F1 IS BACK! NEW RACES, NEW RULES, BUT NO FANS... RACING **CARLOS SAINZ** FROM MADRID TO MARANELL VIA F1'S SCHOOL **STARS WHO TRANSFORMED** OF HARD KNOCKS **FORMULA 1 HOW WILL F1 COPE WITH RACING IN A PANDEMIC?** RICCIARDO To McLaren: RENAULT Technologies REASONS **EDITION** £5.99 RIGHT CALL 2020

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F1 IS BACK! NEW RACES, NEW RULES, BUT NO FANS...

CONTENTS JULY 2020

SECTOR 1

IGNITION 6 Sainz has a tough job to do before Ferrari switch

PARADES 8 Classic French GP images

F1 INSIDER 18 Lewis Hamilton's push for diversity in Formula 1

F1 ANALYST Ben Edwards on team-mates and rivalry

UNDER

24 THE HOOD Pat Symonds on the return to racing

SECTOR 3

SUBSCRIPTIONS Three issues of GP Racing for £3

PREVIEWS A look ahead to races in Austria and Hungary

VIRTUAL F1 Luke Smith on sim racing's outcomes

PRODUCTS 96 Reviews of the best F1 gear

FLAT CHAT 98 Stuart Codling on a possible end to team cosiness







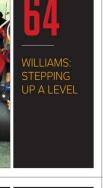




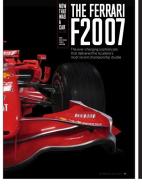














SECTOR 2

FORMULA 1 RETURNS... ... but not as we know it. What's new and what else can we expect

REWARDED WITH RED How Carlos Sainz overcame setbacks to secure Ferrari seat

5 REASONS TO BE CHEERFUL Why Daniel Ricciardo's 2021 McLaren switch could be smart

SURVIVAL TIME How teams plan on surviving when racing during a pandemic

56 FORMULA 1 @ 70 - THE 1960s Further analysis of the most influential people in F1 history

THE HISTORY OF WILLIAMS 64 Renault engines and dominance: part three of our seven-part series on Williams F1

NIGEL ROEBUCK'S HEROES Jacky Ickx, the all-rounder who raced with humility

NOW THAT WAS A CAR 74 Kimi Räikkönen's dream machine, the sophisticated Ferrari F2007

MOTORSPORT SHOWCASE British GP photographic delights from Motorsport Images

F1 RACING PRO

STRAIGHT TALK Mark Gallagher on the timing of Formula 1's budget cap and whether it has come too late

PROFILE Daniel Obajtek, CEO of PKN Orlen, Alfa Romeo's title sponsor

IGNITION

JULY 2020



Contributors



ALEX KALINAUCKAS Alex thinks Daniel Ricciardo's switch to McLaren for 2021 is a smart move and on p44 analyses five reasons

why this is the case

DAMIEN SMITH



Mansell, Prost and the fantastic Williams FW14B, are all included in part 3 of Damien's

superb history of Williams (p64)

LUKE SMITH



As on-track racing gets set to return, Luke talks about the positive effects that enforced sim racing could have on the F1 grid (p94)



NIGEL ROEBUCK

This month Nigel recounts the F1 career of lacky lckx, the man who, in 1970, didn't want to win the world championship (p72)



Sainz 'on notice' ahead of Ferrari switch

The 1996 world champion Damon Hill joined me recently on a 'Race of My Life' Autosport podcast, discussing the best race of his F1 career: the 1994 Japanese GP. A big part of what made it special to Damon was producing a performance under pressure that proved to himself, and to Williams, that he belonged at the highest level.

Hill continually wrestled with doubts from Frank Williams and Patrick Head that he was suited to being the team's leading driver after Ayrton Senna died. Damon now readily admits he didn't deliver consistently enough for Williams, so endured the ignominy of racing for the entirety of his titlewinning season knowing that the team had already replaced him.

Thus Hill knows something of what this month's cover star, Carlos Sainz, and the man Sainz will replace at Ferrari, Sebastian Vettel, will go through this season. Damon says the moment a team knows you are no longer part of its plans, attention shifts away from you and towards the future. This could make Daniel Ricciardo's final season at Renault uncomfortable also. You are effectively 'on notice', but still required to work rather than tend to your garden, as other personnel might.

For Sainz, the future looks rosy regardless. He's making an amicable split with McLaren and knows at the end of this strange season he will head off for the biggest break yet in his career. Ricciardo is likely making a step foward with McLaren, which will ease his Renault burden. For Vettel, the picture looks darker. The experience he is about to have with Ferrari in 2020 mirrors Hill's most closely. Who knows, perhaps that's a good omen?

But Vettel isn't so in control of his own destiny as he was when he chose to leave Red Bull and join the Scuderia in 2014, which will surely only add to the strain of trying to perform at his best.

We don't yet know whether Vettel will continue in F1 elsewhere in 2021, or take a sabbatical - as his former team-mate Mark Webber suggests he may. Hill says it's even harder to continue racing when you know you're going to stop altogether, as he had to in 1999 during his final season with Jordan.

Whatever Vettel does next, 2020 could well end up being mentally the toughest season of his career. How he, Ricciardo and Sainz handle their respective farewell tours will be just three strange subplots to this most unusual of upcoming seasons.

· I must correct some egregious errors in last month's issue: Alberto Ascari was not Italy's first world champion; that honour belongs to Giuseppe Farina. Nigel Mansell did not equal Ascari's feat of nine straight wins (excluding the Indy 500); that was Vettel in 2013 (p33). Honda's most recent win before Max Verstappen's Austria 2019 triumph was not 1992; it was Jenson Button's in Hungary in 2006 (p21). Please accept our sincere apologies.

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All aboard the Trulli train

While many aspects of
Magny-Cours were rustic,
to say the least, it was an
interesting place to photograph
and the unique pit complex,
with its tiered terraces of
hospitality boxes, was very
distinctive.

It made for quite a nice start shot, especially when full. Renault used to buy hundreds of grandstand tickets as well as hospitality.

Renault got what it paid for this weekend – Fernando Alonso was really getting into his stride, and put his Renault on pole. Jarno Trulli alongside in the Toyota would also be a key player – he usually qualified well then held everyone up in the 'Trulli train'...



Photographer
Rainer Schlegelmilch
Where Magny-Cours, France
When 3.01 pm, Sunday
3 July 2005

Details Canon EOS-1DS Mkll 28mm lens, 1/1600th @ F7.1







You'll get what you're hoppin' for

The last chicane at Magny-Cours opens onto a reasonably long straight, so grand prix drivers often rode the kerbs pretty aggressively here in search of laptime.

If you shot from inside the circuit with a long lens, looking across, then perhaps three or four times a session someone would push it too far and you'd get a striking image like this one. You just had to be patient.

Lewis Hamilton had taken his first grand prix win in Canada, then another at Indianapolis, but here in France he had car trouble in first practice and was trying to make up for lost time in the afternoon.



Photographer Rainer Schlegelmilch Where Magny-Cours, France

When 3.01 pm, Friday 29 June 2007

Details Canon EOS-1DS Mkll 800mm lens, 1/100th @ F9











Second time's a charm

I was struck by this David Phipps image because it's very 'of its time': the cars have been assembled in a semicircle in the paddock for some reason lost to the mists of time (perhaps a Goodyear marketing shot), and the drivers are just hanging around and chatting with one another. The 1973 French GP was Paul Ricard's second time hosting the race and you can recognise that very distinctive quality of light you get in this part of the world.

I also like it because it's got the beautiful JPS-liveried Lotus 72 in there, more than compensating for the aesthetic howler that was the disastrous Ferrari 312B3!



Principal photographer Steven Tee Where Paul Ricard, France When 11.00am, Saturday 30 June 1973

Details Nikon F2, 24mm lens, 1/250th @ F6, Kodak Ektachrome film

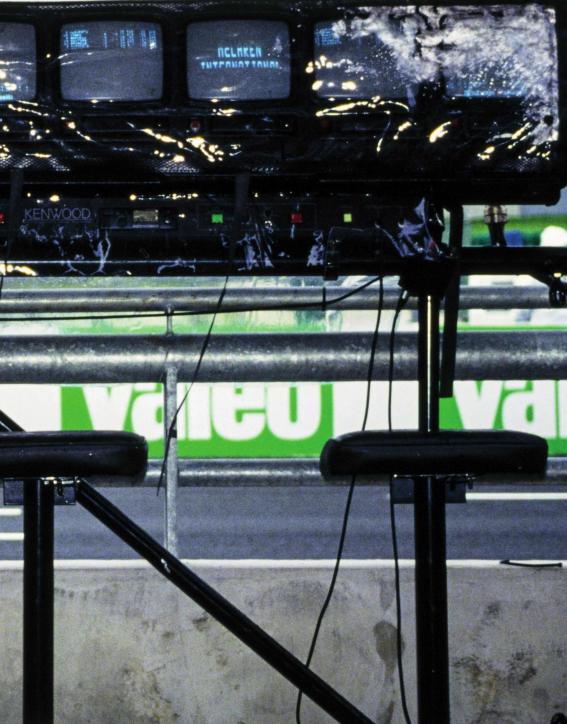












Senna contemplates a French washout

Ayrton Senna always had this intensity and focus about him, even when he was outside the car. He spent every moment watching, thinking, calculating how to make his car go quicker.

In 1992 the Williams-Renault was much faster than the McLaren-Honda and Senna was quietly furious. Here at Magny-Cours both McLarens were out early, Senna in a crash with Jean Alesi, Gerhard Berger with engine failure. There was a brief stoppage for rain. Senna returned to the empty McLaren 'prat perch' and quietly watched the rest of the race with his ear plugs in, scrutinising the Williams cars closely every time they went past.



Photographer Ercole Colombo Where Magny-Cours, France When 2.30pm, Sunday 5 July 1992

Details Nikon F4, 70mm lens, 1/250th @ F4, Kodak Ektachrome film



LEWIS HAMILTON TACKLES SOCIAL JUSTICE

F1 JOINS HAMILTON'S DIVERSITY PUSH

Lewis Hamilton has moved decisively to use the full weight of his star power to add momentum to the Black Lives Matter movement. Both the FIA and Formula 1 have responded with initiatives to promote diversity, and Hamilton himself has teamed up with the Royal Academy of Engineering to launch a 'Hamilton Commission' with the aim of making motorsport "as diverse as the complex and multicultural world we live in".

Using a self-penned article in the *Sunday Times* as a platform from which to announce the project, Hamilton added: "the time for platitudes and token gestures is over".

Against a wider tapestry of revulsion over the killing of George Floyd unleashing waves of social unrest and protests again inequality, Hamilton first spoke up via his social media channels to 'call out' the motorsport community over its silence on the matter – then became more strident and active. Other drivers and teams responded by expressing their support – but, this being social media, the feedback from the public occupied the full width of the spectrum, from accusations of tokenism to declamations that "sport and politics should not mix".

This, and the fact that so many bodies and individuals within the motor racing community felt unable or unwilling to express their position until given a very public nudge, indicates the scale of the cultural mountain to be climbed. Hamilton also addressed this in his *Sunday Times* article, saying, "I'm used to being one of very few people of colour on my teams and, more than that, I'm used to the idea that no one will speak up for me when I face racism, because no one personally feels or understands my experience."

The partnership with the RAE aims to encourage more young black people to study STEM (Science, Technology, Engineering and Maths) subjects in school, opening the way to greater representation in motorsport.

"Despite my success in the sport, the institutional barriers that have kept F1 highly exclusive persist," said Hamilton. "I hope that the Hamilton Commission enables real, tangible and measurable change. When I look back in 20 years, I want to see the sport that gave a shy, working-class black kid from Stevenage so much opportunity, become as diverse as the complex and multicultural world we live in. Winning championships is great, but I want to be remembered for my work creating a more equal society through education."

In June, the FIA launched a '#PurposeDriven' initiative at its inaugural Sport and Mobility eConference, attended





"WINNING CHAMPIONSHIPS IS GREAT, BUT I WANT TO BE REMEMBERED FOR MY WORK **CREATING A** MORE EQUAL **SOCIETY THROUGH EDUCATION**" LEWIS HAMILTON

virtually by 243 member clubs. FIA president Jean Todt urged members to sign up to a pledge which included commitments to "commit to fight systemic racism and prejudice" and to "proactively encourage, attract and employ a wider and more diverse range of participants in motorsport and its broader ecosystems".

F1 announced its own initiative in support of the wider #PurposeDriven movement, a campaign that seeks to emphasise the unifying effect of the global fight against COVID-19, and to combat inequality.

"The whole world has come together as one collective community in the fight against COVID-19," F1 said in a statement. "And it has brought out the best in human nature. In recent weeks people from all walks of life have united in their condemnation of racism and inequality, something that has no place in our modern world. As a member of the global FIA motor sport family, we acknowledge its Fundamental Principles Statutes, including the fight against any form of discrimination.

"It will not be a one week or one-year theme that disappears as issues disappear from headlines, it will underpin the F1 strategy to make a tangible difference in our sport and society."

F1's '#WeRaceAsOne' campaign features a rainbow logo incorporating the colours of the F1 teams - who will coordinate with F1 on a range of merchandise to raise funds for charity. The slogan "Racism Must End" will feature on trackside signage during the season-opening Austrian GP.

"Our first race in Austria is a big moment for our sport after nearly four months of no racing," said F1 CEO Chase Carey. "While it is an important moment for the F1 community it is also a time to recognise the issues that are bigger than any one sport or country."

WILLIAMS FOR SALE; McLAREN

Williams and McLaren - the second and third most successful Formula 1 teams of all time in terms of championships won - face a fight for survival as the economic effects of the COVID-19 pandemic exacerbate financial vulnerabilities which have been troubling both organisations for some time. Both have struggled for competitiveness in recent seasons, leading to a reduction in their share of F1's revenues, which are determined by constructors' championship positions.

Although McLaren has undergone a competitive renaissance, its wider business has encountered cashflow problems as a result of the pandemic. Its ability to raise new funds has been constrained by a previous bond issue



in 2017, when the other shareholders bought former CEO Ron Dennis's 25% stake for a sum reported to be £275m.

Williams declared a £13m loss in its latest financial reports and announced that a formal sale process for the business had begun - an unprecedented move for a family owned team which has robustly rebuffed previous proposed acquisitions. Although 20% of Williams Grand Prix Holdings plc was listed on the Frankfurt Stock Exchange in 2011, and other minority shareholders have come and gone, Sir Frank Williams retains a controlling 52.3% share. Williams has already sold its Advanced Engineering business and it terminated its relationship with title sponsor Rokit in May, following that up with a statement saying the team had fulfilled all its contractual obligations - which can be read as a suggestion that its erstwhile sponsor had not.

But who is in the frame to invest now? Chanoch Nissany, the Israeli businessman who once drove a Minardi during practice for the Hungarian GP, is an outside possibility as his son Roy, an F2 racer, is a Williams development driver. Dmitry Mazepin, the Russian billionaire whose son Nikita also races in F2, is another name touted as a possible buyer. He tried to acquire Racing Point in 2018 when its previous owners hit financial trouble.

Most likely, though, is Michael Latifi, whose son Nicholas will race for Williams this season. Latifi owns a 10% share of McLaren, and in April he reportedly loaned Williams some of the £28m the team obtained as part of a refinancing deal, some of which is leveraged on the group's heritage assets – including its historic car collection.

McLaren is also considering a partial sale and is heading to the courts as it tries to raise £280m to shore up its finances. It deems the court action necessary because its plans involve the possible sale and lease back of its properties, and the sale of some or all of its heritage car



The classic car collections of both Williams (above) and McLaren (below) are being leveraged by the teams to raise funds



collection. These plans have been complicated by what McLaren described in a statement as "an ad hoc group of creditors (including hedge funds and distressed asset investors)" which has challenged its right to proceed. This group has an interest in the previous bond issue and is objecting to the release of the security. McLaren claims the group is stalling the process in order to force the company to accept an alternative financing proposal. It has now successfully applied for its legal action to be fast-tracked through the UK courts, starting on 2 July.

McLaren says that while it "has sufficient liquidity to meet its obligations as and when they fall due in the very short term, further liquidity is required to be made available by no later than 17 July 2020". Judge Anthony Mann, who agreed to expedite the hearing, described the timescale as "ambitious".

KEY MERCEDES F1 ENGINE MAN FAVES

Dominant for most of Formula 1's hybrid powertrain era, Mercedes faces a new challenge after a key architect of its engine programme signalled his intention to leave. Mercedes Benz High Performance



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ON SALE



A FIGHT FOR DIVERSITY

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- > Now That Was A Car: Vanwall VW9
- > Austrian, Styrian and Hungarian GP reports

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Powertrains managing director Andy Cowell has been with the company for 16 years following previous stints at BMW and Cosworth in Formula 1.

Cowell has vacated his role and will depart the company next year after a period of acting as a consultant, which will include managing the transition to his successors, a leadership team which will consist of existing staff: Hywel Thomas (managing director), Adam Allsopp (powertrain director), Richard Stevens (operations director) and Ronald Ballhaus (finance and IT director). The nature of the new structure is in itself an acknowledgment of how many hats Cowell wore, from managing the business to playing an active role in engineering oversight. He informed Mercedes of his intentions in January and said in a statement, "I have decided that now is the right time

to move on from my role and seek a new engineering business challenge."

What that challenge is remains to be seen, although some pundits have speculated that his ultimate destination may be Aston Martin, which is returning to F1 next season as a manufacturer via a rebranding of the Racing Point team, with which it has a major shareholder - Lawrence Stroll - in common. Mercedes

F1 team principal Toto Wolff is a minor shareholder.

Aston Martin will continue to run Mercedes hybrid powertrains in F1 next season. Given the road car company's imperilled financial state - which opened the door to Stroll's acquisition in the first place - it's unlikely the funds or the will exists for a works engine programme in Formula 1 when there is a balance sheet in urgent need of shoring up.

"NOW IS THE **RIGHT TIME TO** MOVE ON FROM MY **ROLE AND SEEK A NEW ENGINEERING BUSINESS CHALLENGE**" **ANDY COWELL**



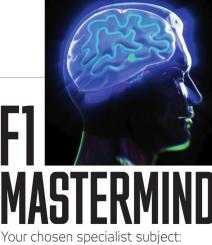
Cowell has already vacated his managing director role but is staying on as a consultant this year

As this edition of GP Racing went to press,

Paralympian and former F1 driver Alex Zanardi remained in a medically induced coma after suffering severe head injuries during a hand-cycling race in Italy. All at GPRacing send their best wishes to Alex and his family.



Support for Zanardi is coming from both the motorsport and cycling fraternities

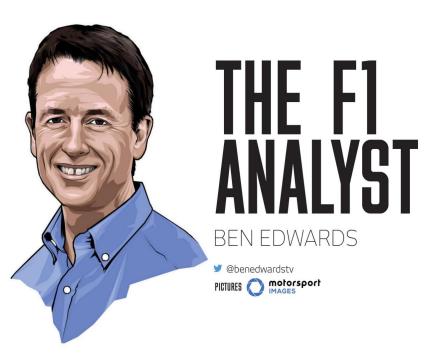


the world's greatest motorsport

- 01 Jenson Button won the title in 2009, but finished in the top three in which two other seasons?
- Q2 Which constructor achieved its sole Formula 1 victory in the 1976 Austrian GP?
- Q3 Zeltweg only ever held one Austrian GP. What year was it and who won the race?
- Q4 True or false: Nigel Mansell failed to qualify twice in his career, at the 1980 Italian and 1981 British Grands Prix, both times driving for Lotus?
- Q5 Olivier Panis, Jacques Lafitte and which two other drivers won F1 races driving a Ligier?
- 06 True or false: the Spanish GP has never been held in August prior to this season?
- **Q7** At which circuit are Mario Andretti and Lewis Hamilton the only drivers to have started an F1 race from pole position?
- Q8 How many times has Mercedes won the British Grand Prix: six, seven or eight?
- 09 Which was Rubens Barrichello's last season in Formula 1?
- Q10 Which current driver led a world championship GP for the first time in Austria in 2014?







