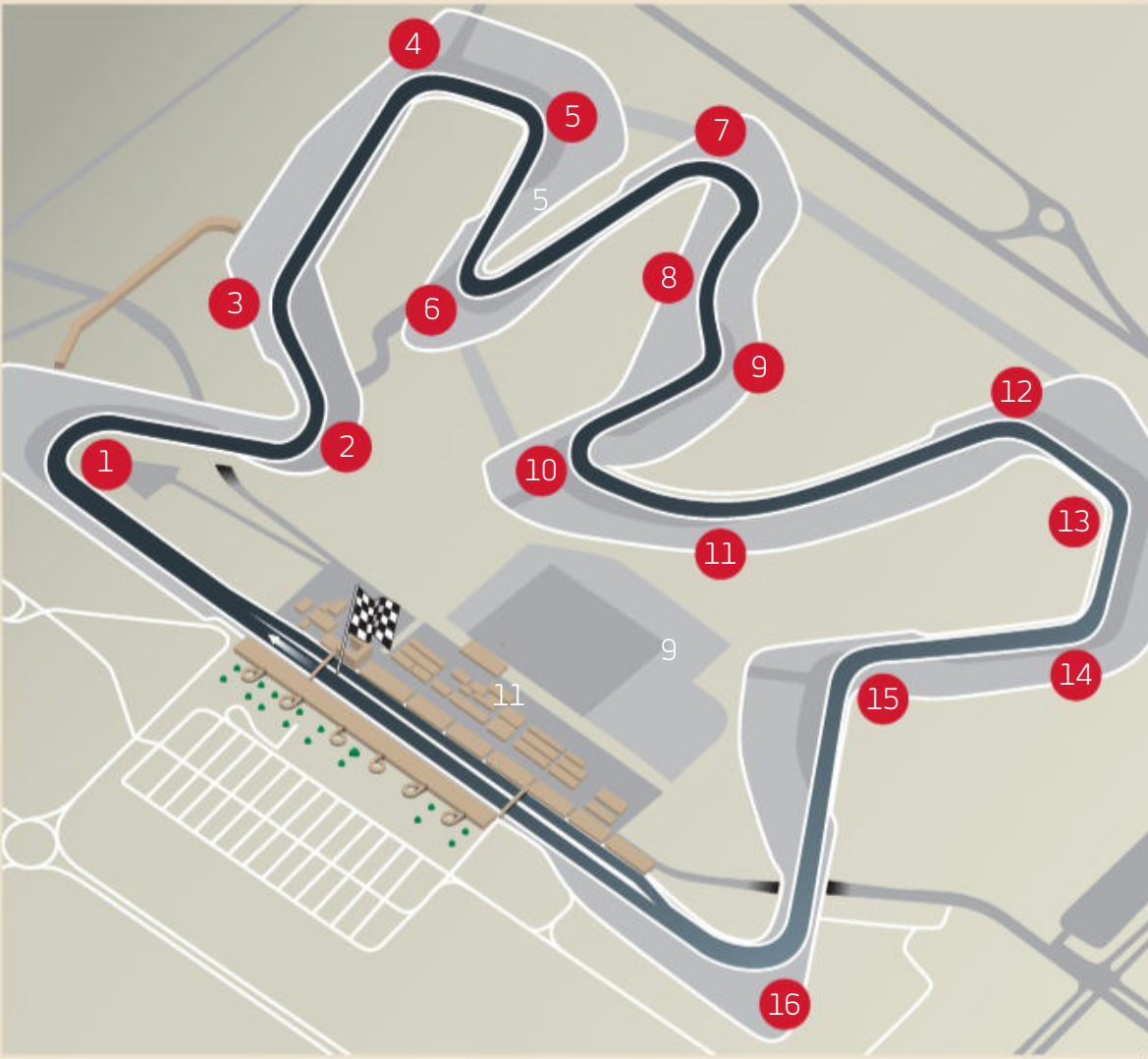
Qatar Losail, 6-8 October



OUR VERDICT

Built in 2004 primarily for motorcycle racing, the Losail International Circuit, is located north of the capital Doha. Three years after construction, permanent floodlights were installed to facilitate atmospheric night-time racing.

Qatar struck a long-term deal with Formula 1 in 2021 (a race Lewis Hamilton won), but didn't host a grand prix last year because it coincided with the Arab nation's hosting of the FIFA World Cup. F1 returns this season and, to make up for the lost time, Qatar will this season feature two races, with the sprint event taking place on the Saturday.