TEAM-MATE

RIVALRY IS

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at the end of this seas

Combat between team-mates is one of the fascinations of Formula 1. The balance of cooperation and single-mindedness shifts constantly and there's no simple equation for delivering the best results. Sometimes a team surges ahead thanks to intense rivalry between two top campaigners, on other occasions the same outfit may benefit from a more holistic approach.

Ferrari has won five times in Austria, the venue of the first two races of this delayed season; team cooperation helped Jacky Ickx take the first win at what is now the Red Bull Ring in 1970 thanks to his rookie team-mate Clay Regazzoni waving him through and providing a resilient doorstop to the opposition. In 2002 Rubens Barrichello waited until the end of the last lap before handing victory to Ferrari's superstar Michael Schumacher, a team orders fiasco that had ramifications down the line.

The Italian squad often soars when there's a clear number one driver backed up by a solid points scorer. At the start of 2019 the strategy felt similar; the management adopted a relatively

inexperienced but talented driver in Charles Leclerc and made it clear that Sebastian Vettel would get preference at key moments. But Leclerc had other plans and outqualified Vettel more often than not, outscored him by 24 points and beat him 2-1 in terms of race wins.

The news of Vettel's departure from Ferrari at the end of this season has shifted the balance between the two even further. Charles integrated closely with the team from the outset and has created hope for the future. Vettel never quite achieved that bonding process, something identified by former team mate Mark Webber: "Seb's motivation has been tested in a very culturally challenging environment and that's a movie we've seen many times with Ferrari drivers," he commented when we caught up in preparation for our Channel 4 work this year. "The small nuances of how the Italians go about their motorsport is quite draining for him with his robotic approach; unquestionably he could get the spark back in a different environment".

While Vettel may not have melded with Ferrari as he did with Red Bull, he goes into this shortened campaign with a mindset effectively freed from the duties of being team leader while Leclerc will unofficially carry that label. The hunter and the hunted from early 2019 have exchanged roles and that could set the path for some fiery confrontations this year.

Those contract announcements in May could affect other relationships. Renault's situation is

particularly intriguing; Esteban Ocon goes into his first season with the team after a year's sabbatical that has extended to 19 months. His target will surely be to match and beat Daniel Ricciardo before Dan moves to McLaren. If Ocon succeeds, it will remove pressure from team boss Cyril Abiteboul to sign up a big name like Vettel or Fernando Alonso, but if Ricciardo retains the upper hand in these early races it becomes more complicated.

A cooperative environment seems unlikely.

McLaren has had its own dramas in Austria between team-mates; in 1999 David Coulthard piled into Mika Häkkinen at the first corner which led to an embarrassing debrief and the gift of one of those five Austria victories to Ferrari. Thankfully his relationship with Mika survived and they're happy to bump into each other these days.

The current McLaren line-up is a genuinely friendly combination and least likely to be affected by the driver shake-up. Lando Norris has a year under his belt and a contract that extends for a couple of seasons while Carlos Sainz has extra confidence generated by his new deal with Ferrari. If the two of them can focus on getting the best for the team as they did last year then McLaren has a healthy chance of

retaining fourth place in what promises to be an even more fraught contest for 'Best of the Rest' in the constructors' championship.

Mercedes has experienced a smooth working environment over the past few years but it was a different story when Nico Rosberg was fighting for success. Lewis Hamilton and Nico clashed on the final lap at the Red Bull Ring in 2016, although the team still emerged with victory. Since Valtteri Bottas was signed the atmosphere has been competitive yet productive, important when the team's margin of superiority has been chipped away at. That knowledge no doubt lingers in Toto Wolff's mind as he considers changes for the future.

As for the 'home' team at the initial races, Red Bull has a driver reaching peak form in Max Verstappen, sharing the garage with the inexperienced yet talented Alexander Albon. This is a pairing that could gel effectively, and off the back of two wins in two years in Austria the imminent back-to-back races could well lead to four in a row if the cards fall into place.

Each team develops an internal psyche which shifts subtly in a season, affected by results, reliability, ongoing prospects and individual performances. Sometimes a team boss can have an influence but ultimately it emerges through the character combinations involved. Rarely is there a clear answer as to which balance works best. Intense, calm cooperation or spiky inner conflict? It looks like we'll be watching examples across the board in the coming months.





The performance of Esteban Ocon against the departing Daniel Ricciardo will be crucial for Renault to decide if it needs a high-profile replacement for the Aussie

Ferrari and Austria have history in terms of team-mate cooperation. Rubens Barrichello moved over for Michael Schumacher in 2002 (above) and Clay Regazzoni led at the start in 1970 (bottom, right), yet deferred to Jacky Ickx. But the current dynamic at Ferrari between Leclerc and Vettel (right) was different, even before it was announced Vettel was leaving at the end of the 2020 season





The line-up of Max Verstappen and Alex Albon will look to continue Red Bull's good run of form at its 'home' circuit







UNDER THE HOOD PAT SYMONDS

agencies and border control. The list is enormous, as is the task.

The return to motor sport guidelines issued by the FIA run to over 70 pages and cover the process of putting on a race event while providing a fair, fun and entertaining competition. This has been backed up by further work done by the F1 organisation and significant and valuable input from the teams.

It naturally covers the core transmission mitigation measures such as social distancing, hand hygiene, health checks and testing, as well as contact tracing, but within the context of a mass gathering such as a race event. While the concept of racing 'behind closed doors' removes the concern over spectator safety, the number of people involved in

making a race happen is still considerable.

For the first events of our delayed season these numbers are severely limited, with each team allowed to bring only 80 staff and every other organisation being asked to look at how to minimise numbers.

A good example of this exists within the F1 organisation. As part of the drive to a low carbon future, a programme had been initiated to produce more of the world television feed remotely. This can reduce the number of staff attending an event by around 40% but has the added benefit of reducing the freight weight that is flown to each race outside Europe by around 40% as well.

While this was done for sustainability reasons initially, it has additional benefits now because the reduction in passenger aircraft flying, which also carry a significant

NEW MEASURES FOR RETURN TO RACING

PICTURES

motorsport

The FIA has always put safety at the forefront of everything it does in motorsport. This mantra is embodied in the International Sporting Code that all competitors in every category of racing must adhere to. Prior to the COVID-19 outbreak it was always understood that this safety referred to the hazards of racing, but the current pandemic has brought a new meaning to the provisions of the code and required a completely new approach to how we return to racing.

In response to the events of this year, the FIA and F1 have taken extraordinary measures to protect motorsport, culminating in a raft of new regulations for 2020 and beyond which were passed recently by the World Motorsport Council. While these regulations protected the financial viability of the championships and the teams, there was still a considerable body of work to do in the practicalities of keeping all stakeholders safe as we planned the return to racing.

The World Health Organisation has provided a framework and a suite of measures to mitigate the

effects of COVID-19, but the understanding of the transmission of the virus is a process of learning and adapting the measures in response to new data. The FIA medical department was able to draw on this advice to provide comprehensive guidelines for all stakeholders in order to mitigate risk.

When one considers the breadth of the participants in a motorsport event, the scale of the problem becomes apparent. It is not just the teams that need to be considered but also the FIA officials, the commercial rights holder's staff, the promoters and their staff at the venue, the media, officials, organisers, catering staff, emergency services, and even bodies such as governmental



PICTURES: MARK SUTTON; ANDY HONE; SHUTTERSTOCK. ILLUSTRATION: BENJAMIN WACHENJE



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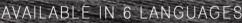
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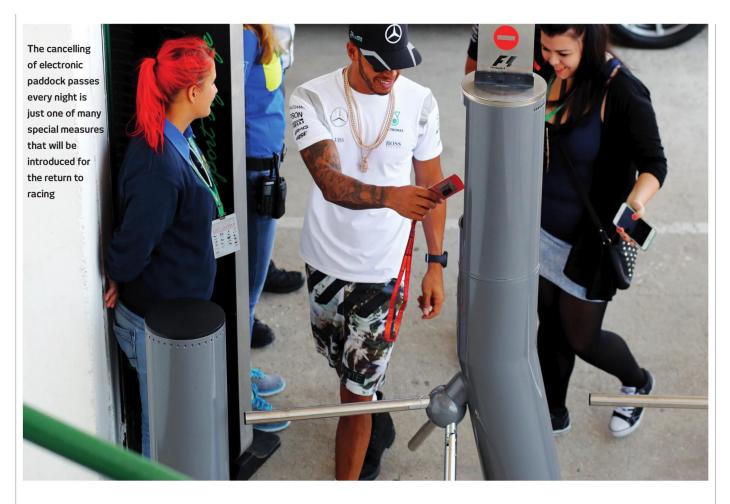












amount of freight ordinarily, has caused a severe shortage in worldwide airfreight capacity. This in turn has driven costs up enormously. The cost of chartering a 747 freighter has risen from around USD \$200,000 to over \$1m.

In order to implement the many special measures required for

the return to racing, each event will have a command and control centre. This will act as the hub for ensuring that all procedures are carried out correctly and that, in the event of an incident, adequate corrective and mitigation procedures are implemented. For example, the electronic passes which grant access to the paddock will be automatically cancelled every evening and will only be re-activated on receipt of a declaration from each team that all their members have given a negative test within the last 48 hours and are not exhibiting symptoms of any sort.

The testing itself will take place both at the teams' premises before leaving for an event and also at the event, with a bespoke service giving a turnaround of results within hours. Any positive test will result in the removal of the infected person to an isolation unit where their condition can be assessed and a self-isolation procedure can start. In this way, a bubble or cluster

66 WHAT IS SEEN WILL BE ONLY THE TIP OF THE ICEBERG OF EFFORT THAT HAS GONE ON BEHIND THE SCENES TO BRING FI BACK 35

strategy can be maintained. A cluster strategy is a mitigation procedure which accepts that within certain groups it is not practical to follow all core virus transmission mitigation measures. A pitstop crew needs to be in proximity to do its job, as do the mechanics in the garage or the engineers and drivers in the debrief rooms.

Testing for COVID-19 will be a huge part of F1's return to the track, and allow a 'cluster' or 'bubble' strategy to be maintained



By keeping each team in a cluster and not sharing any facilities, such as toilets, between clusters, any infection can be isolated. It will also ensure no contact with the local community. In principle it is the same as the guidance and regulations issued by many governments which reference 'members of the same household'. That family unit can be thought of as a mini-cluster, which can work, live and travel together but should avoid interactions with other clusters.

We can expect to see several changes when we return to racing, be it crew members wearing PPE or new grid procedures, but what is seen will be only the tip of the iceberg of effort that has gone on behind the scenes to bring F1 back. The situation continues to evolve and so will the procedures, and even the calendar, but there is no reason to believe that even if the championship is shortened it will be any less enthralling – in fact there are many reasons to believe it may be more exciting, which is great news for sports fans around the world.

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Essential guide to the business of F1



STRAIGHT TALK

MARK GALLAGHER

@_markgallagher

a slight drop on 2018 but still strong. A glance at profitability shows Racing lost £67m and Applied £21m in 2019. To balance that, the F1 team's surge to fourth place in the constructors' championship promised increased revenue from prize money this year and a further uplift in sponsorship, always a strong point for CEO Zak Brown.

Then came COVID-19, working its way from one key automotive market to another. This translated into McLaren selling only 307 cars in the first three months of this year, a year-on-year decline of almost 70%, and this was before the full effects of the extensive worldwide lockdowns seen in April and May...

To help steady the ship, McLaren's existing shareholders ploughed in an additional £300m in March, but even that has not been enough. Costs have been slashed as the company has sought additional funding, most notably by aiming to borrow against its Norman Foster-designed Woking headquarters and historic car collection.

Even this has not been entirely straightforward. Back in 2017, McLaren raised £525m through a bond sale, £275m of which was destined to pay off Ron Dennis in what might be described as a less

than suboptimal outcome for its former boss. Bond holders have alleged the car collection was already used as collateral for that transaction, something McLaren denies.

For McLaren, COVID-19 has been a perfect storm, but with drastic action taken by the management team, headed by recently appointed Executive Chairman Paul Walsh, recovery will occur, although the time scale is uncertain. The COVID-19 pandemic cannot end quickly enough, but if it is then followed by a prolonged recession the market for expensive supercars is likely to remain weak.

An hour's drive away, at Williams, COVID-19 is the latest unwelcome visitor, coming hot on the heels of poor results, shrinking prize money and shaky sponsors – specifically sponsors that fail to pay, leading to ROKiT being given the rocket.

The situation had already prompted last December's sale of a majority in Williams Advanced Engineering to a private equity business. That already felt a little like the beginning of selling off the family silver, even before CEO Mike O'Driscoll announced recently that serious consideration is being given to selling the team outright.

COVID-19 is the last straw but, thanks to the timing of the budget cap, this is perhaps the very best moment for Williams to attract new investors and transition into a new era. For Claire, Frank and the staff it can only be hoped that this leads to an overdue and much needed reversal of fortune.

WILL BUDGET CAP BE A SAVIOUR, OR IS IT TOO LATE?

After decades of wondering what it would take to level the playing field in Formula 1, we now have the answer – a change of commercial leadership, two years of agonising negotiations and a vicious global pandemic.

Like some unexpected superhero, the solution has turned up in the nick of time, although instead of wearing its underpants on the outside it comes in the form of a USD\$145m budget cap. It's a nail-biting moment for McLaren and Williams, the former group having lost £133m in the first quarter of this year, the latter £13m for the whole of 2019.

Job losses are in focus, McLaren pre-empting publication of its first quarter results with news that a restructuring of the group would lead to the loss of 1200 jobs across its three business units: Automotive, Racing and Applied (technologies).

The company has enjoyed great success with Automotive, which last year shifted 4662 cars,

McLaren has considered borrowing against its HQ to secure more funds to help it through these difficult times





THIS MONTH

Daniel Obajtek

Orlen Group

Polski Koncern Naftowy Orlen is Polish-based but with a growing international footprint. The state-owned energy corporation, which supported Robert Kubica's return to Formula 1 and is now title sponsor of the Alfa Romeo team, began expanding internationally in the early 2000s and now operates fuel stations all over Europe. And wherever you go in the world, you may be driving on asphalt it supplied...

2018-present

President of the Management Board and CEO, PKN Orlen

2017

CEO Energa SA 2016

Supervisory Board Chairman. Lotos-Biopaliwa; Supervisory Board member, Dalmor SA

2015-17

President, Polish Agriculture Restructuring and Modernization Agency

2006-2015

Mayor, Gmina Pcim

GP Racing: How does Formula 1 fit into your marketing strategy?

Daniel Obajtek: PKN Orlen is already a global brand. You'll find our asphalt as far afield as Mauritius or the Samoan Islands. Our oils are severely tested during the Dakar Rally and we have a chain of over 2,800 fuel stations in Germany, Czech Republic, Poland, Lithuania and Slovakia. Nevertheless, we aspire to enhance our brand recognition even more, because this translates into customer interest. For that purpose, we are implementing a co-branding process at our foreign gas stations.

We anticipate that ultimately Orlen will be the exclusive brand in all facilities. To strengthen awareness, we also invest in several sporting disciplines. In 2019 alone the advertising equivalent of our brand's exposure on TV exceeded \$44million - after all, Formula 1 races are watched by two billion viewers around the world.

GPR: What other value does a corporation such as Orlen get from sports sponsorship?

DO: According to a study by the market research company ARC, PKN Orlen is consistently perceived as the most proactive sponsor of sports events in Poland, 13% ahead of Adidas. Our brand enjoys almost 100% recognition on the domestic market. However, as a company whose products are present in over 116 countries, on five continents, with 60% of revenues generated abroad, we must also think of the global reach of the brand. Locally this translates directly into an increase in retail sales.

Over the last year the sale of fuels in the entire Orlen Group increased by 4% while the sale of non-fuel items also grew. One in five Polish drivers say our co-operation with Robert Kubica makes them use our products and services more often. Sports sponsorship worldwide provides an invaluable boost to our business activities, including oil and asphalt sales. Exposure of our logo during races makes it easier to establish relationships with global trade partners, and sometimes it's crucial for such relationships to materialise.



GPR: Other fuel companies present in Formula 1 are involved in technological development as well as using it as a marketing vehicle. Would you consider following this route?

DO: As a technology partner, we already have extensive experience in motorsport. For years we've been cooperating with cross-country drivers who test our greases and oils in the extreme conditions that prevail at the Dakar Rally, among others. Perhaps we already have sufficient know-how to become a tech partner in F1 as well. We do not exclude that. After all, three years ago nobody would have imagined that a Polish company could become a partner of an F1 team. Of course, we're still at the beginning. F1 is changing, its technical regulations and financial rules are changing too. We've prepared various scenarios for the future.

GPR: Many other energy companies are looking to diversify away from hydrocarbons in the future. What's your strategy for adapting to change in the coming years?

DO: We are fully aware of the current trends and are already investing in the development of petrochemicals and low-emission power generation. We've just completed the acquisition of Energa Group, one of the Polish power companies with the biggest share of renewable sources used for power generation. This will diversify our production and increase our potential in the development of alternative fuels.

GPR: What have been the main challenges to your business during the COVID-19 pandemic?

DO: As a global player on the fuel market, we feel responsible for the Polish economy. Of course, the continuity of fuel supplies and safety for our employees are of paramount importance. We've demonstrated 100% efficiency in those two areas. The implementation of appropriate procedures effectively eliminated potential risks, but as a socially responsible company we wanted to do more than just secure our business. That's why we decided to support the health care professionals and uniformed services and all Poles in the fight against the pandemic.



Formula 1 will finally get under way with back-to-back races in Austria this weekend and next, but the championship has been forced to make tough choices to ensure it can function responsibly while COVID-19 continues to ravage the planet. Ahead of the first race, we attempt to explain the key aspects of F1 2020 2.0

WORDS BEN ANDERSON PICTURES 🧷





Since F1 went into lockdown, championship CEO Chase Carey

has consistently stated his ambition to hold between 15 and 18 grands prix in 2020, though the fluid nature of a global pandemic means it may not be possible to hit that number.

In early June, Formula 1 released dates for the first eight races: an

Austrian double-header at the Red Bull Ring, a race in Hungary, then another double-header at Silverstone, the Spanish Grand Prix at Barcelona, followed by races in Belgium and Italy.

This constitutes the initial European leg of a truncated calendar. To qualify as a proper world championship F1 would ordinarily need to visit at least two more continents, meaning the season couldn't end with September's race at Monza

lest it be scrubbed from official records. But F1's managing director of motorsports Ross Brawn suggests this requirement will be relaxed given the extraordinary circumstances, thus these eight races would constitute a minimum viable 'world' championship.

The situation remains understandably fluid. The saga of the British Grand Prix has been particularly vexatious for fans hoping to see a return to racing: the originally mooted July dates were pushed back to August to give F1 the maximum chance to either comply with, or be exempted from, the UK's recently imposed 14-day mandatory quarantine on overseas travellers.

Where F1 races after Monza remains a work in progress at the time of writing. Some events initially postponed as coronavirus took hold – such as Bahrain, China and Vietnam – still hope to host events later in the year.

Monaco was the first after Australia to officially cancel for 2020, followed by France, and Azerbaijan, Japan and Singapore have recently joined that club. $\frac{1}{2}$ Canada, although not yet cancelled, faces pressure due to the Canadian winter. The latest a Canadian race has been held, in 1978, was 8 October.

Organisers of the revived Dutch GP at Zandvoort have said they won't hold a race while no fans are permitted, given that would fatally undermine the basis of an event bidding to ride the orange wave created by Max Verstappen's presence on the grid. Hockenheim, Imola, Mugello and Portimao are touted as venues that could step in at short notice if required.

The Mexican GP reiterated a commitment to hosting F1 on their original date of 1 November, while reports suggest F1 will look to hold another

RACES W

THERE BE?





Mercedes was the first team to return to the track since testing, when it ran a 2018 car at Silverstone

Formula 1 has issued a dossier of guidelines, developed in conjunction with the FIA and external experts, to ensure travelling personnel remain safe from the risks of coronavirus exposure when the 2020 season begins. Carey insists teams pulling out because of ill personnel, or even a driver getting infected, will not stop races going ahead

double-header in Russia in the autumn. October's US GP remains in doubt unless spectators can be admitted, given much of that race's funding depends on the event bringing tourists to the region. Brazil is one of the nations worst affected by COVID-19 – São Paulo especially – but the promoter still hopes to hold November's Brazilian GP in front of fans, before F1 plans to finish with a Middle East triple header in Bahrain and Abu Dhabi. All of which is COVID-19 dependent of course.

"We have other options if some things don't come together," explains Carey. "We do expect there are races on the calendar which will probably still not occur. We're in uncharted waters. We certainly continue to have a lack of visibility beyond a fairly short timeframe. We're engaged with all our promoters and we're in active discussion with them – all of them are struggling to have the same visibility."

WHAT ARE



"An individual having been found with a positive infection will not lead to a cancellation of a race," says Carey. "We encourage teams to have procedures in place so if an individual has to be put in quarantine, we have the ability to quarantine them at a hotel and to replace that individual.

as happened in Australia in March.

"Some things we'd have to talk and work through. The array of 'what ifs' are too wide to play out every one of them, but a team not being able to race wouldn't cancel the race. If a driver has an infection, [teams have] reserve drivers available. We wouldn't be going forward if we were not highly confident we have necessary procedures and expertise and capabilities to provide a safe environment and manage whatever issues arrive."

As explained in Pat Symonds' column (see page 24), F1 will operate a 'Command and Control Centre' to manage the situation live in the paddock and deal with any specific coronavirus problems that crop up.

"There is a rigorous set of guidelines, probably at this point it's 80-90 pages, which will include everything from how you travel there, what are the processes for being in hotels, to what are the processes that exist at the track, for meals, going to the restroom, downtime between tracks and testing processes," Carey adds.

"We will test before you go there, then there will be testing every two days. There are processes if we find an infection. We recognise there is the possibility so we're prepared to appropriately deal with it, if we find a positive infection. We're working on putting in place tracking capabilities; we have two different tracking options.

"In many ways, it will be like living in a bubble from when you start travelling on charter planes. There will be controlled transportation to hotels. And probably within it, sub-bubbles of people who operate different functions and it is set up to manage the processes, make sure we have the right protective equipment and social distancing.

"We recognise our sport is one which at times [means] we can't have two metres between every individual on a team. When a car pulls into a pit and has to change four tyres, there won't be two metres between every individual. We need to make sure we have procedures to manage all those risks."



For now, no. Plans to introduce experimental reversed-grid races for parts two of the double-headers at the Red Bull Ring and Silverstone were vetoed by Mercedes. Team boss Toto Wolff said this was done on the grounds his team considers it an unnecessary "gimmick" that distracts from the meritocratic essence of F1, though Brawn says the main reason is the potential risk it poses

to Mercedes' quest for a seventh championship double.

"It seems to be a common pattern in Formula 1 that we're digging out old ideas that have been analysed formally and rejected," Wolff explains. "And then somebody thinks it's great and it's back on the agenda. I believe Formula 1 is a meritocracy. Best man in best machine wins. We don't need a gimmick to turn the field around to create more exciting racing."

Wolff also argues reversed grids would create strategic anomalies, whereby cars could be retired deliberately in one race to gain pole position for the next, unbalancing the championship in favour of the second and third fastest teams, and creating extra risks for top drivers having to work their way through the field.

"This is not the time to experiment with things that interestingly didn't even have the support of Formula 1's fan community," Wolff adds. "In a survey, only 15% expressed an interest in reversed grids."

F1 is determined to experiment during the second legs of the double-



In Australia (below) there were empty grandstands and no on-track action. For the time being, when action gets under way seats at races will remain vacant

The wearing of masks has already become the new normal in F1, as shown by Mercedes at its Silverstone shakedown

headers somehow, to avoid data driving a stake through the heart of the spectacle of the second weekend, perhaps by tweaking the tyre compound selections from one week to the next. Don't be surprised if reversed grids come back on to the agenda later in the season too.

Major changes are coming for 2021 and 2022 on the sporting and technical fronts. This year's car designs will be carried over into next season but with severe restrictions on aerodynamic and engine development imposed, as well as a budget cap of USD\$145million, before F1 introduces a major technical overhaul for 2022, when cars will be radically different aerodynamically and financial restrictions more draconian.

For this season, there are some minor steps in that direction. Aerodynamic testing and engine dyno testing will be limited, and development of certain mechanical parts frozen, in a bid to cut costs – hardly surprising when some teams have already severely felt the financial pinch of coronavirus – while 'closed' events (no fans allowed) will limit teams to 80 staff each per race, only 60 of whom can be associated with operating the cars.

Updates have also been made to the tyre regulations for 2020, allowing additional testing through FP2 sessions if required to help approve any new tyre specifications from Pirelli, which will determine compound selection for each race unilaterally rather than asking teams.

There will, for now, be changes to other race-day staples, with no driver parade or podium, and a change to grid procedure, but the cars themselves will be largely as they were in Australia in March. Mandatory factory shutdowns, and the diversion of resources to the fight against COVID-19 via 'Project Pitlane', means little development work will have been completed.



Even with no spectators at first, F1 still expects to have about 2000 people at each race. There will be 1200 essential personnel, which compares with 3000-5000 ordinarily. F1 teams will bring only 80 staff each, rather than the usual 130. F1 is also cutting back on broadcast personnel, taking only 60 staff to each race rather than the usual 250, aided by a shift to remote broadcasting operations.

British and Spanish GP promoters have already offered refunds or deferrals to fans who bought tickets for 2020, though F1 hopes to open races to spectators later in the season if and when the risks from COVID-19 have substantially reduced. Unlike in Premier League football, there will be no additional events shown free-to-air in the UK — save for Channel 4's existing deal to broadcast highlights of each race plus the British GP live.

"Fans are incredibly important, we'd love to have fans at these events," says Carey. "But we recognise the safety requirements and the risks that still exist, and we have to take steps towards that. We've talked about goals to have fans at the races in the fall [autumn]. It may not be back to stands that are packed to the rafters, but limited capacity fan events. It is a goal realistically to do it in a way when we believe we can do it safely for everybody."

All of which is to say, like much of the constant planning and re-planning required in this highly unusual time for Formula 1, watch this space...

Fans are incredibly important, we'd love to have fans at these events. But we recognise the safety requirements and the risks that still exist, and we have to take steps towards that \$\frac{1}{2}\$ CHARGE CARRY



KF TII

Carlos Sainz has trodden a tough career path to becoming Ferrari's choice to replace Sebastian Vettel in 2021. The timing is perfect, because although Sainz has endured setbacks with Red Bull and Renault, going through F1's school of hard knocks has primed him for one of the toughest driving gigs on the grid

> **WORDS** BEN ANDERSON **PORTRAITS ADRIAN MYERS** PICTURES () motorsport

Carlos Sainz finally has his date with destiny. It's not arrived in quite the way he probably expected when he started the journey, but in this game you must take your chances when they come. Racing for Ferrari in Formula 1 is something else; they all say so. It is never smooth sailing, often it's chaotic, shambolic even, and rarely does it end well, even for the winners. But it is special - a Formula 1 team with culture, history and passion like no other. Irresistible you might say.

Sainz certainly couldn't resist, and very soon he will be turning out resplendent in scarlet red, enjoying the unique emotions savoured only by those who ride the mythical horses of Enzo's stable, living the life dreams are made of - the life of a Ferrari driver. But first there is the small matter of 2020,







With the move to Ferrari for 2021, Sainz has followed in the footsteps of his friend and idol Fernando Alonso all the way to Maranello



Having bounced around teams and looking in danger of being left on the sidelines, Carlos landed a seat that would ultimately change his life in ways he couldn't imagine



and Sainz seeing out his final season driving for Ferrari's great rival of the early 2000s: McLaren, the team Ron Dennis dreamed of transforming into the 'British Ferrari'; the one that propelled Kimi Räikkönen and Fernando Alonso to the destination Sainz is now heading for.

The farewell tour will feel strange to Sainz, no doubt – especially so given the disjointed nature of a season that will (to begin with at least) swap the usual hustle, bustle and fanfare for a 'new normal' regimen of isolation protocols, hyper personal hygiene and coronavirus testing. Probably not how he imagined saying his goodbyes...

However it turns out, Sainz owes McLaren a great debt of gratitude. This team salvaged his career after he was constricted by apparent simultaneous rejection — Red Bull and Renault both deciding by the summer of 2018 that Sainz wouldn't be part of their long-term planning. By that point Red Bull had already determined Max Verstappen to be its main man; Daniel Ricciardo the perfect foil, and if Ricciardo wouldn't sign his new contract then Pierre Gasly was the guy Red Bull wanted to promote from Toro Rosso. Red Bull had no need of Sainz, and what's more his push to get away from Toro Rosso in 2017 had irked Helmut Marko — and Marko is not someone you want to irk...

Meanwhile, Renault was manoeuvring to bring long-term target Esteban Ocon back to Enstone to partner Nico Hülkenberg, now in his second season of a three-year agreement with the team. Hülkenberg maintained a marginal edge over Sainz during their 25 races as team-mates once Sainz replaced underperforming Jolyon Palmer at the back end of 2017, but Enstone was still happy enough to continue with Sainz and was prepared to make his loan permanent on a two-year deal.

The only snag was securing an early release of Sainz from his Red Bull 'master contract', made more difficult by ongoing political wrangling between Renault and its customer team over the performance and reliability of Renault's hybrid V6. So, Renault made other arrangements and Cyril Abiteboul struck a gentlemen's agreement with Toto Wolff to sign Ocon instead.

Heading into 2018's August summer break, Sainz's F1 career looked in real danger of reaching an abrupt end. But there came a piece of apparent serendipity that would transform his fortunes completely. Double world champion Fernando Alonso – hero of Spain and of Carlos too – decided he would take a sabbatical from F1 at the end of the season, and it looked as though this would be the turning point of Sainz's career.

But Sainz and his family had already started talks with McLaren, having considered in early 2018 a possible scenario whereby neither Red Bull nor Renault would want to retain Carlos. Despite being friendly with Fernando, the Sainz clan had no advanced knowledge of Alonso's plans. In fact, Sainz had gotten to know McLaren CEO

Zak Brown on the golf course in 2017, and was sounding out his chances of replacing struggling Stoffel Vandoorne as Alonso's team-mate.

Ocon and Ricciardo were also in the frame initially, but when it looked as though Ricciardo would re-sign with Red Bull and Ocon would join Renault, Sainz's position with McLaren strengthened. He did the deal to join McLaren (alongside rookie Lando Norris) in the summer of 2018, after Red Bull finally waived its option on Sainz. Having bounced around teams and looking in danger of being left on the sidelines, Carlos landed a seat that would ultimately change his life in ways he couldn't imagine.

To begin with, this looked like a marriage of mutual convenience: Sainz getting the chance to save his career with two guaranteed seasons at the same team for the first time; McLaren the opportunity to finally recover completely from the hangover of the troubled Honda years and rebuild around a younger, energetic driver line-up—one that would be keen to learn rather than ready to win while the team was not.

As it turns out, Sainz used McLaren as the springboard for his own leap into the big time – a chance, finally, to race for a top team; a chance denied him by the circumstances of his rise through Red Bull's ranks coinciding with Verstappen sweeping all before him. The domino effect of Sebastian Vettel's departure from Ferrari also means McLaren finally lands another of its 2018 targets in Ricciardo, so everyone is happy – save, probably, for Vettel.

But this is not only about luck, as important as that always is in F1's 'right place right time' games of musical chairs. Sainz has had to work *hard* to get here, while navigating some pretty rough bumps in the road. Superficially, of course, he enjoys the gilded background many of motorsport's aristocracy do: son of *the* Carlos Sainz – rallying god, known as 'The Matador' – and supported by Red Bull from the earliest days of his career. But F1 is not a world familiar to Spain's rallying king, so the journey has still been difficult for the younger Sainz, and that has been the making of him.

At one stage, despite obvious ability behind the wheel, it looked as though Sainz might not make it to F1 at all. He was on Red Bull's junior programme at the same time as Daniil Kvyat, and despite Sainz beating Kvyat comfortably in Formula BMW and Formula Renault (though both were defeated by Robin Frijns) it was Kvyat who subsequently caught Marko's attention with a stirring against-the-odds title win in GP3 and dazzling guest outings in European Formula 3, earning graduation to F1 with Toro Rosso in 2014. After winning the North European Formula Renault title in 2011, Sainz showed indifferent form in British F3 (superb in the wet but otherwise struggling with Carlin's new Dallara F312) and was then roundly trounced by Kvyat in GP3. Carlos's career momentum stalled.

With Verstappen out of the picture, Sainz came out of his shell and became the team's leading light, racing tenaciously – if sometimes a little too aggressively – in the best traditions of Alonso

Four crucial performances saved Sainz. First, a stunning Formula Renault 3.5 debut in 2013 at Monaco, of all places, where Sainz used tips from a track walk with Alonso to qualify fifth for the unfancied Zeta Corse team. Less than two months later, Sainz tested impressively in Red Bull's Formula 1 car at Silverstone, wowing the engineers by quickly matching Vettel's pace. The following year, Sainz moved to DAMS and won the Formula Renault 3.5 championship — as demanded of him by Marko in one of those 'win it or we bin you' tales for which Red Bull's motorsport advisor has become infamous. Sainz then impressed again in a crucial end-of-season F1 tyre test for Red Bull in Abu Dhabi.

At each stage Sainz's career was on the line, but he found a way to come through 'in the clutch', as they say in basketball. This guy can handle pressure, and pressure is an occupational hazard of the highest order when you race for Ferrari in Formula 1...

He also knows exactly what it's like to test your mettle against a once-in-a-generation super talent in the same F1 team and hold his own. Verstappen's rise to Red Bull's A-squad always felt like something almost pre-ordained because of the unusual way in which he was recruited then immediately promoted to Formula 1. In fact, Verstappen's sudden arrival into the Red Bull scheme in the autumn of 2014 initially dealt a severe confidence blow to Sainz, who at that time couldn't know of Vettel's plans to move to Ferrari so could see his own shot with Toro Rosso disappearing, despite leading the FR 3.5 championship.

Sainz nevertheless found the inner strength to get the job done and earned promotion to F1 after that Abu Dhabi test thanks to Vettel's decision to move on and Marko's decision to promote Kvyat and release Jean-Eric Vergne. Regardless, at Toro Rosso it still felt as though Sainz would have needed to absolutely bury Verstappen to get ahead of the Dutch wonder kid and let's face it, Verstappen has proven time and again that he's simply too good for that.

Still, Sainz managed to send clear signals of his own, quieter star quality. He scored points on his F1 debut in Australia; qualified an incredible fifth – ahead of the Red Bulls – for his home race in Spain; and finished tenth from a pitlane start in Monaco. Too often he was simply badly let down by the awful unreliability of the 2015 Renault engine. But the signs were still there that here was a rookie worth reckoning with. Sainz went all out at the season finale in Abu Dhabi to beat Verstappen into Q3 (by just 0.039 seconds) and win their qualifying head-to-head battle 10-9. Red Bull was pleasantly surprised by how quick Sainz was compared with Max.

The following season, armed with consistent year-old Ferrari power, Sainz took a step forward and began to get properly under Verstappen's skin. Two sons of famous fathers, both with strong personalities of their own, created extra pressure behind the scenes at Toro Rosso, but the tension eased with Verstappen's sudden promotion to Red Bull in place of Kvyat for the Spanish Grand Prix, in which Max became F1's youngest ever race winner.

Kvyat went to pieces on his return to Toro Rosso, confidence shredded by a feeling of injustice at being so suddenly and unceremoniously demoted. With Verstappen out of the picture, Sainz came out of his shell and became the team's leading light, racing tenaciously – if sometimes a little too aggressively – in the best traditions of Alonso; scoring points regularly and improving his craft by racing a car that lacked for aerodynamic development and received no upgrades whatsoever to its engine.

This was the first point at which Sainz started attracting serious interest from rival teams, so Red Bull moved swiftly to extend his contract for three more seasons and scare off the vultures. But Sainz himself was beginning to get restless. He made a strong start to 2017 too under F1's new aerodynamic rules, maintaining a clear edge over Kvyat and putting in some mighty performances – including a stunning drive to 'best of the rest' in mixed conditions in China. Incidentally, driving in such weather has always been a major strength of this rally driver's son... Momentum firmly with him, Sainz began to agitate for a move away from Toro Rosso, publicly calling it "unlikely" that he would become the first driver to do a fourth consecutive campaign with Red Bull's junior outfit.

Red Bull disliked what it felt was a lack of gratitude for the support Sainz had received throughout his career so far, but Helmut Marko saw the chance to appease all parties by

using Sainz as a makeweight in the deal struck in the autumn of 2017 to secure an early exit from Toro Rosso's Renault customer engine contract so Red Bull could do reconnaissance on Honda's engines.

This is another important aspect of Sainz's character, and the mentality of the support network around him – they are not prepared to simply

settle for what's there and wait for chances to be handed to them. Sainz is willing to try to make things happen for himself and take his destiny in his own hands. Again, this mirrors Alonso's approach. It is not without its risks, but who dares often wins in this game – and Sainz can now claim to be the only ex-Toro Rosso driver still racing in F1 who hasn't raced for Red Bull.

Sainz probably looks back on his time at Renault with mixed feelings. It started superbly with an outstanding performance on his debut for the team at Austin – always one of Sainz's stronger circuits – but he found it difficult



Sainz's impressive
Silverstone test for Red
Bull in 2013, when he
matched the pace of
Sebastian Vettel, helped
raise his F1 profile

PICTURE: MARK





This season Sainz will be aiming to continue McLaren's recent good run of form before he leaves for Ferrari



to hit that sort of peak regularly over the next 24 races. Again, he was let down by poor reliability occasionally, but although that explains part of the 16-point gap to Hülkenberg in the 2018 drivers' championship, it can't disguise the fact Hülkenberg was internally considered the quicker of the two over the full course of the campaign. Nevertheless, Sainz impressed sufficiently to be retained had the relationship between Renault and Red Bull not broken down so quickly and irrecoverably.

Sainz found the 2018 Renault inconsistent and unpredictable from circuit to circuit, but in fairness to Carlos this was also the first time in his F1 career he'd switched teams. Making yourself properly comfortable so you can exploit your full potential is not the work



This is perhaps the first time we saw the true Carlos Sainz in F1; performances and personality not constrained by the pressure created from a career constantly hanging by a thread

of a moment, even in better-established front-running outfits, and it is even more difficult when there is a strong character on the other side of the garage who has a head start on you in terms of integration.