RACE DATA

Circuit name
Losail International Circuit

First GP 2021

F1 races held 1

Laps 57

Circuit length 3.342 miles

Race distance
190.549 miles

Direction Clockwise

Winners from pole 1

Race start (UK time) 3pm

LAST RACE HERE (2021)

Winner
Lewis Hamilton (Mercedes)

Margin of victory
25.743s

Fastest lap 1m23.196s
Max Verstappen

Race leaders 1

Pitstops 30

Overtakes 39

ROUND 19/23

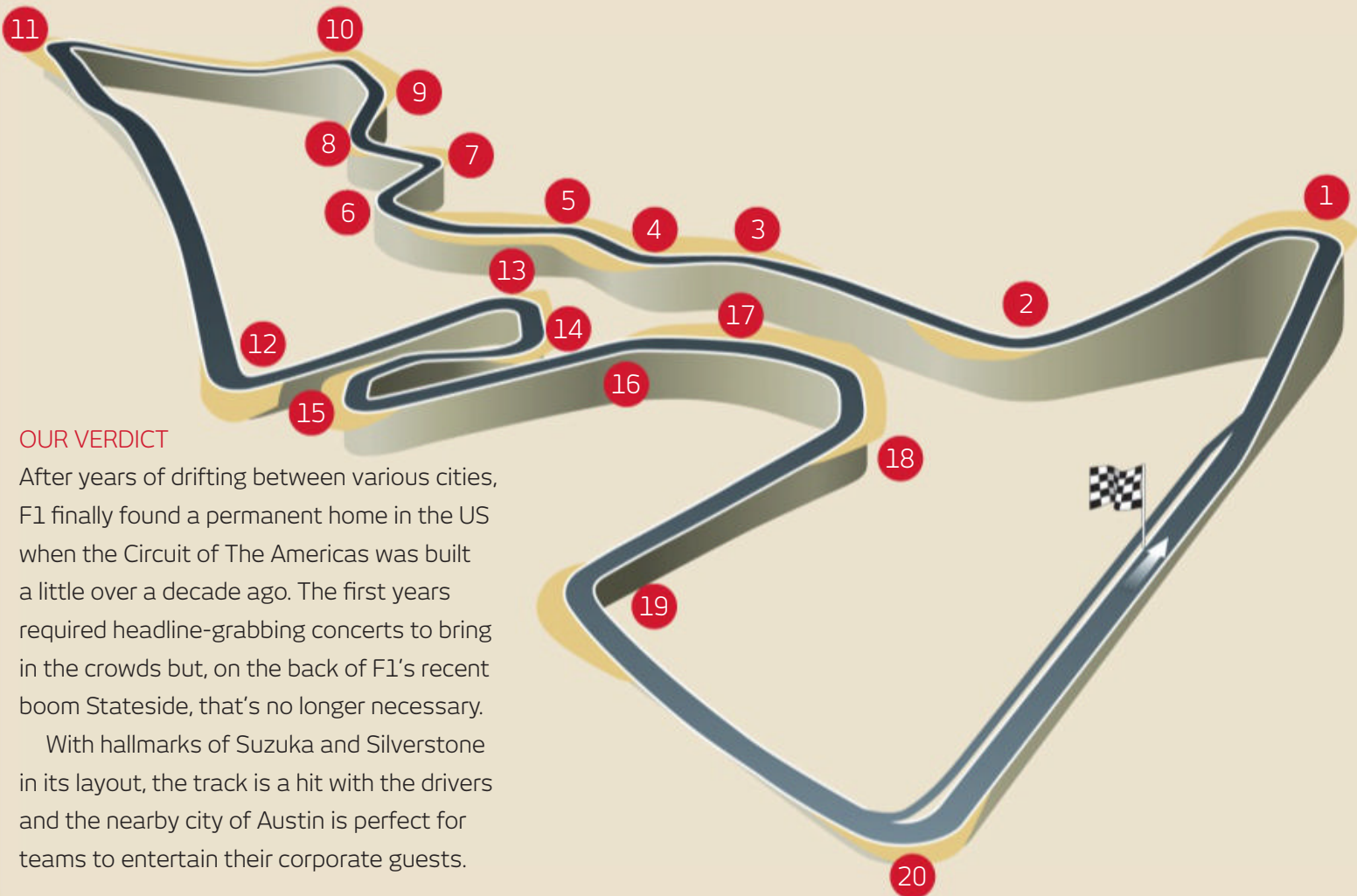
USA Austin, 20-22 October



OUR VERDICT

After years of drifting between various cities, F1 finally found a permanent home in the US when the Circuit of The Americas was built a little over a decade ago. The first years required headline-grabbing concerts to bring in the crowds but, on the back of F1's recent boom Stateside, that's no longer necessary.

With hallmarks of Suzuka and Silverstone in its layout, the track is a hit with the drivers and the nearby city of Austin is perfect for teams to entertain their corporate guests.



RACE DATA

Circuit name
Circuit of The Americas

First GP 2012

F1 races held 10

Laps 56

Circuit length 3.425 miles

Race distance
191.633 miles

Direction Anticlockwise

Winners from pole 5

Race start (UK time) 8pm

LAST RACE HERE (2022)

Winner
Max Verstappen (Red Bull)

Margin of victory
5.023s

Fastest lap 1m38.788s
George Russell

Race leaders 5

Pitstops 36

Overtakes 59

ROUND 20/23

Mexico Mexico City, 27-29 October



RACE DATA

Circuit name

Autódromo Hermanos Rodríguez

First GP 1963

F1 races held 22

Laps 71

Circuit length 2.674 miles

Race distance 189.738 miles

Direction Clockwise

Winners from pole 10

Race start (UK time) 8pm

LAST RACE HERE (2022)

Winner

Max Verstappen (Red Bull)

Margin of victory

15.186s

Fastest lap 1m20.153s

George Russell

Race leaders 3

Pitstops 23

Overtakes 20

OUR VERDICT

If you include the non-championship Formula 1 race in 1962, last season Mexico celebrated 60 years of hosting a grand prix with much fanfare. Sadly the great talent Ricardo Rodríguez lost his life in practice for the inaugural event but the Autódromo Hermanos Rodríguez continues to honour him and his brother Pedro to this day.

Situated 2,285 metres above sea level, and positioned on the outskirts of the sprawling metropolis, this track demands Monaco-spec levels of downforce because the air at that height is so thin. The Mexican fans ensure the party lasts long into the night.



ROUND 21/23

São Paulo Interlagos, 3-5 November



RACE DATA

Circuit name

Autódromo José Carlos Pace

First GP 1973

F1 races held 39

Laps 71

Circuit length 2.677 miles

Race distance

190.064 miles

Direction Anticlockwise

Winners from pole 16

Race start (UK time) 5pm

LAST RACE HERE (2022)

Winner

George Russell (Mercedes)