Leclerc bucked the trend against Vettel at Ferrari last year really, but Lewis Hamilton found 2013 tough alongside Nico Rosberg, who'd been with Mercedes since 2010, and although Verstappen won his very first race for Red Bull, he admitted to needing to follow Daniel Ricciardo's set-up direction for most of their first season together in 2016, when Ricciardo was the grid's outstanding driver. Only two years later, after Max had negotiated a new contract and gone through his early-2018 'trying too hard' phase, did Verstappen definitively gain the upper hand.

What's more, Renault has been a team in regular flux since it returned from the ashes of Lotus in 2016, no doubt making the process of adjustment even more complicated for Sainz. Armed with more experience and a two-year contract for 2019, and heading into a McLaren organisation with a clearer idea of its direction — plus a rookie team-mate in Norris — Sainz flourished, becoming a much more complete and consistent performer.

The MCL34 was a good car, more predictable and thus better suited to Sainz's driving style, and Carlos relished his role as the lead driver in the squad, much as he did at Toro Rosso in 2016-17 while Kvyat was all at sea. Schooled by his father, Sainz has always had a keenness for technical understanding and attention to detail, and he helped drive development of the MCL34 in a positive direction while also forming a constructive and friendly working relationship with McLaren's young charger Norris.

This was Sainz 2.0: fast, relentless in races, Alonso-esque in some of his better drives – such as in Japan where he forced Leclerc to give up a chase of fifth place – but also now mature enough to see the bigger picture

and his own place within it. As James Key, McLaren's technical director, puts it, Sainz has "done the rounds" by racing for three different F1 teams, and with it found his self-confidence, and his voice. This is perhaps the first time we saw the true Carlos Sainz in F1; performances and personality not constrained by the pressure created from a career constantly hanging by a thread. Sainz was energised by the support of McLaren management through a couple of tough early races, and has described 2019 as his best season in F1, and the one he has most enjoyed thus far.

The timing of this evolution could not have been better. While Sainz was rising to become Formula 1's standout driver outside the top three teams last year — and arguably the best performer on the grid after Hamilton, Verstappen and Leclerc — Sebastian Vettel was busy imploding his own Ferrari career. Mattia Binotto clearly saw Sainz as a fast, highly capable, experienced alternative, so pounced.

Binotto admits the Scuderia is entering a rebuilding phase as it recognises the present limitations of Maranello's technical capabilities and how it may be compromised competitively for at least the next two seasons thanks to F1's new restrictive realities. Having someone of Sainz's constructive character, who isn't yet at the stage of his career where it's win or bust, will be a useful addition to that project – perhaps more so than drivers like Vettel and Ricciardo who don't have so much time on their side.

Negotiations between Sainz and Maranello's top brass accelerated (with Zak Brown's blessing) after Ferrari decided not to renew Vettel's contract in the spring, and now Sainz must accept one final McLaren mission before taking on the biggest challenge of his career so far. Quiet and shy when he started in F1, he now looks like a seriously strong driver with the personality, additional experience, inner steel and mental toughness to succeed. It's never easy at Ferrari, but that's exactly why Sainz could turn out to be just the right man for the job.

A word to the wise...

Rubens Barrichello is one man who knows all about the pressures of racing for Ferrari alongside one of the best drivers of your generation. Having made his name at Jordan and Stewart, Barrichello replaced Eddie Irvine as Michael Schumacher's team-mate in 2000. Rubens won nine races in six seasons with the Scuderia, and it's fair to say he found the whole experience tough going. He advises newcomer Carlos Sainz that mental stability is the key to surviving perhaps the toughest driving gig in F1. "He's mentally prepared and he's physically prepared, but he needs to control his anxiety," Barrichello says. "He's going to be anxious to get going. My suggestion is for him to do stuff that can control his mind. Meditation was key for me, to keep my anxiety low. That's what I would suggest. When you work on the future, it makes you anxious." Rubens also feels the fact Sainz has confirmed his Ferrari future before even starting his final season with McLaren will create added challenges for Carlos in 2020, as McLaren begins the process of preparing for its own future without him. "I find it crazy that you already announce what is your future plan is, and then you still have a year to go," Barrichello adds. "It's kind of tough for the mind management. It's really tough for you to be where you

feel like you don't belong anymore."



COUNTING DOWN THE



REASONS RICCIARDO MADE THE RIGHT CALL

Daniel Ricciardo decided to end his lucrative association with Renault and join McLaren for 2021, before 2020's disrupted campaign had even begun, but there are several reasons why this could be a shrewd career move

> motorsport IMAGES WORDS ALEX KALINAUCKAS PICTURES



McLAREN IS A TEAM ON THE UP

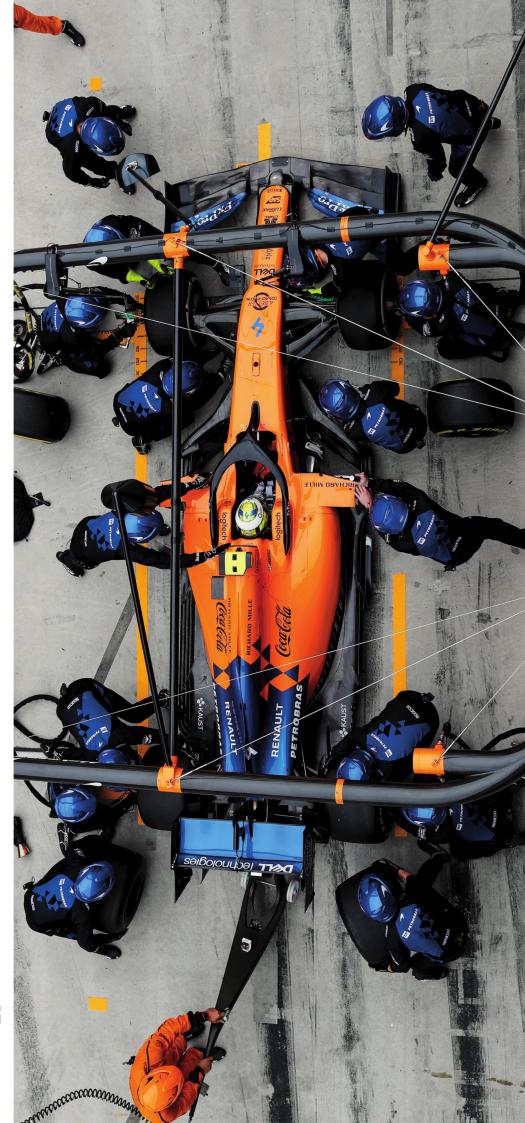
At the end of 2020, Daniel Ricciardo will be on the move again — this time from Renault to McLaren. His decision closed the Ferrari/McLaren seat swap saga that began when Sebastian Vettel's impending departure from Maranello was announced and Carlos Sainz was revealed as Vettel's replacement.

Of the many factors behind Ricciardo's decision to join his fifth F1 squad, following stints at HRT, Toro Rosso and Red Bull, the headline selling point is McLaren's recent resurgence. After the three years of misery and pain with Honda, followed by a revealing first year using Renault customer power, the eight-time constructors' champion squad finished fourth in 2019 – its best result since 2012 – one place and 54 points clear of Ricciardo's current employer.

Much of this is down to the major staffing restructure McLaren has enacted. Zak Brown felt when he became McLaren Racing CEO in November 2016 that there were "a lot of chefs in the kitchen" causing a "lack of focus and direction". Brown has suggested that Ricciardo decided in favour of Renault over McLaren back in 2018 because he couldn't see where McLaren was heading. But now he can. Last year, Brown installed Andreas Seidl and James Key as McLaren's team principal and technical director. But major changes had already begun before they arrived, as shown by McLaren's 2019 MCL34 making clear aerodynamic progress as the squad learned from its 2018 chassis shortcomings.

While there is evidence of McLaren's progress through late 2018 and last year, another factor that should not be understated in Ricciardo's move is how his upcoming new home is planning for the future. Whether that's by making painful cuts to see it through the immediate pain of the COVID-19 pandemic's economic shock, as well as operate as an efficient outfit under F1's new financial rules, or by last year committing to building a new windtunnel and driver-in-loop simulator, McLaren now looks like a team that has fought its fires and is finally ready to rise again from the ashes. And Ricciardo will get to ride that wave.

"OF THE MANY FACTORS
BEHIND RICCIARDO'S
DECISION TO JOIN HIS FIFTH
F1 SQUAD, THE HEADLINE
SELLING POINT IS McLAREN'S
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THE SEIDL FACTOR

Seidl's decision to join McLaren was announced in January 2019, and although he didn't start work until four months later, once his Porsche gardening leave was completed, it was still quite the coup. The 44-year old was set to lead Porsche's Formula E team (as he had its ultrasuccessful LMP1 squad – to three Le Mans 24 Hours/World Endurance Championship doubles) and the marque's motorsport division overall. To any driver, and Ricciardo will no doubt be well aware how highly regarded Seidl is by his former charges, that leadership boosts McLaren.

Since Seidl began his stint as McLaren's team principal – a title he requested due to his fondness for 'traditional' racing programme structures (his predecessor Eric Boullier was racing director) – Seidl has been quietly and

efficiently making his mark. Whereas McLaren was infamous for its complex organisation, which led to responsibilities such as car design being shared by several people, Seidl has streamlined things. His 'leadership team' is Key, Andrea Stella as racing director, Piers Thynne as production director, and Paul James as team manager.

This directional clarity has helped McLaren implement another important aspect of Seidl's method, which is to foster a positive culture that emphasises togetherness. This applies to the drivers too, and Sainz's relationship with Lando Norris – who will remain as Ricciardo's teammate in 2021 – was a joy to behold in 2019, and clearly filtered down the ranks at McLaren.

Ultimately, Seidl has a proven track record of success. BMW Sauber became a race-winning

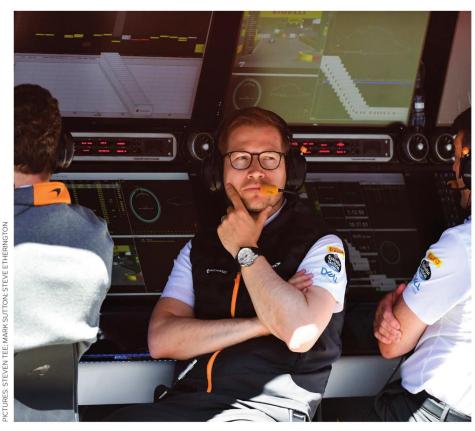
F1 squad during his time there as head of track operations, while BMW immediately won in the DTM when he managed its return as director of race operations in 2012. This is backed up further by how keenly Seidl's departure was felt by Porsche's fledgling Formula E outfit.

Brown sees Ricciardo's arrival as a further signal of McLaren's progress, and says Vettel was never an option for a direct swap with Sainz. Former McLaren star Fernando Alonso is also on the sidelines, but he has long indicated that any F1 return rests on an immediate race-winning seat. McLaren isn't there yet, but in Ricciardo it has hired a younger, proven race winner, who will be ready to take that chance when it comes, and can in the meantime provide a new reference for Norris and the rest of the team.

Andreas Seidl had a great track record even before joining McLaren and this won't have gone unnoticed by the Ricciardo camp



The return of Mercedes engines to power McLaren's F1 chassis from 2021 must also have been a factor in Ricciardo's thinking



MERCEDES POWER ON THE HORIZON

From the start of next season, McLaren-Mercedes will again be an F1 force. It might not be the successful de facto works operation it once was, but McLaren moving back to Stuttgart power after what will be six years away matters double for Ricciardo.

Mercedes power is still undefeated in the turbo hybrid era and, thanks to its controversial settlement with the FIA, Ferrari's recent advantage in this area seems to be on the wane — if indications from a previous lifetime's winter testing can be firmly believed right now. Mercedes' engines are also generally more reliable than the current customer Renault units McLaren is buying, despite the unusually high rate of attrition seen on the works car's units and at Williams during 2020 pre-season testing.

Ultimately, McLaren lost some big results to patchy reliability in 2019, and it's worth remembering that Honda's sketchy record was a factor in Ricciardo's decision to jump ship from Red Bull to Renault in 2018 – a point to where his contact with McLaren can also be traced.

From McLaren's perspective, it targeted a Mercedes reunion as part of its plan to move up the grid, which will have given Ricciardo added confidence. Mercedes also feels the new deal is beneficial. And the reunion is also unaffected by the regulatory decision to keep the 2020

"McLAREN GAN ALSO NOW DEMONSTRATE GLEAR PROGRESS ON THE TRACK, WHILE RENAULT HAS GONE BACKWARDS"

cars effectively in service through 2021 as a coronavirus cost-saving measure. The MCL35 has even been granted dispensation to be altered to fit the Mercedes engine it was not designed to house. Indeed, Toto Wolff has already stated that his operation's sole "risk" regarding this new arrangement is that McLaren could become a direct competitor...

The big unknown in all of this from Ricciardo's perspective is just where McLaren sits in the current competitive order.

Judging by form and car behaviour in preseason testing, the 2020 McLaren looks to be ahead of the Renault RS20, but behind present Mercedes customer Racing Point (soon to become Aston Martin), which appears to be leading the way in the midfield with its Mercedes W10-inspired design.

The abandonment of the Australian Grand Prix before it began means we have no unequivocal evidence to support this picture yet. Nevertheless, Ricciardo has clearly seen *something* in McLaren's makeup, even if he insists there was no single factor in his decision to leave Enstone and head for Woking.



LEAVING THE GLORY TO ESTEBAN

One of the most interesting aspects of Ricciardo's decision is that by choosing to leave Renault at the end of 2020 he will be exiting a team that has just installed a highly rated young star in Esteban Ocon. Ricciardo left Red Bull just as Max Verstappen was beginning to gain a decisive upper hand at that team, and some will no doubt suggest this is a version of history repeating itself.

That would be rather disingenuous to



Ricciardo given Renault's 2020 line-up hasn't raced yet thanks to the pandemic delays. But Renault has long targeted Ocon. He was in and around the operation as far back as 2016, when as newly crowned GP3 champion he became the squad's reserve driver despite his Mercedes ties, and Renault subsequently jettisoned Nico Hülkenberg to bring Ocon in on a two-year deal despite Hülkenberg enjoying a decent 2019

season alongside Ricciardo.

In the past ten years only once, in 2011, have the Enstone squad's drivers finished the season with similar points totals, so it may well be that Ricciardo balanced this against Ocon's potential, the team's keenness to bring Ocon in, and Ricciardo's own lucrative deal ending soon, and made a decisive call given there is so much positivity surrounding McLaren.



At the same time, a return to Fi's Class A was effectively closed to Ricciardo. Ferrari, despite maintaining contact for several years now, picked Sainz to partner long-term star Charles Leclerc, and Red Bull is committed to giving Alexander Albon a shot at keeping his place for 2021. Sainz's deal also ended any remote chance of Lewis Hamilton leaving Mercedes at the end of 2020, and rumours that Renault has sounded

out Valtteri Bottas about joining a team he was linked to previously in 2016 only surfaced after Ricciardo made his call to leave, so the chances of a Mercedes 'swap' deal were always remote.

Ricciardo has given up effective lead-driver status at a works operation, which may sound odd but makes sense given the current climate in the automotive industry – to which his current team is inexorably tied.



RENAULT'S UNCERTAIN FUTURE

If McLaren's form is the headline selling point for Ricciardo's decision, it is the uncertainty surrounding the future of his current squad that is perhaps the most significant factor.

Two weeks after Ricciardo's impending switch was announced, Clotilde Delbos – Renault's chief financial officer and acting CEO – publicly stated the company remains "committed to Formula 1". This followed team boss Cyril Abiteboul's positive suggestions that Renault would see the benefit of F1's new cost-control and (minor) performance-balancing measures. Indeed, Delbos cited the new financial rules as "very good for us".

But the underlying problem has not gone away, which is that the full economic bite of the pandemic and lockdowns are only just starting to bear down. Renault has a history of leaving F1 during times of economic downturn, and so there remains a significant chance the team in its current guise may not be around next year. After all, positive vocal commitments are often made even when wheels are about to be set in motion to the opposite effect. This applies to many companies in many industries. Also, no team is legally committed to F1 beyond 2020, given fresh Concorde Agreements remain unsigned.

Renault is part state-owned, whereas McLaren has considerable private resources on which to draw for its new efficiency-driven future. Force India/Racing Point has already established itself as a leader in doing more with less, which is the challenge all F1 teams now face. McLaren can also now demonstrate clear progress on the track, while Renault has gone backwards and (so far) failed to achieve the targets set out ahead of its 2016 comeback.

Renault, which remains linked to both Vettel and a reunion with Alonso at the time of writing, was clearly irked by Ricciardo's unexpected decision to jump ship — Abiteboul didn't even say his driver's name when commenting on the news. The feeling is perhaps understandable. After all, Ricciardo's decision to switch teams is as damning an indictment of Renault's stagnant F1 status as it is an affirmation of McLaren's increasingly impressive renaissance. 🗗



SURVIVAL OF THE FITTEST



Like all professional sports, motor racing was driven into hybernation by the COVID-19 outbreak. But for the sake of its own survival it's had to begin again before the storm has truly passed. So how will Formula 1 cope with racing in a pandemic? And why does it have to?

WORDS STUART COOLING PICTURES O MOTOR SPORT





he truth is out there in the form of grim economic statistics posted by countries the world over: on top of the disruption to everyday life, and the hundreds of thousands of unnecessary deaths, COVID-19 has brought financial ruination. In the UK alone, Gross Domestic Product (GDP) - the essential barometer of a country's economic health plunged more precipitously in April than it did during the global financial crisis of 2008, or any other previous recession for that matter.

For that reason, many professional sports - including Formula 1 - are desperate to get back to some form of business before the cash runs out. They are teetering on the brink of that figurative precipice. Liberty Media, owner of F1, has reshuffled its finances to afford shortterm protection not just for the commercial rights holder, but for the competitors who depend on it. Already facing its own cashflow issues owing to cancelled and postponed events, F1 has had to advance payments to struggling teams. Even then, two of the biggest names in the business - McLaren and Williams, among the most successful operations of all time face an uncertain future.

So is all the talk of F1 "coming back stronger" a realistic aspiration, or mere platitudinous cant? Is it now just a question of survival?

What the pandemic has done is expose major structural weaknesses in the F1 ecosystem. And although the stakeholders have united to agree a swathe of measures previously thought impossible to push through - including a reduced budget cap, and design freezes and development limits on high-cost parts - all the businesses that rely on grand prix racing face a jittery few months.

"We went through a learning process we are not used to," says Haas team principal Guenther Steiner. "Reacting quickly is something we're good at, reacting collectively we're normally not...

"We banged our heads together and came out a bit more united for the time being. I don't know how long it will last. What it [the pandemic] has shown is that as businesses we're too much on the edge - any disruption threatens to tip us over the edge. We don't have any reserve fuel in the tank, let's say."

Sudden economic shocks such as the interruption wrought by COVID-19 not only "WE BANGED OUR HEADS TOGETHER AND CAME OUT A BIT MORE UNITED FOR THE TIME BEING. I DON'T KNOW HOW LONG IT WILL LAST. WHAT IT [THE PANDEMIC] HAS SHOWN IS THAT AS **BUSINESSES WE'RE TOO** MUCH ON THE EDGE - ANY DISRUPTION THREATENS TO TIP US OVER THE EDGE. **WE DON'T HAVE ANY** RESERVE FUEL IN THE TANK" GUENTHER STEINER

McLAREN ANNOUNCED 1,200 REDUNDANCIES DUE TO THE PANDEMIC. OF WHICH APPROXIMATELY 70 WILL **COME FROM THE 800-STRONG F1 TEAM**



provide the final nudge required to tip an already struggling business into crisis, they can also hobble successful enterprises. Williams, for several seasons now a straggler at the back of the grid, was vulnerable to scenarios such as unpaid sponsorship. What's most shocking in this case is that it's a family-owned business whose leaders have previously been adamant that they would never sell. And yet there it is. McLaren, for its part, had a portfolio of successful businesses within the group, including a rapidly expanding high-end road car manufacturer - but the bottom has fallen out of that market. In trying to shore up its position McLaren has sought to raise bonds using assets such as its heritage cars and factory as collateral... but those are already claimed by holders of a previous bond, issued to buy Ron Dennis out of the business in 2017, and now the subject of a court battle

F1's cost cap, due to come into force next year, has therefore taken on increased relevance. When first mooted, its critics dismissed its value, saying that the teams with the deepest pockets would 'pre-load' by spending as much as possible now. Circumstances have changed and the budget cap now offers a lifeline – both to the cash-strapped independents and the manufacturer outfits whose owners are now pondering the wisdom of ongoing involvement in racing when they have showrooms full of unsold cars.