Margin of victory

1.529s

Fastest lap 1m13.785s

George Russell

Race leaders 2

Pitstops 44

Overtakes 62

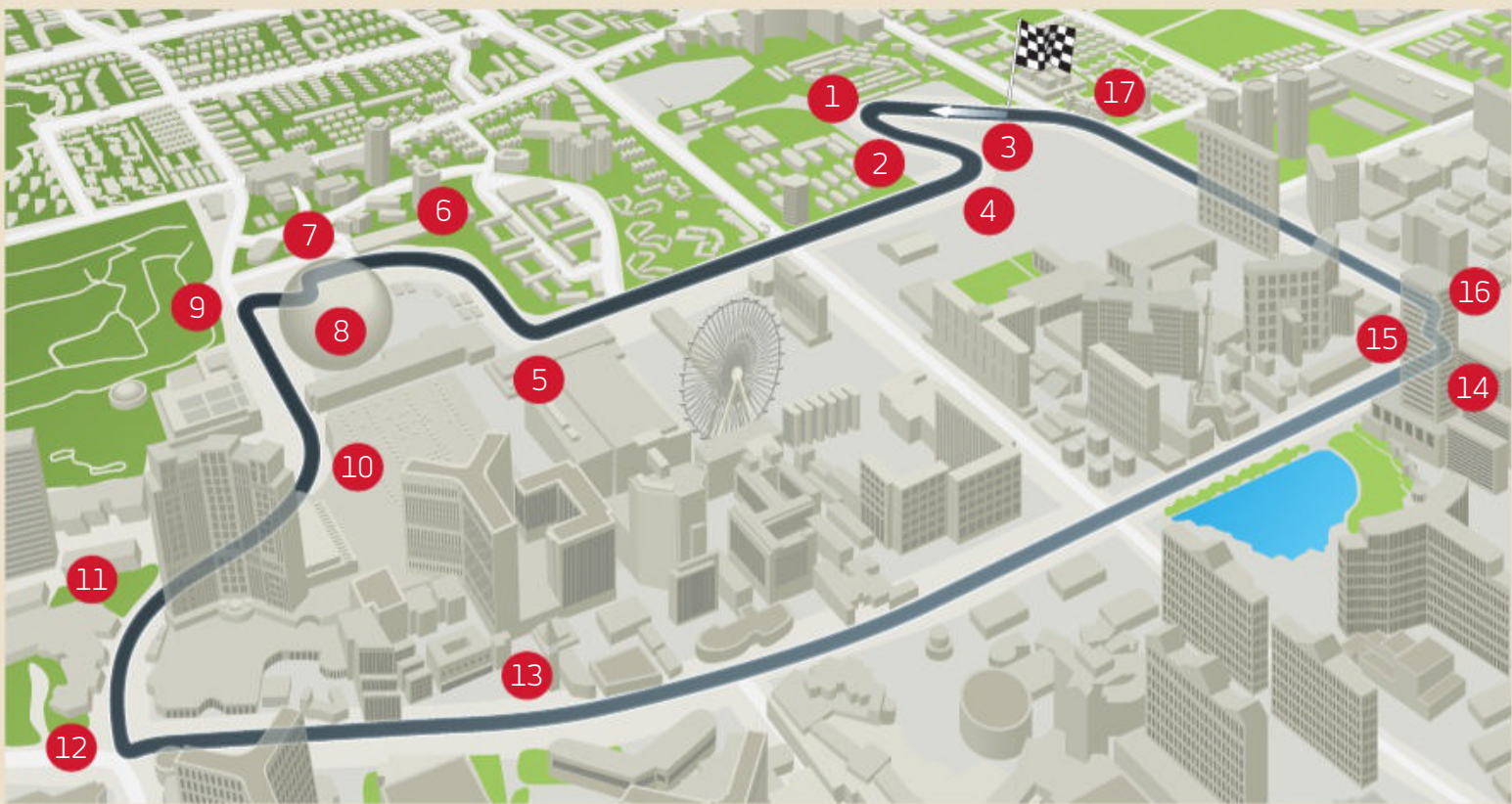


OUR VERDICT

While not as high as Mexico City, São Paulo boasts the second highest circuit on the Formula 1 calendar and, while similar in many ways – located on the outskirts of a huge Latin conurbation – it differs insofar as Interlagos sits within the tropics and is much more susceptible to rain.

That bad weather led to Haas's first pole last year, set on the Friday night. Look out for a potential similar shock as the sprint weekend returns to the Autódromo José Carlos Pace. Expect samba drums, overtaking and the odd rain shower...

ROUND 22/23
USA Las Vegas, 16-18 November



RACE DATA	
Circuit name	Las Vegas
First GP	1981
F1 races held	2
Laps	50
Circuit length	3.80 miles
Race distance	190.064 miles
Direction	Anticlockwise
Winners from pole	0
Race start (UK time)	6am
LAST RACE HERE (1982)	
Winner	Michele Alboreto (Tyrrell)
Margin of victory	27.292s
Fastest lap	1m19.639s
	M Alboreto
Race leaders	3
Pitstops	5
Overtakes	N/A

OUR VERDICT

There was a time when races were often held on a Saturday. Indeed, until 1983, Silverstone always ran the British GP on Saturdays. We have to re-wind to Kyalami 1985 for the last time it occurred. That record will be broken when Las Vegas returns to the calendar on a brand new track blasting down the iconic Strip. The start time is 10pm Saturday, which equates to 6am Sunday in the UK. Will the championship be decided here, as it was at the Caesars Palace GP in 1981 and '82?

ROUND 23/23
Abu Dhabi Yas Marina, 24-26 November



OUR VERDICT

Formula 1's fourth visit to the Middle East in 2023 is to the now-traditional curtain-closer at Yas Marina. In the 14 races held in Abu Dhabi, 11 have been as the final race of the season. The guaranteed fine weather is also useful for the post-season test which takes place at the venue.

In 2021 slight modifications were made at both ends of the circuit, to make the track more enjoyable to drive and to help with overtaking opportunities. They have seemed to have had the desired effect although there was less to play for last season since the title race had already been decided.



RACE DATA	
Circuit name	Yas Marina Circuit
First GP	2009
F1 races held	14
Laps	58
Circuit length	3.281 miles
Race distance	190.253 miles
Direction	Anticlockwise
Winners from pole	9
Race start (UK time)	2pm
LAST RACE HERE (2022)	
Winner	Max Verstappen (Red Bull)
Margin of victory	8.771s
Fastest lap	1m28.391s
	Lando Norris
Race leaders	2
Pitstops	34
Overtakes	53

MAURICE HAMILTON'S ALTERNATIVE VIEW

A new documentary series charting the life and works of Bernie Ecclestone captures the enigmatic power of a key figure in Formula 1 history



DEALING WITH BERNIE ECCLESTONE was never easy. Whatever the circumstances, or your apparent strength as inquisitor, he would look you in the eye, pause for an unnerving second or two, and then offer his response in a soft but vaguely menacing tone.

I was reminded of that within the first minute of *'Lucky!'*, a docuseries in which Ecclestone tells his story. To the background of slow, subdued music, that familiar face fills the entire screen while looking straight at you. His pale features and mop of grey hair, set against a stark white background, present a spectral, spooky image that's so Bernie – and immediately unnerving. Studio lighting accentuates the lived-in features of a man in his nineties. This is Ecclestone, warts and all. Which is the precise intention of an eight-part series, the brainchild of Manish Pandey, writer of the award-winning film *'Senna'*.

A sub-title says: 'Formula 1. How It Happened.' Such a broad statement is not an exaggeration. Ecclestone's motorsport association stretches across eight decades of massive change – much instigated by the man himself. This is not the entire story, of course. *'Lucky!'* recounts it solely through the eyes of a former motor trader who raced in the 1950s, managed drivers (Stuart Lewis-Evans and Jochen Rindt, both of whom



Alain Prost comes out well in the docuseries as Ecclestone repeats his favourable view of the four-time world champion, but other drivers, including Nigel Mansell, aren't quite so fortunate

suffered fatal accidents), owned Brabham, marshalled the F1 teams, took on the FIA and changed the face of grand prix racing. Then he was ushered to the exit of a global business that had generated millions – including a countless number for himself. None of this had come easily. For Bernie, this was part of the attraction.

"If I've a chance of a gamble – I'm there," he says. Ecclestone's quick thinking was honed through an informal second-hand car market in London's Warren Street. Footage of the automotive horse trading shows dealers, straight from a rogues' gallery with their cigars, trilbies and double-breasted suits, exchanging wads of cash across bonnets of 'lovely clean motors' parked by the kerbside. This and other evocative video clips, unearthed by

archivist Richard Wiseman, are an essential part of a winning formula that also uses clever animation at key moments and does not resort to a single photograph.

Wiseman, respected for diligent research in motorsport documentaries, has excelled himself with this one. Even if you aren't particularly interested in what Ecclestone has to say (a view that's likely to change as the unusual format becomes intriguingly familiar), *'Lucky!'* is worthy of any enthusiast's time, if only to revel in the glorious footage, much of it previously unseen.

Ecclestone reflects on a relationship with Rindt that grew to the point where "we were like brothers". The poignancy is increased significantly in 1969 when Rindt crashes heavily on Barcelona's Montjuïc Park circuit and is shown recovering at home. When the Austrian asks his wife what her most cherished wish might be, Nina Rindt replies: "That you would stop racing." Jochen's cheeky grin not only intimates 'No chance!', but also ramps up the pathos because you know what's coming next.

Bernie's description of Rindt's fatal crash and its aftermath at Monza in 1970 may be delivered

'LUCKY!' IS WORTHY OF ANY ENTHUSIAST'S TIME, IF ONLY TO REVEL IN THE GLORIOUS FOOTAGE, MUCH OF IT PREVIOUSLY UNSEEN



Jochen Rindt's huge crash during the Spanish GP at Montjuïc Park in 1969 forms part of the narrative surrounding Ecclestone's relationship with the Austrian driver

in the same thoughtful, quiet manner as the rest of his storyline, but there can be absolutely no doubt about its profound effect on a man who usually thrives on displaying dispassion.

Apart from occasional brief clips of interviews with F1 people, Ecclestone is the sole provider of a narrative that is revealing, occasionally brutal, sometimes surprisingly moving, but always underscored by a sense of humour and pragmatism. He doesn't hold back on drivers,

saying Nigel Mansell "should get an Oscar for acting if he didn't win the championship", and Michael Schumacher's obsession with winning meant "sometimes he wasn't too careful in exactly how this happened". Ecclestone repeats his belief that Alain Prost was the best: better, even, than Sebastian Vettel, for whom Bernie clearly developed a warm relationship that transcended any other driver.

Affection isn't something that comes to

mind when he refers to a certain individual. Ecclestone's negotiations may have been shrewd, but each one was built on a relationship contingent on trust. In 1973, Marlboro's representative, Patrick Duffeler, agreed a sponsorship deal with Brabham – and then switched to McLaren at the last minute. "[It] often happens with people," muses Bernie. "They forget what they said – or they didn't want to remember. As far as I'm concerned, we shook hands on a deal. That's a deal, no matter what."

Duffeler would come to regret that several years later when he represented race organisers and faced the formidable combination of Ecclestone and Max Mosley as delegates for the F1 teams. Bernie probably wouldn't have mentioned the previous duplicity – but it's clear he hadn't forgotten it. "Duffeler screwed me," says Ecclestone. Not many of his adversaries could make that claim.

The teams were content to let Ecclestone do the negotiating and take his cut. With Bernie, the actual amount of money was no more than a marker; the result of a canny deal he had relished clinching (as witnessed by an extraordinary clip of the F1 boss stuffing bundles of uncounted banknotes into his briefcase and politely thanking the race organiser before legging it!).

It was business. Bernie's business. That much is clear when he says: "The teams all believed they owned the business; that without them there would be no business... [But] all they did was run their business on the back of the Formula 1 company. F1 teams are like actors in a film. It's a film that makes the actors, not the actors that make the film." Paradoxically, the sole actor comes close to making this film.

Mood music isn't confined to the opening shots. Pandy cleverly uses *Last Night of the Proms*, which fell just four days after 9/11 and two weeks before the 2001 USGP. An extract shows the American, Leonard Slatkin, lost in the moment as he conducts the haunting 'Adagio for Strings'. This forms the backdrop to Ecclestone's insistence on fulfilling Formula 1's contract (and ignoring the Schumacher brothers' petition to stay away) at such a crucial time for the USA and its recovery. It may have been a significant decision among many in a long and varied career, but this one is deeply moving. I never dreamed I'd say such a thing in connection with Bernie Ecclestone. That's the extraordinary power of *'Lucky!'*.