"This pandemic hit at a time when a lot of our costs were sunk for the season," says Racing Point team principal Otmar Szafnauer. "Designing, building, manufacturing components, putting the car together - that had all happened and that's a big part of our costs. So that bit of it we couldn't really save on.

"However, what we [the teams] did do, together with the FIA, we made some smart decisions on homologating components so that for the rest of this year and next year we can't develop them further. That will help save a significant amount of money - because although there were a lot of sunk costs involved in getting ready to race in Australia, we would normally spend a lot of money upgrading throughout the season.

"So I think we've done a smart job with the token system, and the homologation of components that are expensive to develop, such that all teams can save money - which we have to, now that the revenues have significantly decreased."

With a denuded calendar - currently eight European events - the amount of income the teams will receive as a share of the prize pot remains uncertain, hence the push to start racing again and fulfil contractual obligations to promoters, broadcasters and so on. This represents an operational challenge for this



season, even before the cost cap comes in.

Steiner describes the decisions he had to take during lockdown, in terms of putting staff on furlough, as the "toughest time of my management career", a phrase that's been echoed by other team principals including McLaren's Andreas Seidl. The challenge has been magnified by that lack of certainty over whether there would be any racing at all in 2020 - or how it would be organised if and when it did begin. A grey area still exists beyond the eight European events this summer, though F1 has expressed the desire to run up to 18 races.

"You never had a fixed budget to work with and we still don't really know," says Steiner. "If you know what you have to achieve, you don't have to guesstimate how much you're going to spend. You know what you've got and then you manage it."

It's going to be a hand-to-mouth existence, then, in the coming months, as COVID-19 remains a threat. In terms of keeping personnel safe, the 'cluster' system (see Pat Symonds column, p24) is the most logical structure in

> For Claire Williams, a possible sale of Williams F1 - previously unthinkable - is now on the table



the circumstances, although an element of risk remains which will require constant vigilance. Shortly before this issue of *GP Racing* closed for press, for example, New Zealand declared itself free of COVID-19 and released its lockdown measures (which included sports such as Super Rugby being played in front of live crowds), only for two British visitors to test positive. Likewise, China experienced a spike in cases in Beijing.

"The financial impact for sure will be this year," says Szafnauer. "I don't know how significant because we don't know whether we'll get to 15, 16, 18 races. I hope we get that many in. And I also don't know how many will have fans and how many won't, so unless you have that definition it's really hard to pinpoint the revenue. Hopefully by next year we'll be back to normal.

"We're working through what the payment profiles look like for our sponsors based on how many races we do. Some sponsors are saying, 'Well, we've committed to this, so we'll pay you in full.' Others are saying a pro rata amount works better for them. I can understand both. Long-term sponsors generally take the view that the relationship is for more than one season and they're prepared to stick with you through thick and thin."

Although Racing Point halted construction of its new factory in March, it still intends to complete the project. It now intends to occupy the premises a year later than planned, in the summer of 2022 rather than 2021. It is also continuing to recruit at a time when other teams, notably McLaren, are downsizing.

"The nice thing with us is that apart from Haas – which has a completely different business model, with a lot of outsourcing – we still have the smallest number of employees," explains Szafnauer. "Inclusive of Haas, I'm pretty sure we have the smallest budget. When something like this hits, and you're the most efficient – or you have the least number of employees and the smallest budget – it's easier to ride the storm, so to speak.

"We had plans to continue hiring up to a certain level and we're still doing so, even though I understand there are other teams that are letting people go. Our strategy in expanding hasn't changed. We weren't going to expand to anywhere near the numbers some of the bigger teams have, but definitely bigger than we were.

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OTHER SZAFNAUER

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NEC
Clare

We've gone from 405 to 465 from the time it was Force India to now, and we will probably add in the region of the same again, maybe 50 more people. But that's about it.

"525 or so is still pretty small when you have around 1100 at Mercedes and over 900 at Red Bull. The cost cap I think will mean they have to look at getting smaller, having a smaller workforce, but we won't. We will 'rightsize' the business for what we plan to do from a competitive standpoint, and that won't be impacted by the cost cap."

Having been the proverbial bone of contention for several years now, prompting the likes of Ferrari to threaten to flounce out of Formula 1 as recently as last April, the budget cap may now be the saviour of the category. No less an eminence than F1 managing director of motorports Ross Brawn has said it has proved vital to the continued involvement of both manufacturers and independents.

A salient question, though, is whether the budget cap is realistic enough. Too high and it could be irrelevant; too low and the human cost of large teams forcibly downsizing would be painful. Initially pegged in the region of \$200m, then \$175m, it has been negotiated down to \$145m with a glide path in subsequent seasons through \$140m to \$135m by 2023. That's lower than some stakeholders wanted but a higher figure than others had demanded.

"Is that \$145m figure, with the glide path, the correct one? I don't know," says Szafnauer. We came down to \$145m, mainly as a result of the pressures of the pandemic and looking at it and saying, 'If this is going to be the new normal, then perhaps \$175m is too high and Formula 1 has to do a better job on the cost cap such that we are financially sustainable.' Some teams wanted the \$145m to be lower – they'd have been happier at \$100m – and the big teams were happy at \$175m. Having it at \$145m with a glide path, to me, seems like a good compromise. I always say that if the big teams and the small teams are equally happy, or equally unhappy, then it's a good compromise.

"Is this indicative of F1 coming to us [independents such as Racing Point]? Our sweet spot would probably have been below that level

FORMULA 1 GROUP REVENUES FELL BY 84% IN THE FIRST QUARTER OF 2020, OWING TO THE EFFECTS OF THE COVID-19 PANDEMIC



"WE NEED TO STAY ON COURSE, IMPLEMENT PROPERLY WHAT WE'VE DECIDED To do – and not start giving concessions to the big teams. I think we've learned things we mustn't forget when the good times return.

THAT'S HOW WE'LL COME OUT STRONGER"

GHENTHER STEINER

because we don't spend that today. But it's a lot harder to come down in costs than it is to expand into a cost cap that you're not at. From that perspective we're going to be in a better position than some of the bigger teams who are having to shed costs. It's easier to find a way to spend than it is to find efficiencies when you're used to spending for performance.

"So we'll be in good shape when the cost cap comes in — we'll still be under it. But we won't be able to spend up to it, unless of course we find some sponsors, which Aston Martin may be able to help with because its journey back into the sport will be a great one — we're expecting to perform at a pretty good level."

Inequalities will persist: big teams will still have an advantage, even if they have to slim down, because of the huge databases of knowledge they've acquired over the years. That data and experience may decrease in relevance with time, but the sharp economic correction we've seen during the COVID-19 pandemic is unlikely to result in greater competition in the short term. In the long run, though, the measures taken to restructure F1's financial model should pay off in terms of greater stability.

"Before, if you were planning to start an F1 team, it was a case of 'how long is a piece of string?' How much money do we need to do this?" says Steiner. "It could be anything, because there was no limit to what you could spend. With the budget cap, when you're doing your planning, you know the maximum you can spend, and it's just a case of whether you can get there. That will give stability to the smaller teams, and then the next thing is that the new FOM contracts will be more equal – not 100% equal, but it will bring more [proportionally] of the prize fund to the little teams.

"At the moment the gap between us and one of the big teams is between \$100m and \$150m. In future it might be \$20m or \$30m. Is that not a good step? I would say yes."

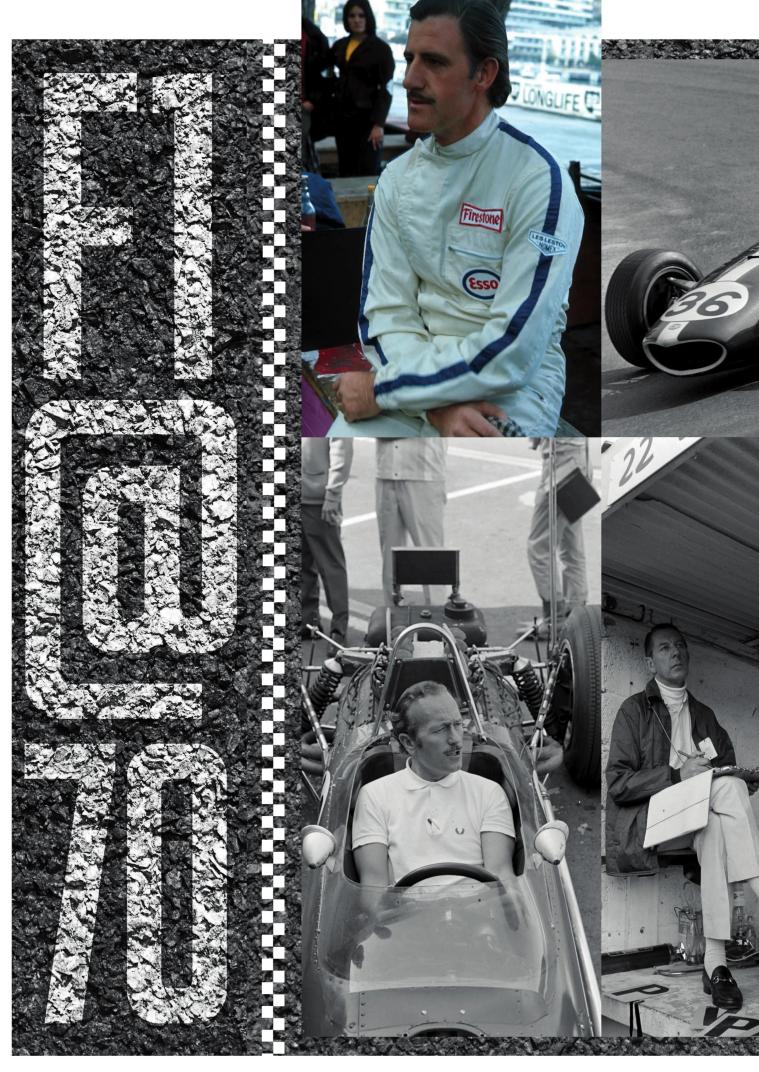
But what of the aspiration expressed by many of F1's senior figures that it can "come out stronger"? Certainly it will only be treading water for the coming months as teams send skeleton crews to a handful of races held behind closed doors. Perhaps there's a wider lesson to be drawn

Racing Point has delayed moving in to its new factory until 2021 but has still been recruiting staff during the panademic

from the rapid consensus achieved in agreeing measures which have already saved several teams from financial failure — and which should make the ones still struggling, such as Williams and McLaren, more attractive prospects for new investment. For too many years F1 has been beset by counter-productive infighting; one positive of the COVID-19 pandemic is

that it has made mutual interests outweigh vested self-interests.

"We need to stay on course, implement properly what we've decided to do – and not start giving concessions to the big teams," says Steiner. "I think we've learned things we mustn't forget when the good times return. That's how we'll come out stronger."





FORMULA 13 SEVENTY SIREATEST NELUENCERS



JACK BRABHAM Rob Walker Carlo Chiti Graham Hill Louis Stanley COLIN GHAPMAN JIM GLARK Yoshio nakamura Dan Gurney Keith Duckworth

IN THE SECOND OF OUR SEVEN-PART TRIBUTE TO THE PIONEERS WHO HAVE SHAPED THE WORLD

THE WORLD

CHAMPIONSHIP'S

WE LOOK AT

THE 1960S: A

REMARKABLE ERA

OF ENORMOUS

CULTURAL

MOVEMENTS IN F1

AS WELL AS THE

WIDER WORLD...



FI'S 70 GREATEST INFLUENCERS: THE 1960s

THE LAST CHAMPION of the 1950s also became the first of the new decade, his success symbolising a radical change in the design of racing cars. Jack Brabham was a former flight mechanic with the Royal Australian Air Force and a national champion in midget cars before he moved into road racing. On arriving in England in 1955 he went to the Cooper works in Surbiton, bought one of its cars, and spent so much time hanging around the garage and making himself useful that by 1957 he had become a member of its grand prix team. Brabham's practical experience was vital to the development of the little Cooper-Climates as they evolved into full-blown F1 machines capable of winning the world championship, as they did in 1959 and 1960, capturing not just the drivers' title but the constructors' championship, the first rear-engined cars to do so.

In the days before kerbs and painted lines, Brabham's brusque tail-out driving style, developed on dirt tracks, often resulted in stones and earth being thrown into the faces of his pursuers; this rustic approach did not please all his rivals. There were no loose verges at Indianapolis, however, where in 1961 he finished ninth in the 500 in one of John Cooper's cars, heralding the eclipse of the classic front-engined roadster.

A year later Brabham left Cooper to drive the machines he and the chassis designer Ron Tauranac had started building. Having failed

to win a single grand prix in the five years of the 1.5-litre formula, in 1966 Jack persuaded Repco, an Australian company, to build him a V8 engine for the new three-litre regulations; it made him the first man to win the world championship in a car bearing his own name. In 1970 he took the last of his 14 grand prix wins, at Kyalami, before ending his driving career and returning home at the end of the season, having sold the team to Tauranac.

Unlike Brabham, Stirling Moss took easily to the 1.5-litre F1 cars. By the time the new regulations came into force in 1961, he had established a partnership with **Rob Walker**, who now entered his cars in grands prix, F2 and GT races, painted in the dark blue of Scotland with a white band around the nose. Walker had inherited a fortune from the Johnnie Walker whisky business, and in 1939 he and a university friend co-drove his Delahaye to eighth place at Le Mans. A wartime Navy pilot, Walker briefly resumed his racing career after being demobbed but then decided to enjoy the sport as an entrant rather than a driver.

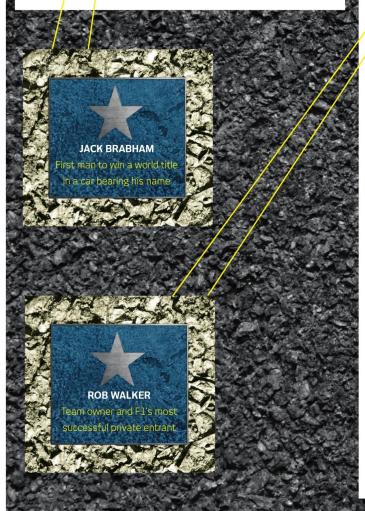
Gradually the team, based at his garage in Dorking, worked its way up to F1, and in 1958 his little Cooper-Climaxes won both the Argentinian GP, with Moss at the wheel (on loan from Vanwall), and the Monaco GP, with Maurice Trintignant. After Vanwall's withdrawal at the end of 1958, Moss joined Walker full-time.

Their most famous victories came in 1961, when Moss outran the Ferraris in his outdated Lotus, first at Monaco and then at the Nürburgring. The driver had just made a deal with Enzo Ferrari to run factory-prepared F1, sports and GT cars in Walker's colours when he had his career-ending shunt at Goodwood on Easter Monday, 1962. The most successful private entrant in Formula 1 history, Walker carried on and won his last GP with Jo Siffert at Brands Hatch in 1968. He retired in 1975 to cover the grand prix scene for an American magazine, remaining a much-loved presence in the paddock.

The F1 Ferraris that Moss beat twice in 1961 were the work of **Carlo Chiti**, a designer whose ample silhouette stood in obvious contrast to the sleekness of his most famous creation. Designated the Dino 156, the first rear-engined Ferrari grand prix car became better known as the Sharknose, due to its aggressive-looking twin nostrils; its powerful V6 enabled it to make a meal of the English Coopers and Lotuses, with their puny four-cylinder Climax engines. In the hands of Phil Hill, Wolfgang von Trips and the novice Giancarlo Baghetti, the Sharknoses won five of the 1961 season's eight races, with Hill taking the title – the first American to do so.

Chiti, born in Tuscany, joined Alfa Romeo's racing department on graduating in aeronautical engineering from the University of Pisa. Recruited by Ferrari, he worked with the veteran designer Vittorio Jano on the title-winning Dino 246 in 1958. It was Chiti who eventually persuaded Enzo Ferrari to abandon his long-held disdain for the idea of putting the engine behind the driver.

At the end of the glorious 1961 season, however, he and a group of senior executives walked out, allegedly fed up with the constant interference of Laura Ferrari, Enzo's wife; they went off to build the ATS F1 car, which proved a disaster. Chiti quickly resurrected his





FI'S 70 GREATEST INFLUENCERS: ##E 1960 THE MOUSTACHE, THE SLICKED-BACK TERNATIONAL GRAND PROX MEDICAL SERVICE HAIR AND THE AIR OF WIDE-BOY NAUGHTINESS CAUGHT THE PUBLIC'S IMAGINATION BUT CAMOUFLAGED HILL'S TALENT" The founding and funding of the International Grand Prix Medical Service was Louis Stanley's response to Jackie Stewart's crash in one of his team's BRMs at Spa in 1966 **GRAHAM HILL** Charismatic double champion and winner of triple crown **COLIN CHAPMAN** Lotus founder and

The smartly dressed Colin Chapman,

Graham Hill (in white overalls) and

two mechanics problem-solving at the 1968 Belgian GP

LOUIS STANLEY

BRM chair and funder of F1's

first mobile medical service



career with Alfa, designing its sports and F1 cars between 1963 and 1984, then founded Motori Moderni, making F1 engines for Minardi in the mid-1980s.

An immediate beneficiary of the infighting that preceded the collapse of Ferrari's fortunes in 1962 was **Graham Hill**, who became Britain's second world champion that year at the wheel of a BRM. Born in 1929, the Londoner rose from his beginnings as a mechanic to become one of the most charismatic figures in the sport. Two years with Lotus – where he endured 12 retirements in 16 races – preceded his move to BRM, where his first two seasons produced exactly the same statistics. It all came right in 1962, however, with wins in the V8-engined P57 at Zandvoort, the Nürburgring, Monza and East London (South Africa) on the way to the title.

Runner-up in each of the next three seasons, Hill returned to Lotus as Jim Clark's team mate for 1967, taking his second title the following season. Hill's win at Monaco in 1969 was the last of his 14 grand prix victories, although he continued with Rob Walker's Lotuses and the works Brabhams before running Shadows and Lolas with his own team until retiring in 1975, his 18th season in F1. The moustache, the slicked-back hair and the air of wide-boy naughtiness caught the public's imagination but camouflaged Hill's talent. The real truth was in the results. Nobody wins the Monaco GP five times, as well as Le Mans, the Indy 500 and two world championships, without being one of the greats.

Hill's first world title had been won with a team reorganised by Louis Stanley, whose second wife, Jean, was the sister of BRM's owner, Sir Alfred Owen. Stanley was a larger-than-life figure with no background in motor racing: he studied theology at Cambridge before working as a journalist for a glossy magazine and as a manager at the Dorchester Hotel. On a visit with Jean to the 1959 Monaco Grand Prix, Stanley encountered a world in which he felt he could wield a degree of influence. BRM was slowly emerging from a decade of abject failure, and Stanley accelerated the process of change by putting the designer Tony Rudd in charge. In 1962 BRM was rewarded with the drivers' and constructors' championships.