Ecclestone at Brands Hatch in 1951. His talents, it would be fair to say, lay elsewhere and he soon stopped racing, returning to motorsport in 1957 as manager to Stuart Lewis-Evans



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FINISHING STRAIGHT

RACE PREVIEW

F1 WORLD CHAMPIONSHIP ROUND 1

BAHRAIN GP

3-5 March 2023

Bahrain International Circuit

PICTURE: STEVEN TEE. ILLUSTRATION: ALAN ELDRIDGE



RACE DATA

Circuit name Bahrain International Circuit**First grand prix** 2004**Number of laps** 57**Circuit length** 3.362 miles**Race distance** 191.530 miles**Lap record** 1m31.447s

Pedro de la Rosa (2005)

F1 races held 18**Winners from pole** 8**Pirelli tyre compounds**

TBC

CAR PERFORMANCE

Downforce level Medium**Cooling requirement** High**Full throttle** 66%**Top speed** 203mph**Average speed** 137mph

TIMETABLE (UK TIME)

Friday 3 March**Practice 1** 11:30-12:30**Practice 2** 15:00-16:00**Saturday** 4 March**Practice 3** 11:30-12:30**Qualifying** 15:00-16:00**Sunday** 5 March**Race** 15.00**Live coverage** Sky Sports F1**Highlights** Channel 4

THE MAIN EVENT

Previously Formula 1's go-to season opener when Australia was unable to take up its preferred place in the calendar, Bahrain got the nod again this year thanks to its geographical proximity to race two – and the fact that it's holding the sole test the weekend before. While the budget cap makes combining the pre-season test with the first race commercially as well as logistically prudent, continent-hopping elsewhere on the calendar makes something of a nonsense of this principle.

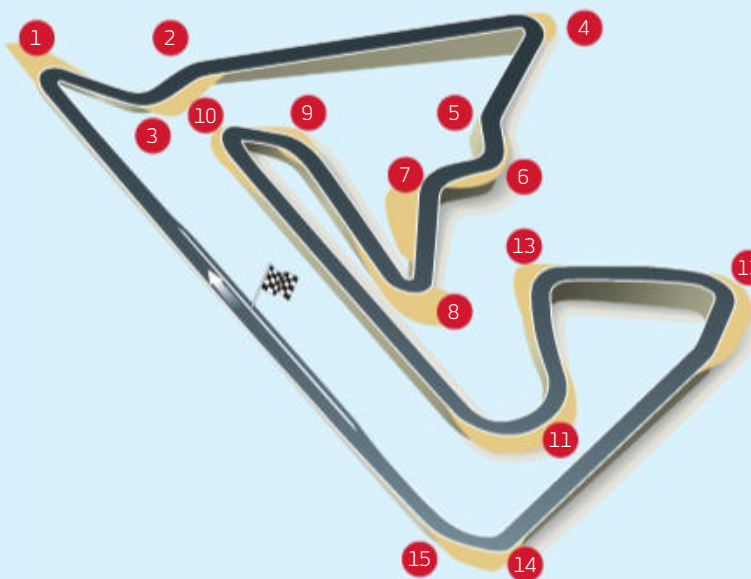
While many prefer the atmosphere of Melbourne, few would argue that track-wise Bahrain is a better place to kick off the racing year. The day-into-night format adds spectacle, the tyre-punishing layout makes for intriguing strategic variances, and the heat makes reliability a factor.

2022 RACE RECAP

Charles Leclerc won from pole position, leading all but two laps – during which Ferrari team-mate Carlos Sainz ran at the front. It was only a two-team race at the front since Lewis Hamilton, the fastest Mercedes driver in qualifying, was nearly seven tenths off pole pace and fell back in the race.

The Red Bulls of Max Verstappen and Sergio Pérez ran the Ferraris close in qualifying but, come the race, the RB18's bulk made it understeer-prone and Verstappen was able to pass Leclerc only briefly. Both cars then retired near the end with vapour locks in the fuel system, believed to be the result of the team removing baffles in the fuel tank to save weight.

KEY CORNER: TURN 10 A sharp corner where a good exit speed is essential for the straight which follows. But the curve before entry (Turn 9) makes judging the approach and braking difficult.



THE PAST FIVE WINNERS HERE...



2022

Charles
Leclerc
Ferrari

2021

Lewis
Hamilton
Mercedes

2020

Lewis
Hamilton
Mercedes

2019

Lewis
Hamilton
Mercedes

2018

Sebastian
Vettel
Ferrari

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FINISHING STRAIGHT

RACE PREVIEW

F1 WORLD CHAMPIONSHIP ROUND 2

SAUDI ARABIAN GP

17-19 March 2022
Jeddah Corniche Circuit

PICTURE: ZAK MAUGER. ILLUSTRATION: ALAN ELDRIIDGE



THE MAIN EVENT

Initially planned as a temporary facility while the Saudi government completes a huge infrastructure project in Qiddiya, which will ultimately host the country's GP, Jeddah's street circuit has got the gig until at least 2027. That means still more work as the Corniche layout is fast but safety concerns have marred the two events held thus far.