From that peak, a long period of decline ended in 1975 with a dreadful final season after which the team, competing under the name Stanley-BRM, faded into extinction.

Stanley's lasting importance to F1 lay in his response to the accident suffered in one of his cars by Jackie Stewart at Spa in 1966, when the driver lay in his wrecked car, bones broken and soaked in petrol, for half an hour before effective help arrived. The creation of the International Grand Prix Medical Service, with its mobile medical unit, was instigated and funded by Stanley in 1967, the first serious effort to make life safer for F1 drivers.

Safety and the name of **Colin Chapman** were often linked in the 1960s, and not always in terms flattering to the English designer whose cars won world championships but in which several grand prix drivers lost their lives. Those deaths were not always caused by a breakage on the car, but enough accidents to Lotuses involved wheels falling off at high speed to make some drivers wary of Chapman's urge to increase performance by minimizing the weight of key components. Lotuses were usually fast but sometimes fragile.

Born in London in 1928, Chapman studied structural engineering and at 21 he built his first racing car, a modified Austin 7. He raced it, and its successors, with some success, but it was with the Lotus 7, a bare-bones two-seater sold to the public in kit form, thus avoiding tax, that he made his reputation. By 1958 he was in F1 with a front-engined car, but within two years he had followed the example set by John Cooper and put the engine of the Lotus 18 behind the driver. Clark was Chapman's first world champion, winning the title in 1963 with the Lotus 25 – the first car to be built around an aluminium monocoque – and in 1965 with the Lotus 33, two cars that, in the hands of the Scottish maestro, were utterly dominant.

With the Lotus 49 in 1967 Chapman pioneered the use of the engine as an integrated and fully stressed part of the car, and with the 78 and 79 "ground-effect" cars he explored the use of aerodynamics to create low-pressure areas under the car. Renaming the team Gold Leaf Team Lotus in 1968, Chapman also became the first man to allow a sponsor to cover the bodywork in the livery of a

FI'S 70 GREATEST INFLUENCERS: THE 1960s

cigarette packet; others would enthusiastically follow suit.

Chapman's partnership with Jim Clark, formed in 1960 and lasting until the driver's death in 1968, became legendary, producing 25 grand prix wins from 72 starts. Until Clark perished in an unexplained crash during an F2 race at Hockenheim in 1968, it had seemed the perfect combination. The driver, born in Fifeshire in 1936, was a farmer from the Scottish porders who took up motor racing for fun, competing in trials, rallies, autocross and hillclimbs before taking to circuit racing. Invited to join the Border Reivers team, he began winning with its sports cars: a Jaguar D-Type, a Lister-Jaguar, an Aston Martin DBR1 and a Lotus Elite. When he beat established drivers in the Elite, Chapman took notice and it was in his new Lotus 18 that, in 1960, Clark became a professional racing driver.

After several promising early performances, his first wins came in 1962, at Spa, Aintree and Watkins Glen. Already it was generally recognised that, following the retirement of Stirling Moss, here was the sport's new presiding genius: a shy man, famously indecisive out of the cockpit, to whom the clean sweep of pole position, a flag-to-flag victory and lap record seemed the most natural way to spend a grand prix weekend. The titles of 1963 and 1965 would surely have been followed by more but for the tragedy at Hockenheim, where Clark's

death at the age of 32 snuffed out a sublime talent.

One of Clark's five British GP wins came at Silverstone in 1965, but anyone in possession of a paddock pass for that meeting would also have been gripped by the sight of a white car with a red roundel on its nose emerging from a transporter whose inner panels were covered with mechanics' notes written in Japanese ideograms. In a sport whose soul had always been European, this represented a intriguingly alien experience. The Honda RA272 was a step further from the previous year's RA271, Japan's first F1 car, which had made three tentative and unpromising appearances with its development driver, Ronnie Bucknum, in the cockpit; Honda's latest F1 car was in the hands of a more experienced and gifted American, Richie Ginther.

The man in charge of the car's design and construction was **Yoshio Nakamura**, a native of Osaka and graduate of the University of Tokyo who had spent the Second World War designing military aircraft. The neat little car's most striking feature was its engine, a 1.5-litre V12 designed by Tadashi Kume. With 14,000rpm available to the drivers, it resembled the high-revving multi-cylinder engines with which Honda had dominated motorcycle racing, and its 230bhp made it the most powerful engine in the F1 field.

Starting the project from scratch in 1962, with no real experience



have won had the various Lotus machines he drove been just a little more reliable

YOSHIO NAKAMURA Guided Honda to first world championship race win

Yoshio Nakamura ensured that Honda's first foray into Formula 1 was a successful one, with a win at the end of 1965, in only its 11th race



of four-wheeled racing, Honda needed to acquire knowledge fast. Under Nakamura's guidance, and with Ginther's shrewd input, it progressed so quickly that in the last race of the 1965 season, in Mexico City, Honda achieved what had seemed unthinkable and won a world championship grand prix. Honda would be in and out of F1 over the next 55 years, but Nakamura-San had laid the foundation.

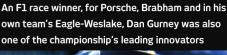
Ginther was one of a platoon of American drivers whose presence gave F1 a different flavour. Of them all, Dan Gurney was the most gifted, said to be the only one of his contemporaries feared by Jim Clark. The son of an opera singer, Gurney grew up as a California hot-rodder, served in the Korean War as an artillery mechanic, and arrived in Europe in 1958 with a ride in one of Luigi Chinetti's Ferraris at Le Mans. A year later came a place in the Scuderia's grand prix squad, followed by an unsatisfactory year with BRM and two seasons with Porsche, with whom Gurney took his first grand prix win at Rouen in 1962. Three years with Brabham produced only two wins before Gurney launched his own team, Anglo American Racers, in 1966, with the beautiful Eagle chassis. The arrival of the bespoke Weslake V12 engine in 1967 gave him an historic victory at Spa, the first for an American driver in a car of his own construction, but unreliability led him to close the F1 operation at the end of 1968.

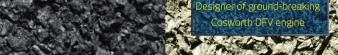
He returned to America, where his cars won the Indy 500 three times.

A tall, handsome and hugely popular figure, Gurney became the first driver to spray champagne from the podium while celebrating victory with AJ Foyt at Le Mans in 1967. Dan introduced the full-face helmet to F1, and popularised the Gurney flap, a metal strip attached to the trailing edge of a wing to improve performance.

At a time when finding a powerful and reliable three-litre engine was the main problem facing British F1 teams, **Keith Duckworth** and his partner, Mike Costin, came up with the Cosworth DFV, a V8 which won on its debut in 1967 and took the last of its 155 grand prix victories in 1983. It was Colin Chapman, their former employer, who asked Duckworth to design an engine that could be used as a stressed part of the chassis – a revolutionary idea that eventually became universally adopted. Ford funded the project, in exchange for branding, and after Jim Clark's initial victory wi<mark>t</mark>h the Lotus-Ford 49 at Zandvoort the engine became almost ubiquitous: light, compact, reliable, producing something north of 400bhp, and a bargain at £7,500 a pop. As the decade came to a close, it powered the winners of all 11 rounds of the 1969 world championship, in four different makes of chassis. Duckworth's engines had provided the soundtrack to Formula 1 in one of its most compelling eras.

DAN GURNEY First American to win in car





Jim Clark claimed victory for Duckworth's Ford-backed DFV on its debut at

Zandvoort in 1967, and the engine won 155 races until the end of 1983

KEITH DUCKWORTH



THE THE HISTORY OF WILLIAMS

PART 3: 1989-93

GHANGER

A new alliance with Renault and the rapid development of high-tech electronic suspension control systems opened the door to absolute dominance for Williams in the early 1990s. But this set off a technological arms race which prompted a sharp FIA clampdown...







TEN RACE VICTORIES,
SIX TEAM ONE-TWOS,
15 OUT OF 16 POLE
POSITIONS AND A
CAR THAT LED 84%
OF THE SEASON'S LAPS.
THERE ARE OTHER EXAMPLES
THAT EXCEED SUCH
STATISTICAL DOMINANCE,
BUT NOT MANY...

More significantly, few teams have ever been so much better than their rivals as Williams was in 1992, as it hit a seam of form that would make it the driving force of the decade. Out of the 20 world titles for constructors and drivers available in the 1990s, Williams would claim nine, McLaren seven, Benetton three and Ferrari just one.

By now well established as a Formula 1 superpower, the final year of the 1980s marked the next step for Williams, as the stability of a symbiotic partnership with Renault shot it through the next nine seasons. At the same time, years of investment, hard work and canny recruitment allowed Williams to harness a raft of technologies that would change the game, to the point where the governing body outlawed it all. On the one hand, that hurt after so much grind to unlock F1's perennial quest for the 'unfair advantage'; on the other, it was the ultimate compliment. Williams had simply become too good.

The source of that sweet status can be traced all the way back to 1984, when brake and clutch specialist AP approached Williams with an active ride system it had originally developed for road cars. Patrick Head charged his deputy Frank Dernie with responsibility for a project that would initially run in an FW09, the team's ungainly first

Honda-powered contender, in the winter of 1985. But Williams had a lot on its plate in the mid-1980s, as the Honda partnership began to bear fruit. It took until 1987 for the active ride system to be deemed ready for an FW11. The original target was to simply improve an F1 car's ride and allow for softer suspension settings, but by now the penny had dropped that aerodynamic load distribution was the most significant gain. Always alert to a technical advantage, Nelson Piquet embraced the concept and took on testing duties, while team-mate Nigel Mansell - still haunted by unhappy active ride experiments during his time at Lotus - showed little interest. Piquet would give the system a winning debut at Monza that season, beating an 'active' Lotus driven by Ayrton Senna, but subsequent tests on bumpier circuits highlighted its imperfections, including a tendency to generate 'bounce' in faster corners. It was dropped, for now.

The following FW12 for 1988 was the first Williams designed specifically as an active ride F1 car, as the team explored methods to grab back performance after the loss of Honda's all-powerful turbo V6 for a humble normally aspirated Judd V8. But again the system's imperfections made it troublesome and by the British Grand Prix —

Patrese dives inside Boutsen in Australia in 1989. Boutsen won that race but Patrese was the best-placed Williams driver in the points, in third





The joining of Renault's new V10 to Williams' chassis would, after a steady start, prove to be a marriage made in Viry-Châtillon and Didcot...

where Mansell finished second in the rain - the team had reverted FW12 to 'passive' spec.

The Judd was a necessary stop-gap in the wake of the Honda divorce. New opportunities were there to be forged ahead of the looming 'atmo' engine rulebook that would cast aside turbo power in '89. Renault had single-handedly triggered a slow-burn F1 revolution when it first ran its 'funny little' turbo engine at Silverstone in 1977 - and yet despite mixing all the right ingredients to deliver a batch of world titles, the French car maker had always fallen short. Deflated, Renault folded its works team at the end of 1985, reverting to engine supplier status only for a year before quitting completely. But it was only licking its wounds. By early 1987 a new 3.5-litre normally aspirated engine programme was under starter's orders and in June 1988 an inital three-year deal with Williams was struck. In Viry-Châtillon, Bernard Dudot rubbed his hands at the chance to work with Patrick Head.

As Mansell headed for Ferrari, it was left to veteran Riccardo Patrese and a new signing, Thierry Boutsen, to lead the charge in 1989. The Belgian had grown in stature at Arrows and Benetton, but this was a relatively low-key line-up after the sparks of the Mansell-Piquet years. No bad thing as Williams knuckled down for a new climb to the summit.

After pre-season testing in a modified FW12C powered by the new high-revving RSo1 67-degree V10, Williams appeared only second on pace to McLaren's Senna-Prost super-team, powered by Honda's potent new V12. In Brazil, as Patrese started a record-breaking 177th grand prix, the Italian qualified on the front row, led and even set fastest lap before retiring, as Mansell pulled off a surprise win on his debut for Ferrari. The Williams-Renault partnership was properly consummated with a team one-two in a wet Canadian GP, Boutsen scoring his first F1 win after Patrese gave way with a broken underfloor.

In Hungary, Patrese took pole and led until lap 52 when a stone punctured a radiator. That one stung. But momentum was building, and was further boosted when the evolutionary FW13 finally came on line in September. Patrese and Boutsen scored a two-three at Suzuka after Senna and Prost's infamous collision at the chicane, then Thierry made the Williams a winner with another impressive wet-weather performance in Adelaide. Despite his lack of wins, Patrese still outscored his team-mate over the season to finish third behind the warring McLaren duo, while Williams-Renault claimed a comfortable runnerup spot, well clear of Ferrari, in the constructors' standings. On the downside, it was a whopping 64 points shy of the dominant McLarens. Williams was still in the foothills of its F1 mountain.

In 1990 Patrese would win his first GP for seven years, at Imola, scene of a painful throwaway back in 1983 when his own countrymen had cheered



Thierry Boutsen joined Williams for the start of the 1989 season and claimed his first F1 win in Canada that same year



Both Patrese (pictured with race winner Alessandro Nannini) and Boutsen made it on to the podium in Japan in 1989

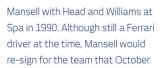
THE HISTORY OF WILLIAMS



Patrese with Head in 1990, the season the Italian won again after a drought stretching back to 1983



The hiring of Adrian Newey in 1990 enabled the team to make a final push to get back to the top





as he crashed. Redemption was sweet. Then in Hungary Boutsen delivered a virtuoso performance – in the dry – holding off his friend Senna to lead from lights to flag and win by 0.288sec. But in ultimate terms, it was a disappointing campaign, the team slipping to fourth in the constructors' standings behind that brash, pesky bunch at Benetton and still a gaping 64 points short of champions McLaren. Still, away from the races significant groundwork was being laid.

First, the active ride programme was given new impetus under an ambitious team led by promising engineer Paddy Lowe, Dernie having left for Lotus in 1988. The control systems were now being designed in-house and with the evercheerful Mark Blundell doing most of the leg-work in the cockpit, progress was made.

Second, in June 1990 Adrian Newey joined the team, initially as chief aerodynamicist. But after just one week Head promoted him to chief designer, clearly recognising the talent he'd just recruited. Newey had cut his teeth at the Fittipaldi team in 1979, then progressed to March for whom he drew the 83G sports car and a pair of potent Indycars. After an educational year engineering Mario Andretti, March co-founder Robin Herd gave this bright spark the keys to the F1 programme, now running under the auspices of Leyton House. Newey made mistakes during his time in turquoise, but his 881 was a true groundbreaker in shrink-wrapped form. Subsequent cars lost momentum, although Ivan Capelli almost sensationally won the 1990 French GP - but by then Newey was already hard at work at Williams.

Strip the FW14 of its livery and it would look for all the world like a Leyton House. The model marked the first collaboration between the young visionary and the fierce engineering logic of the inspirational Head. Newey relished working for and with a man he still holds in the highest regard.

But the climb to the summit was not yet over, even if it was beginning to loom into view especially with the return of the moustache in 'Red Five': Mansell was back. His love affair with Ferrari had proven both predictably passionate and destructive, quickly flickering out in the wake of Alain Prost's arrival in 1990. Mansell flounced into retirement after dropping out at Silverstone, as Prost rubbed it in with victory. Nigel had already spoken to Williams about a return, but Frank was eyeing Senna - until the Brazilian re-committed to McLaren. Williams then 'signed' exciting firebrand Jean Alesi - only for the French-Sicilian to make the biggest mistake of his life by falling for the lure of Ferrari. Suddenly Williams needed Mansell, Mansell needed Williams - and they soon fell back into the old routine.

But not before Patrese gave Mansell a bloody nose. The Italian outqualified the Englishman for the first seven races of 1991, as Williams ironed out the unreliability of its new semi-automatic transmission. Mansell was caught out by it in the most cringeworthy fashion in Montréal. He'd dominated with a performance that foreshadowed much that was to come, but chose to showboat by waving to the crowd at the hairpin. He hadn't changed down, revs dropped below 2000rpm, and the small battery fitted didn't have enough voltage to keep the engine running. It stalled in neutral, with no hope of finding a gear or restarting... and Nigel's old nemesis Piquet (of all people!) swept past to win for Benetton. Newey, expectant of his first F1 victory, was distraught, but only had to wait for the next round in Mexico to taste champagne. Notably, it was Patrese who headed Mansell for a special one-two.

Thereafter, Mansell's quality shone through and he won three on the trot, in France, at Silverstone in front of his increasingly rabid home crowd, and at Hockenheim. But Senna's McLaren had broken

THE CLIMB TO THE SUMMIT WAS NOT YET OVER, EVEN IF IT WAS BEGINNING TO LOOM INTO VIEW - ESPECIALLY WITH THE RETURN OF THE MOUSTACHE IN 'RED FIVE'



Alesi tweaks a cut-out of Mansell at the 1992 British GP. It was Mansell's drive – and possibly title – that Alesi shunned in 1991 in favour of Ferrari



THE HISTORY OF WILLIAMS PART 3

the back of the championship by winning the first four races. He was too far out of Mansell's reach. The McLaren ace hit back at the Hungaroring and Spa, Mansell defeated the Brazilian with some style at Monza, but then came Estoril and the ignominy of a Williams pitstop catastrophe when an untightened wheel nut ruined his day. Patrese won, but for Mansell his title long-shot had just stretched further away. He would famously go wheel to wheel with Senna to win in Spain, but at Suzuka a lame moment of understeer left him picking gravel. Senna was champion for a third time.

But once again good work away from the races boded well. Now with Damon Hill on testing duties — Blundell had chosen to 'race' a hopeless Brabham — the active programme was building a head of steam. Over the winter the team worked on bullet-proofing reliability, shelving the FW15 to focus instead on perfection in a B-spec FW14 —

Although he had a huge car advantage in 1992, Mansell made the most of it and put in some stunning drives. By Hungary the title was his





For 1993 the new line-up of veteran (Prost) and rookie but respected tester (Hill) proved perfect and the team claimed another title double

and the ultimate Williams was born.

No one, not even Senna, McLaren and Honda, could live with Mansell and Williams in 1992. Five of his nine wins were achieved straight off the bat, and he only lost Monaco to a suspected puncture and slow pitstop. Still, his frantic chase of Senna provided the year's standout highlight. 'Nige' swept to another home win at Silverstone, circulating almost 1-2secs a lap faster than anyone for most of the weekend, to Head's lasting satisfaction — and in Hungary, in his 176th race and 13th F1 campaign, Mansell was crowned champion. It was churlish to begrudge him. Yes, he'd enjoyed a monumental car advantage (even if he wouldn't admit it), but he'd also driven brilliantly to make the most of it.

The car itself was hailed a modern wonder, loaded with tech: four-channel anti-lock brakes, traction control, a perfected six-speed transverse semi-automatic gearbox and that long-gestation active-ride suspension system. But it was the traction control that was most contentious, being described as the easiest 0.5-0.75sec gain in lap time any team could hope to find. In 1991 Patrese's edge over Mansell had been found in the slow corners. Now his light-touch advantage was wiped as the drivers planted their right feet and allowed the electronics to find the grip. Additionally, Mansell now revelled in the active



HE SWEPT TO ANOTHER **HOME WIN AT** SILVERSTONE, AND IN HUNGARY, IN HIS 176TH RACE AND 13TH FI CAMPAIGN, MANSELL WAS CROWNED CHAMPION

ride, his old prejudices long forgotten. The brute strength in his forearms on the tiny steering wheel helped - no power assistance back then but so too did his faith. A slight delay in turn-in feedback created a floating sensation that Patrese couldn't get his head around - but Mansell would just commit, trusting his clever car to catapult him through and out of a corner on to the next straight. It's here that Mansell earned the respect some still deny him.