Poor sight lines have already been addressed but for 2023 circuit architect Tilke GmbH has focused on dissuading drivers from taking liberties with track limits. Bevelled kerbs have replaced steel ones at key corners while in other areas, so-called 'rumble lines' have been added, which will slow cars down if drivers stray onto them.

2022 RACE RECAP

The fireworks began off-track as Houthi rebels launched a missile strike at a nearby Aramco refinery, prompting the drivers to mull a race boycott. Once that prospect was headed off, Sergio Pérez led the initial laps from pole position until an unfortunately timed Safety Car – just after his pitstop – dropped him behind Charles Leclerc and Max Verstappen.

The race then became a game of DRS cat-and-mouse between the Ferrari and the Red Bull, setting up an exciting finale in which Verstappen prevailed by just half a second. The second Ferrari of Carlos Sainz held off Pérez for the final podium spot



KEY CORNER: TURN 27 A curved approach and a small element of positive camber add to the challenges of braking from high speed at this turn, which has been a flashpoint at both Saudi GPs so far.



RACE DATA

Circuit name Jeddah Corniche Circuit
First grand prix 2021
Number of laps 50
Circuit length 3.836 miles
Race distance 191.662 miles
Lap record 1m30.734s
Lewis Hamilton (2021)
F1 races held 2
Winners from pole 1
Pirelli tyre compounds
TBC

CAR PERFORMANCE

Downforce level Medium
Cooling requirement Medium
Full throttle 79%
Top speed 200mph
Average speed 156mph

TIMETABLE (UK TIME)

Friday 17 March
Practice 1 13:30-14:30
Practice 2 17:00-18:00
Saturday 18 March
Practice 3 13:30-14:50
Qualifying 17:00-18:00
Sunday 19 March
Race 17.00
Live coverage Sky Sports F1
Highlights Channel 4

THE PAST WINNERS HERE...



2022

Max Verstappen
Red Bull



2021

Lewis Hamilton
Mercedes



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further graphic evocation of speed. On the back of the watch, a transparent case reveals the workings of the Calibre Heuer 2 movement with its custom-designed oscillating mass, shaped to resemble a Porsche steering wheel. The leather strap also features neat orange stitching. This special-edition version is also water-resistant to 100m.

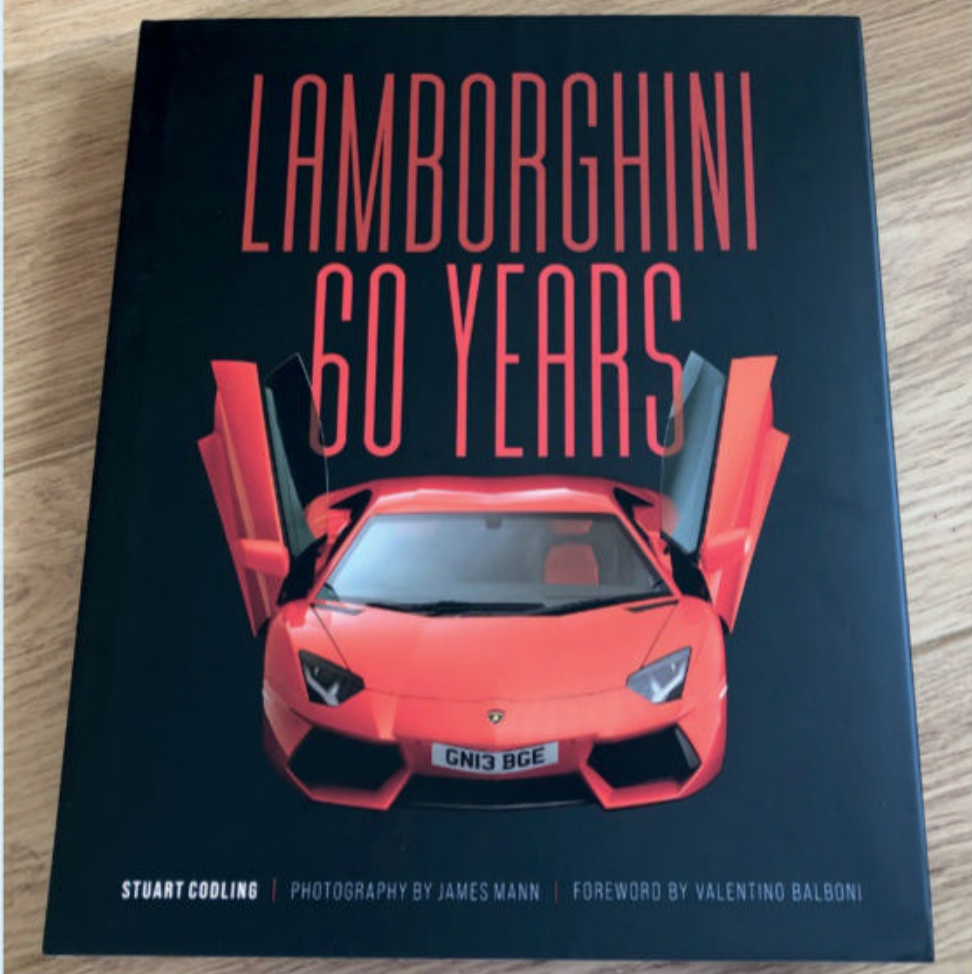


LAMBORGHINI 60 YEARS

Author Stuart Codling
Price £45
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60 years ago Ferruccio Lamborghini made the leap from tractor and air conditioning equipment manufacturer to sportscar builder – reputedly, though the story has been greatly embellished in the telling, after an argument with Enzo Ferrari over the flimsiness of the clutch in Ferruccio’s 250 GT. Lamborghini 60 Years covers the history of the marque from Ferruccio’s origins through various owners, and many iconic supercars,

to the present day. The author of the book should be familiar to GP Racing readers as the editor of this magazine; the majority of the sumptuous photography is the work of James Mann, the wizard behind the regular *Now That Was A Car* feature. It’s a revised, expanded and updated version of their *50 Years Of Lamborghini Supercars*, now featuring every car the marque has built.





FINISHING STRAIGHT

THE FINAL LAP

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FLAT CHAT

{ FULL THROTTLE MUSINGS WITH **MATT KEW** }

PICTURES



BEN SULAYEM STEPS OUT OF THE FIRING LINE

“Don’t let the door hit you on the way out.”

Whether it’s been scrawled on the internet by fans or communicated more privately by team bosses and the championship’s top brass, the reaction to FIA president Mohammed Ben Sulayem stepping back from day-to-day management of Formula 1 hasn’t been sentimental. It’s easy to see why.

The championship is yet put the ghosts of Abu Dhabi 2021 to rest as the FIA tos and fros between the optimum number of race directors, while developing a peculiar fixation about drivers wearing jewellery. Ben Sulayem risked souring relations with F1 by publicly disputing the valuation placed on it. And even if an extra team or two is desired by the outside world, he further put the paddock’s nose out of joint by taking to social media to express his dissatisfaction with their closed-shop attitude to Andretti’s bid to enter.

F1 CEO Stefano Domenicali is seldom seen

without a broad smile but rest assured he was enraged when the FIA jumped the championship in revealing the 2023 calendar first. Then there was the peculiar scene when Ben Sulayem took the microphone at the FIA Prize Giving Ceremony. He was defensive to a fault as he gave an impassioned speech about why the points system was just fine and that everyone else interpreted the scoring wrongly during the confusing end to the 2022



It’s been a rocky road for Ben Sulayem as far as F1 is concerned, so the decision to step away from direct involvement is no surprise

Japanese GP. At least that was consistent with predecessor Jean Todt’s passing the buck after Abu Dhabi ’21, when the FIA released an astonishing statement saying events behind the late Safety Car had “generated significant misunderstanding and reactions from F1 teams, drivers and fans.”

The F1 drivers’ WhatsApp group lit up with messages over the winter as they expressed their disapproval with the FIA tweaking the international sporting code to ban them from making comments on “political, religious or personal” issues without first obtaining permission.

The president’s brand of diplomacy has also raised eyebrows. This writer didn’t know what facial expression to pull last year when Ben Sulayem paused an informal presentation to publicly berate catering staff who were clinking crockery a little too loudly for his liking. Furthermore, the FIA was very recently compelled to totally reject resurfaced misogynistic comments from Ben Sulayem originally

published in 2001.

Taking the president’s place in dealing with F1 matters at the top of the FIA is the comparatively mild-mannered and apolitical Nikolas Tombazis. Having worked alongside Domenicali at Ferrari between 1997 and 2003 before a second stint which spanned 2006 to 2014, Tombazis should be able to soothe the fevered relationship between the championship and the governing body. That will surely prove critical should the controversies continue to land. While Ben Sulayem has loosened his grip on the reins of F1, he is still the president and will continue to play a pivotal role in all key decisions determining the series’ immediate future. And he will still have a captive audience eagerly waiting to report on every soundbite, even if they become more infrequent.

Of course, Ben Sulayem did state during his election campaign that he wouldn’t be hands-on with F1 for long. So, while it might have been interpreted as a bit of spin, the FIA’s press department was truthful when it issued a communiqué reiterating that this was always part of the plan. But trying to frame the president’s 14-month tenure so far as anything like an unqualified success is akin to George W Bush standing on the deck of the USS Abraham Lincoln in 2003 beneath a banner declaring ‘Mission Accomplished’.

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