But for all the wonders on track, the games off it were causing the kind of grief Frank and Patrick just couldn't stand. Drivers: are they really worth the pain?

On sabbatical after his sacking from Ferrari, Prost was working hard to get into the best F1 car on the grid for 1993 - and it didn't hurt that Frank had always been a fan. Mansell, on his way to a certain title and still sore from 1990, was ruffled by Alain's confirmation - and then Senna threw in his oar by offering to drive for free! In their midst, Patrese signed for Benetton, certain he'd be left standing in the high-stakes game of musical chairs - but at Monza was left kicking himself when Mansell flounced, announcing his 'retirement' again as negotiations with Williams broke down. Patrese had given Benetton his word - and being a gentleman felt bound to it. A fine five-year stint at the team was over.

As Mansell crossed the Atlantic for a stunning campaign in Indycars, F1 fans contemplated who would land the most coveted drive in F1. Prost had a veto on Senna (fair enough, given

what had passed between them)... so attention swung to the test driver.

Damon Hill hadn't even won a Formula 3000 race, but earned respect at Williams over his many thousands of testing miles. Being the son of the late Graham Hill added unwanted attention, but the British tabloids loved it, quickly swapping their outrage for the team that had 'ousted Our Nige' to demanding Williams 'give Our Damon the drive'. Frank and Patrick took little notice - then hired Hill anyway. With Prost in the other car, there was little to lose.

To some, canny politics bought Prost his fourth world title before he'd turned a wheel, as Senna - who had almost signed for Williams for 1992 - raged in a McLaren now powered by a relatively humble customer Ford V8. There was the embarrassment of sodden Donington at the track's one-off European GP in April. But in an FW15C that simply honed perfection, a driver of Prost's quality was always going to prevail. The team loved working with him as he picked his way to seven wins and the Renault-powered title he'd missed out on a decade before. Meanwhile, Hill led at Silverstone before his engine blew, endured the agony of a puncture while in sight of a win at Hockenheim... then blazed to an unlikely hat-trick in Hungary, at Spa and at Monza Already 33, the man with a zero on his nose had repaid the faith.

But two 'inevitables' were on the horizon: with Prost's title assured and the Frenchman tiring of F1 politics, the path was clear for Frank Williams to finally hook Senna, more than ten years after

Hill went from test driver, without even an F3000 victory to his name, to race winner in 1993, and was a perfect replacement for Mansell





Ten years after he ran Ayrton Senna in a Williams at Donington, when the Brazilian was still in British F3, Frank finally got his man for the 1994 season...

he'd given the Brazilian a trial run in an FWo8C at Donington. Also his team's hard work was undone as the 'gizmos' - active suspension, traction control, ABS - were outlawed for 1994. But with Head and Newey, strength in depth, awesome Renault power and the fastest racing driver in the world Williams surely had nothing to fear. What could possibly go wrong?

NIGEL ROEBUCK'S HEKUE5

JACKY ICKX



IN 1958...

Jacky Ickx was taken by his father Jacques, a prominent journalist, to the Belgian Grand Prix at Spa-Francorchamps, and was so bored that he asked to be taken home.

"Maybe I have always been a bit unusual," Jacky smiled. "The truth is that I never wanted to be a racing driver - never thought about it. Yes, I went to Spa, but I was absolutely not interested. I remember seeing Stirling [Moss] and others at home in Brussels for a cocktail party before the race – even that didn't impress me!"

Ultimately Jacques Ickx came to dislike motor racing, explaining that he had lost too many friends. "Exactly," said his son. "So many had gone that it was hurting him, but still he supported me when I started. I wasn't good at school, but at 16 I was given a trials motorcycle, and for the first time was able to do something well, and realised I could be a winner."

Once into cars, Ickx's rise was meteoric, success in touring cars followed by startling Formula 2 performances for Ken Tyrrell in 1967, which led to a late-season full Formula 1 debut with Cooper, then an offer from Ferrari.

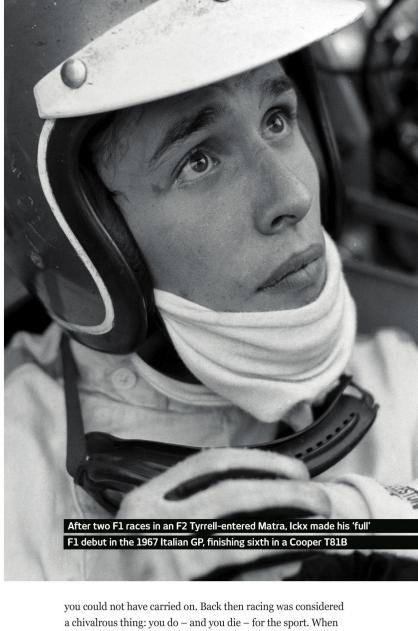
Although the V12 engine was well down on power to Cosworth's DFV, Ferrari made a fine chassis in 1968, and though Chris Amon was invariably the pacesetter, Ickx it was who scored

the team's only victory, in the rain at Rouen.

"Chris was such a lovely guy - and such a beautiful driver, for sure quicker than I was. He had pole positions, led so many grands prix - but never won one, always because of the car. I was new in the team - and then I won the French Grand Prix. It should have been him..."

As Ickx celebrated that day – 7 July – the paddock mourned the loss of Jo Schlesser. After Jim Clark, Mike Spence and Ludovico Scarfiotti, this was the fourth consecutive fatality at this point in a month. "This was my first win," said Ickx, "and at a wonderful circuit, but it was a terrible time. Of course I was young, and you think nothing can happen to you – to someone else, maybe, but not you. Honestly, that was how you had to think - otherwise,





someone was lost it was always accepted in a way. The progress made in safety is wonderful, because now you're almost at risk zero.

"Sometimes I wonder how I survived when so many others did not. I remember an F2 race at Barcelona, where I tried to pass

> Clark on the first lap – and hit the back of his car. We were both out, and it was entirely my fault. Jimmy was the best in the world, and could have been very hard, but he just had a quiet talk to me. One week later he was dead.

"In my house you would not know I had ever been a racing driver. No trophies on display, and just one racing photograph on my wall - the wonderful picture by Jesse Alexander of Jimmy's face, completely drained, after a race at Spa."

In 1969 Ferrari returned to sportscars, so Ickx wishing to continue with John Wyer's sportscar team - left for Brabham, beating Jackie Stewart in a straight fight at the Nürburgring, and also winning at Mosport. Following Amon's departure, though, Enzo Ferrari was keen to have Jacky back, and in 1970 - driving the new flat-12 312B - he came within an ace of becoming world

"

champion. Uniquely in the annals of racing history, he rejoiced that he did not.

"At first the 312B was not so reliable, but later we were able to compete with [Jochen] Rindt and the Lotus 72. By then, though, Jochen had a big points lead, and it looked impossible to catch him."

Then came Monza, where Rindt was killed in final qualifying, and after winning the next race in Canada Ickx found himself the only other driver with the possibility to win the title. "First of all, honestly, the world championship had no meaning for me – the goal was always to win races, not calculate how many points I would get for this position or that.

"Still, this was a horrible situation.

I was obliged to try and win for Ferrari if not for myself, and if I won the last three races I would be champion, by one point.

I won at St Jovite, but then had a problem at

Watkins Glen and finished fourth. That was a *huge* release. I didn't want to be champion, beating a man who... wasn't there any more. Where would have been the glory in that? Jochen deserved the championship – if God exists, he made the right decision. I went to the last race, in Mexico, in a good frame of mind. And I won again."

There would be further victories for Ferrari over the next two seasons, not least a dominant display at his beloved Nordschleife in 1972, but the team's fortunes plummeted the following year, and although Ickx has only good memories of Maranello, he left for Lotus. By now his F1 career was on the wane, but there remained

IN THE REST OF LIFE, YOU KNOW, SELFISHNESS IS A DEFECT, BUT IN RACING IT'S NECESSARY IF YOU ARE GOING TO BE A WINNER

JACKY ICKX

one last victory: in torrential conditions at the 1974 Brands Hatch Race of Champions, he passed the Ferrari of Niki Lauda at Paddock Bend – on the outside...

While a magnificent F1 driver, Ickx is most remembered for his many sports car wins for Wyer, for Ferrari, for Porsche. There were six at Le Mans, including the fabled triumph in 1969, when his Ford GT40 beat Hans Hermann's faster Porsche by a scant 130 yards. The victory Jacky remembers most fondly, though, came in 1977.

"My Porsche retired with an engine problem, and I went to the remaining car, which had also had troubles, and was lying 40th. Ahead there were four works Renaults, which were the quickest cars, but we all drove like maniacs, pressuring them so much that in late morning the last one retired. It was one of those days when nothing will stop you."

As a motorsport all-rounder, Ickx – who won the CanAm championship, won at Bathurst, won the Paris-Dakar – might be thought of in the same terms as Moss or Mario Andretti, yet he looks back on it all with disarming humility.

"In the rest of life, you know, selfishness is a defect, but in racing it's necessary if you are going to be a winner. I'm much happier today because in so many ways I'm another person. I was quite difficult when I was young — winning was my only goal — but now I don't have any ego any more.

"I watch the races on TV, and enjoy going to Monaco or Spa, but whereas at Goodwood I know everyone, F1 is a world I don't know any more, and I don't think I would have survived too well in it – not in the physical sense, because it's so much safer than it was – but all the PR work, and so on, I would have hated.





NOW That

WORDS Stuart Codling Pictures JAMES MANN

THE FERRARI

The ever-changing sophisticate that delivered the Scuderia's most recent championship double





he year 2007 was the beginning of a new era for Ferrari after the senior personnel that had done so much to effect a turnaround in the late 1990s – team principal Jean Todt, technical director Ross Brawn, chief designer Rory Byrne and multiple champion Michael Schumacher – moved on. All was not happy behind the scenes: Todt, disgruntled that Ferrari president Luca di Montezemolo had unilaterally decided to hire Kimi Räikkönen and shove Schumacher into premature retirement, was stepping aside to consider his options elsewhere; Brawn, who held ambitions to be team principal but knew he would never reach that post at Ferrari, was taking a sabbatical; and Byrne was retiring to Thailand to set up a scuba diving school.

Brawn had prepared for his departure exquisitely, though, leaving experienced personnel schooled in his methodologies. Byrne's long-time deputy, Aldo Costa, took over as head of design while Nikolas Tombazis, recently returned after a stint at McLaren, slotted in as chief designer. John Iley, poached from Renault in 2004, remained as head of aerodynamics.

The F2007's predecessor, the 248, had returned Ferrari to contention after a generally miserable 2005 but it wasn't quite sharp enough for Schumacher to claim an eighth world title. Ferrari's response was typically aggressive and, though the F2007 seemed at first to embody a familiar aerodynamic philosophy, it was very different in detail. Some of the changes were responses to new crash regulations and the mandate that two different tyre compounds had to be used in each race, but others represented a huge shift in the Scuderia's thinking. Chief among these was the adoption of the 'zero-keel' approach to mounting the front suspension: it had become increasingly fashionable elsewhere for the aerodynamic gains possible from cutting bodywork under the nose, but it brought compromises in structural stiffness and suspension geometry that Ferrari didn't feel ready to take on until now.

Zero-keel suspension entailed two separate lower wishbones angling slightly upwards to meet the higher nose on each side,

NOW THAT WAS A CAR

THE FERRARI





rather than attaching to a bodywork spur below it. While revising the design, Ferrari also shortened the upper wishbones to lower the roll centre, mitigating the effects of the raised nose. The entire crash structure was longer not only to meet the new regulations but also to extend the wheelbase by 85mm, creating a bigger space for more sophisticated bargeboards to manage the turbulent front-wheel aerodynamic wake.

The sidepod inlets and turning vanes were re-profiled to make more optimal use of the better-quality airflow from the front end. Behind the driver, the 2.4-litre V8 remained theoretically unchanged, since engine development had been



'frozen', but the seven-ratio gearbox now featured 'seamless' shifting, an innovation that had become *de rigueur* since being pioneered by McLaren-Mercedes and BAR-Honda in 2005.

Between the launch and the season opener, Ferrari fitted very different front and rear wings, the front featuring a higher and more twisted chord profile for the second horizontal element where it met the nose. But some of the cleverest and most sophisticated details of the F2007 were invisible to the naked eye, and were initially only the subject of conjecture. Or so it seemed...

After Räikkönen won the season-opening Australian Grand Prix for Ferrari, McLaren filed a detailed technical query to the FIA – the usual mechanism by which a team tries to 'out' a rival it suspects of circumventing the rules – regarding the theoretical legality of a flexible front splitter.

Some flexibility in this area of bodywork was permissible, on the grounds that otherwise it would be more vulnerable to damage when the car rode kerbs. Like many other body surfaces, the splitter was tested for flexibility during scrutineering by applying a force of 500 Newtons; any deflection outside a tolerance of 15mm (5mm downwards, 10mm upwards) would fail the test. The F2007's splitter was hinged at the rear, where it was attached to the tub, and fixed at the front to the underside of the car's nose by a stay containing a pair of springs, one in tension and one in



"BRAWN HAD PREPARED FOR HIS DEPARTURE EXQUISITELY, THOUGH, Leaving experienced personnel schooled in his methodologies."

compression, which were tuneable depending on the nature of the circuit and the amount of ballast carried in the splitter.

Flexible splitters unlocked a virtuous circle of performance benefits: cars could run lower at high speed, enabling their aerodynamic furniture to work more optimally; there was the potential to stall the diffuser for a gain in straightline speed; and they could ride kerbs more aggressively, enabling drivers to take liberties through chicanes. Since the FIA had been using ride height as a tool to limit performance gains for over a decade, it acted immediately to put the brakes on such systems, announcing a new scrutineering procedure from round two, the Malaysian Grand Prix, onwards.

Both Ferrari – and BMW, which was running a similar device on its F1.07 – had to remove their sprung-floor mechanisms, but it's difficult to persuade a genie back into its bottle. Ahead of the Spanish GP, scrutineering procedures were revised again, this time to defeat the use of "buckling stays" – an alternative to the sprung system in which the floor's front support was fabricated to provide a high initial resistance to loads, then to soften. This wrinkle came to light at the end of the year during the 'Spygate' hearings, when Ferrari silk Nigel Tozzi cut McLaren technical director Paddy Lowe to ribbons during cross examination about McLaren's similar system.

The story of how Ferrari's longtime chief mechanic and race technical manager, Nigel Stepney, came to pass design intelligence to McLaren chief designer Mike Coughlan began to bubble to the surface early in the season. What started as rumours of sabotage in the Ferrari garage at Monaco blew up into a storm of rancour between F1's top two teams and an eye-watering \$100million fine imposed on McLaren. Stepney was reported to have felt sidelined during the restructure while Coughlan, similarly, felt he would never achieve the seniority he coveted at McLaren. Together they planned to secure employment with another team and take a tranche of Ferrari secrets with which to impress.

In court it was revealed that Stepney tipped off Coughlan about the F2007's flexible floor ahead of the Australian Grand Prix. Other revelations included knowledge that Ferrari had been using a hydro fluorocarbon gas in its tyres which gave better heat management, and that the F2007 featured a system which adjusted the bias of the rear brakes under load to prevent locking.

The legal battle after the end of the season was every bit as





"FERRARI AND McLAREN FOUGHT TOOTH AND CLAW FROM THE VERY FIRST RACE, AND THE RATE OF DEVELOPMENT WAS STAGGERING"

vicious as the one on track. Ferrari and McLaren fought tooth and claw from the very first race, and the rate of development was staggering. Both teams brought new components to every race and, at the Spanish GP, Ferrari introduced an entirely new monocoque with shorter sidepods, requiring it to be re-homologated. For Silverstone, it added fairings to the outside faces of the front wheels to gain an aero benefit from air passing through the brake ducts – and regardless of how small or how great that benefit, the fairings demanded new fastenings and a new pitstop methodology.

Another development, one with no performance benefit, was imposed on Ferrari early in the season. Disquiet had grown over its use of prominent Marlboro branding in territories





where tobacco advertising was still permitted, replaced with a stylised barcode design in those where it was forbidden. While pushing back against pressure to drop the 'barcode', Ferrari changed the colour of the car to a richer, darker and less Marlboro-packet-like shade of red from Monaco onwards.

Although Räikkönen won the opening round in Melbourne, Fernando Alonso hit back for McLaren by winning in Malaysia, and Räikkönen's team-mate Felipe Massa then won in Bahrain and Spain before Lewis Hamilton consolidated his impressive rookie form with two victories. The result was the McLaren pair eked out an early advantage over the Ferrari duo before they fell into a state of civil war, Alonso feeling unloved in a team that had nurtured Hamilton since his karting days.

Reliability was not the F2007's strongest suit, and its gentleness on its tyres - aided no doubt by the unusual gas within the Bridgestone carcasses - was as much of a hindrance in qualifying as it was advantageous in races. Massa slid out of the four-way battle for the drivers' crown when an inertial damper (present on the Ferraris mid-season, and a legal alternative to Renault's tuned mass dampers banned in 2006) failed at Monza. Hamilton ought to have claimed the title at the penultimate round in Shanghai, but McLaren tied itself in a strategic knot while pointlessly - indeed, vindictively - trying to ensure he finished ahead of Alonso on the road. Instead Räikkönen cantered to victory as Hamilton slithered into the

When Hamilton then fluffed the dramatic denouement at Interlagos, and Massa politely deferred to team orders and handed victory to Räikkönen, it brought a remarkable end to an extraordinary season. Of the three drivers in contention, Räikkönen was the least likely to lift the trophy, and yet he did so after a day when Ferrari executed its race perfectly.

McLaren was subsequently stripped of its points and fined, leaving Ferrari to enjoy its championship double – which remains its most recent. Though it took the constructors' honours in 2008, diminishing returns set in thereafter. Few other Ferraris since have looked as complete as the F2007.

Starts 34

Wins 9

Poles 9

Fastest laps 12

Other podiums 13

Points 204

Chassis Carbonfibre monocoque

Suspension Double wishbones, pushrod-actuated coil-over shock absorbers (front), rotary dampers (rear)

Engine Ferrari 056 V8

Engine capacity 2398cc

Power 790bhp@19,000rpm (estimated)

Gearbox Seven-speed seamless-shift semi-automatic

Tyres Bridgestone

Weight 600kg

Notable drivers Kimi Räikkönen, Felipe Massa



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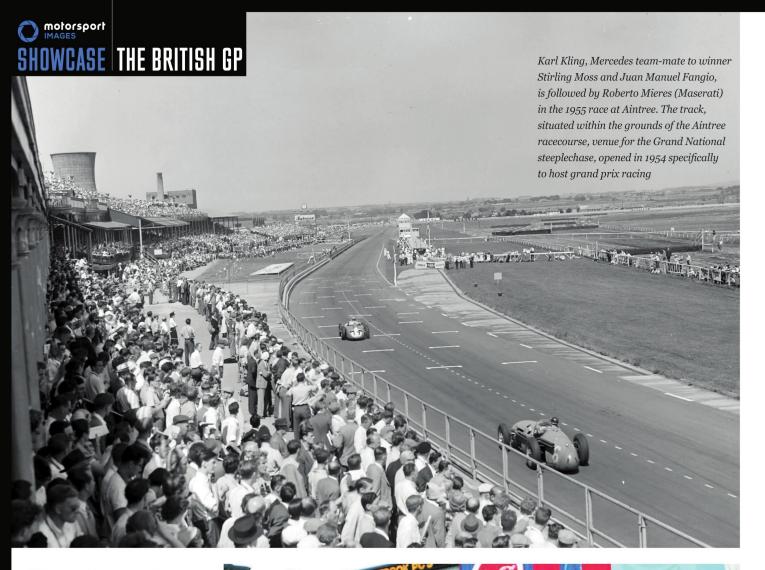
C motorsport THE BRITISH GP SHOWCASE

As racing gets set to resume it's time to take a look at the British GP, the race that kicked off the world championship in 1950

Lewis Hamilton wasn't the first sportsman to crowd surf but in F1 has made the celebration his own after a British GP win. He first threw himself into his adoring crowd in 2016 and has repeated the move in 2017 (pictured here) and 2019







■ Lap 11 of the 2003 race featured an unwanted guest appearing on Hangar Straight. Neil Horan invaded the track, but thankfully all the cars avoided him and the Safety Car was scrambled. Stephen Green, a marshal, caught Horan and Green was later awarded the BARC Browning medal for bravery



Strange as it seems now, the appearance of F1 cars – such as this Jaguar driven by Martin Brundle – on the streets of London in 2004 was part of a promotion for the British GP. However, it also called into question Silverstone's hosting of the race and increased calls for an impractical London GP





Nigel Mansell certainly lit up Silverstone in 1987. After a stop for tyres Mansell was just under 29secs down on Williams team-mate Nelson Piquet with 29 laps to go. On lap 63 of 65, to the delight of the crowd, he took the lead and made it to the finish first, only for his Honda engine to expire just after the line

Michael Schumacher had won for Ferrari at Silverstone in 1998, but the 1999 race was a disaster for the German. On the opening lap, as he tried to regain third from teammate Eddie Irvine, a brake failure sent him into the tyres at Stowe. He broke his lower right leg and missed the next six races as a result





SHOWCASE THE BRITISH GP

Until he was confirmed at Benetton for 1995, as reigning champion
Michael Schumacher's team-mate, it seemed that Johnny Herbert's F1 career was destined to fizzle out.
That all changed at Silverstone that season. Schumacher was leading but tangled with Damon Hill on lap 46 and Herbert picked up the pieces for a very popular first F1 win



1

2013 will be remembered more for the five dramatic high-speed punctures that occured during the race than Nico Rosberg's win. There was so much debris – which the marshals did their best to remove – that FIA race director Charlie Whiting briefly contemplated stopping the race to allow the track to be properly cleared



1

James Hunt leads Niki Lauda at a parched Brands Hatch in 1976. Due to the controversy that surrounded Hunt being allowed to restart the race, and his subsequent disqualification after he had won, it is sometimes forgotten that Lauda actually led on track for the first 44 laps until gearbox problems started to plague his Ferrari...





Sebastian Vettel had just succumbed to a Max Verstappen DRS-assisted pass for third at Stowe, on lap 38 of last year's race, and thought he had a chance to regain the place immediately at the very next corner, Vale. Vettel braked too late and went into the back of the Red Bull, a mistake for which he later apologised

It's race day in 1960 – a Saturday as it was until 1982 – and the drivers of these brand-new Mini Coopers in a support race are the same field of F1 drivers who would take part in the GP later that day. Bruce McLaren, Graham Hill and Jim Clark cross the line almost together, with a partially hidden John Surtees just in their wake

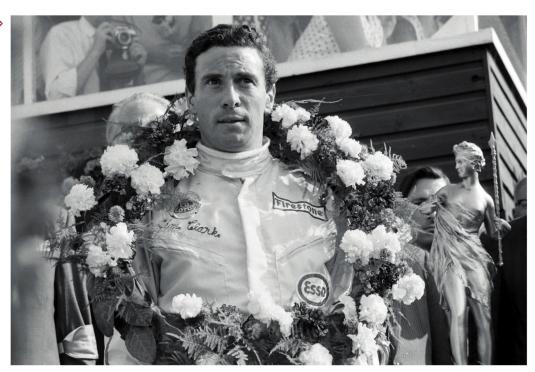




SHOWCASE THE BRITISH GP

In 1966, after four consecutive wins in the race, Jim Clark could only manage to finish a lowly fourth in the British GP, but returned to the winner's circle in 1967, with the race back at Silverstone. It was yet another lights-to-flag victory for Clark, and his fifth and last world championship victory on home soil

One of the quirky events that used to surround the British GP was a post-race cricket match. This one followed the 1974 race and though the result is not known the game included Ken Tyrrell, John Watson, Denny Hulme, James Hunt, Niki Lauda and Graham Hill among others, although some of the 'whites' were strictly non-regulation







Water, water everywhere for Romain Grosjean as his Lotus E20 aquaplanes during practice for the 2012 British GP. Grosjean topped the timesheets in Friday's first practice but the rain was so heavy that Silverstone advised spectators not to travel to the circuit for qualifying on Saturday to save the car parks for raceday spectators



- A very happy Mark Webber after his win in 2010 when, on crossing the line, he uttered the words: "Fantastic, guys, not bad for a number two driver. Cheers." Webber had been displeased that a new front wing on his Red Bull had been removed after practice and put on to team-mate Sebastian Vettel's car for qualifying
- ▼ McLaren pair Lewis Hamilton and Heikki Kovalainen battle through Stowe for the lead of the 2008 race. Hamilton, on the inside, wrestled the place from the Finn and went on to win the British driver's first F1 victory at home by over a minute from Nick Heidfeld and Rubens Barrichello

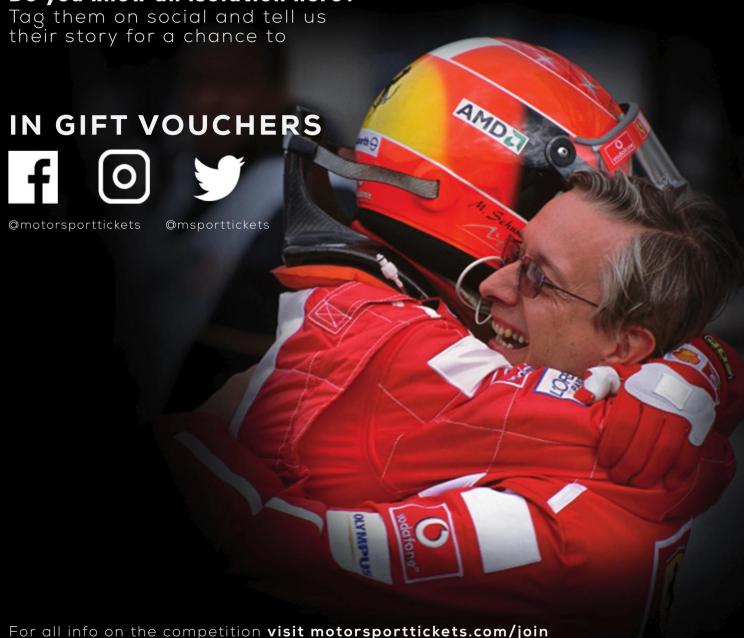




When Ayrton Senna's McLaren ran out of fuel on the last lap of the 1991 British GP – which dropped the Brazilian from second to fourth in the classification – he was at least lucky that Nigel Mansell, the race winner and the man who he had been unable to stay with for 58 laps, was able to give him a lift back to the pits...







TERMS & CONDITIONS: To enter all your need to do is tag the person you want to nominate and tell us their story. The competition runs from 00:01 on 27 May 2020 until the 23:59 on 13 December 2020. A separate winner will be selected each month. Entries to the Contest must be received on our Instagram, Facebook or Twitter social channel. Entries must tag the individual being nominated and include rationale on why the person is being nominated and what act of kindness have been undertaken which should be considered. Any entries received without a nominated person or rationale, or received after the 13 December 2020 will be disqualified. One prize to be awarded per month, consisting of a £250 Motorsport Tickets Gift Voucher for the nominator. The competition is open to all, is not limited to customers of Motorsport Tickets. Motorsport Live, Bookf1, Bookmoto or Bookwec, and is open to those over the age of 18 years of age. Those under this age, can still enter, though parental permission will be needed to accept prize should entry be selected as the winner. Promoters details: Motorsport Tickets, a trading name of Bookf1.com Limited, Suite 31, Beaufort Court, Admirals Way. London. E14 9XL. The Motorsport Tickets Gift Vouchers are redeemable for tickets & associated products for all global motorsport events available at motorsporttickets.com only. Gift vouchers are not redeemable or refundable for cash and the user will not be issued any cash in the event the balance if not used in full at time of expiry. The Winner will be notified in writing via the messaging facility within the social channel within 72 hours of the corresponding month ending. Proof of identity may be required. The winner shall, be entitled to turn down the Prize within 5 working days of receipt of notification, in which case he or she forfeits all rights to the Prize and an alternative winner will be selected. If a winner fails to respond to claim their prize within 5 working days of receipt of the notification, or the notification is confirmed as

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RACE PREVIEW

10-12 July 2020, Red Bull Ring

AUSTRIA ===

F1 WORLD CHAMPIONSHIP ROUNDS 1 & 2



THE MAIN EVENT

The 2020 season will remain a blip on the radar of grand prix history for years to come since the opening tranche of eight races now includes two double-headers. Nearly four months after the cancellation of the season opener in Australia, the world championship gets under way at the Red Bull Ring on the Austrian GP's original slot of 5 July, with the Steiermark GP a week later at the same venue.

That's great news for Red Bull's Max Verstappen. Max may be performing in front of empty grandstands rather than his 'Orange Army', but he's the form man having won the previous two Austrian GPs. There's a caveat here in that by this time Red Bull has usually developed its way out of any early season car weaknesses. But if Max were to win it would make for an even more eventful year...

2019 RACE RECAP

This race signified a turning point for Ferrari prodigy Charles Leclerc. Starting from pole position, Leclerc led the initial stages after Max Verstappen's anti-stall kicked in at the start, dropping him from second to eighth.

High temperatures took their toll on the Mercedes cars and world champion Lewis Hamilton toiled. Verstappen charged back through the middle of the top ten, passing Leclerc's team-mate Sebastian Vettel and finally hassling Leclerc himself. With two laps to run they banged wheels as Verstappen made his move at Turn 3. Leclerc ran wide and Verstappen went on to win - but Leclerc swore he would never be such a walkover in combat again...

KEY CORNER: TURN 3 This relatively open-angled hairpin provides the most significant overtaking opportunity on this short circuit. Judging moves here is tricky because of the proximity of Turn 2, which is merely a kink but it makes the approach to Turn 3 more challenging.



RACE DATA

Venue Red Bull Ring

First GP 1970

Number of laps 71

Circuit length 2.683 miles

Longest straight 0.539 miles

Elevation change 208 feet

Race distance 190.42 miles

Lap record 1m 06.957s

Kimi Räikkönen (2018)

F1 races held 31

Winners from pole 9

Pirelli compounds C2, C3, C4

CAR PERFORMANCE

Downforce level Medium Cooling requirement High Fuel consumption 1.7kg/lap Full throttle 66% Top speed 192mph Average speed 140mph

TIMETABLE RACE 1 (UK TIME)

Friday 3 July

Practice 1 10:00-11:30

Practice 2 14:00-15:30

Saturday 4 July

Practice 3 11:00-12:00

Qualifying 14:00-15:00

Sunday 5 July

Race 14:10

Live coverage Sky Sports F1

Highlights Channel 4

TIMETABLE RACE 2 (UK TIME)

Friday 10 July

Practice 1 10:00-11:30

Practice 2 14:00-15:30

Saturday 11 July

Practice 3 11:00-12:00

Qualifying 14:00-15:00

Sunday 12 July

Race 14:10

Live coverage Sky Sports F1 Highlights Channel 4

THE WINNERS HERE











2360	3365	2750	2350	2360
2019	2018	2017	2016	2015
Max	Max	Valtteri	Lewis	Nico
Verstappen	Verstappen	Bottas	Hamilton	Rosberg
Red Bull	Red Bull	Mercedes	Mercedes	Mercedes



RACE PREVIEW

F1 WORLD CHAMPIONSHIP ROUND 3







THE MAIN EVENT

Previously constitutionally conjoined for 50 years prior to 1918, Austria and Hungary don't share a language or currency but geographical proximity is convenient in the COVID-19 era: the Hungaroring is just 260 miles by road from the Red Bull Ring, enabling the temporarily slimmeddown F1 circus to relocate to Budapest a week after the Austrian double-header.

Situated just east of the Hungarian capital, the Hungaroring is an undulating track which has grown in stature in recent years. It remains a tricky place on which to overtake, but circumstances have conspired to make many of the most recent races memorable and exciting for a variety of reasons. The variable weather helps – it can go from hot and dusty to soaking wet over the race weekend.

2019 RACE RECAP

This was the grand prix that ended Pierre Gasly's tenure as Max Verstappen's Red Bull team-mate. Verstappen qualified on pole position but Gasly's poor performance on Saturday – he started sixth – proved crucial on race day.

Verstappen led from lights out, helped by the Mercedes of Lewis Hamilton and Valtteri Bottas tripping over each other as they challenged him into the first two corners. Wing damage pegged Bottas back and although Hamilton appeared to be struggling with tyres and brakes, the huge gap behind him - which ought to have been occupied by Gasly and Bottas – enabled him to make a second pitstop and catch and pass Verstappen late on.

KEY CORNER: TURN 1 Extended and reprofiled in 2003 to improve the possibility of overtaking, Turn 1 is a sharp hairpin at the end of the main straight. In its current form, braking too late compromises drivers into the following two corners and opens up more opportunities to pass.



RACE DATA

Venue Hungaroring First GP 1986 Number of laps 70 Circuit length 2.72 miles Longest straight 0.546 miles Elevation change 123.69 feet Race distance 190.53 miles Lap record 1m 17.103s Max Verstappen (2019) F1 races held 34 Winners from pole 15 Pirelli compounds C2, C3, C4

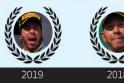
CAR PERFORMANCE

Downforce level High Cooling requirement High Fuel consumption 2.1kg/lap Full throttle 55% Top speed 193mph Average speed 123mph

TIMETABLE RACE (UK TIME)

Friday 17 July **Practice 1** 10:00-11:30 Practice 2 14:00-15:30 Saturday 18 July **Practice 3** 11:00-12:00 Qualifying 14:00-15:00 Sunday 19 July Race 14:10 Live coverage Sky Sports F1 Highlights Channel 4

THE WINNERS HERE.











-				
2019	2018	2017	2016	2015
Lewis	Lewis	Sebastian	Lewis	Sebastian
Hamilton	Hamilton	Vettel	Hamilton	Vettel
Mercedes	Mercedes	Ferrari	Mercedes	Ferrari



possibility that rancour might leak into the real world.

"That's the thing that happens when you get professional racing drivers into something – we all want to win, even if it's a game. Whatever it is, we all get competitive," said ex-Sauber F1 driver Marcus Ericsson, who was

TWITCH HAS TAKEN US TO PLACES EVEN NETFLIX'S DRIVE TO SURVIVE SERIES HASN'T

involved in the inter-driver beef following the chaotic end to IndyCar's *iRacing* series. "I think there might be some rivalries that go on from what happened in *iRacing*. It will be fun though."

Thankfully, F1's band of 20-somethings who have sunk their free time into sim racing have been grown up about it. At no point has there been any nastiness between the protagonists. It's all led to highly unlikely events taking place: Charles Leclerc dressing in a banana suit; Lando Norris shaving his head; and George Russell winning races for Williams (and winding up Alex Albon in the process). Fantastic! While other series have seen the negative impact

of taking drivers away from their PR babysitters and letting them act freely, it has only been a good thing for F1.

We've seen the true colours of some brilliant characters, offering sides previously unseen. Twitch has taken us to places even Netflix's *Drive to Survive* series hasn't.

The hope is that even in the era of closed events and social distancing, these newly formed bromances can prove lasting.

Norris, Leclerc, Russell and co. are likely to be around for years to come. If this kind of cordiality can also persist, it will give us a likeable, open and positive grid – something that's perhaps been lacking at times.

The hubbub over sim racing may now be coming to an end, but let us hope its positive effects continue to be felt.

MUCH ADO ABT NOTHING?

As the motorsport world begins to edge back towards normality and the resumption of on-track racing, the Esports scene will also face a transitional phase. The spike in interest in virtual racing will undoubtedly have converted many fans and racers but let's face it, nothing quite beats the 'real thing'.

For some drivers, incidents over the last few months will have a profound impact on their racing futures. In the case of Formula E driver Daniel Abt, it may have ended his career entirely.

Abt was revealed to have used a professional sim racer to take his place in a Formula E 'Race at Home' event. The Audi driver later apologised and explained it was all meant to be a joke, and that he had envisioned turning the exercise into a video. But his employers saw no amusement in the scenario. Abt was suspended and then dismissed from Audi's Formula E squad (run by his father), putting the brakes on his motorsport career. Audi's rationale was that its values of "integrity, transparency and consistent compliance with applicable rules" had been breached by Abt's shenanigans.

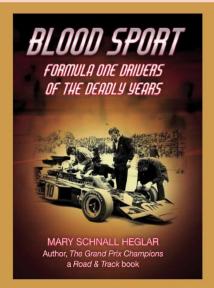
The episode served to reignite the "it's just a game" debate that has rumbled throughout the Esports boom of the past few months. In the absence of physical motorsport, the application of the same laser-focused mentality to sim racing has hardly been unanimous.

Some have taken it far more seriously than others; and even if you do regard Abt's transgression as trivial, there are wider issues surrounding trust and integrity in the sports world given the prevalence of betting. There's also the

The negativity over Abt's offence is at odds with the good vibes surrounding F1's Esports drivers



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*C.B., <u>Antique Automobile</u>, reviewing Heglar's first book, The Grand Prix Champions

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F1 UPGRADES

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F1 2020

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It's a photo finish between on-track racing and the officially licenced product as the latest version of the F1 game franchise launches hot on the heels of the (belated) first grand prix of the year. Covering PC, Xbox One and PlayStation 4 formats, F1 2020 features all the cars and drivers of the 2020 season as well as the full line-up of tracks originally scheduled to be on the calendar.

That means you'll be able to lap Zandvoort virtually before F1 returns to the Dutch GP venue next year, as well as the new Hanoi street circuit. Also new for this iteration is the 'My Team' mode which enables players to create their own team and select a driver to be their team-mate.

A slightly controversial facet of this, received rather sniffily on social media, has been the inclusion of Top Trumps-style ratings for each driver, all of which affect their in-game performance. Cue much grinding of teeth from fans of particular drivers who feel their man has been badly under-rated in certain areas.

A two-player mode featuring a split screen makes a welcome return to the game, and there's also the option to choose between running a full season or two shorter options. A Michael Schumacher Edition (at extra cost) enables you to race four iconic cars from Michael's career: the Jordan 191, Benetton B194 and B195, and the Ferrari F1-2000.

SHADOW - THE MAGNIFICENT MACHINES OF A MAN OF MYSTERY

Price £75

Author Pete Lyons evropublishing.com

Fifty years ago the Shadow marque appeared in motor racing for the first time in the CanAm championship. Latterly it spread its wings into F1 and F5000 before fizzling out in 1980.

In 11 seasons it claimed one CanAm title and a single F1 victory but its story is a fascinating one, encompassing tragedy as well as triumph: in the 1977 South African GP one of the team's cars retired in flames and a marshal crossing the track with a fire extinguisher was struck by Shadow's lead driver, Tom Pryce. Both the marshal and Pryce, whose head hit the extinguisher, died immediately.

Possibly the most fascinating aspect of the Shadow story is the team's founder, Don Nichols: a former military man who had parachuted into France on D-Day and served as a counter-intelligence operative in the Korean war, latterly an entrepreneur with several business interests in Japan (he was also involved in the



project to build Fuji Speedway). Nichols took amusement in playing on his shadowy past, even adopting a cloaked figure as his team's logo.

Author Pete Lyons, grand prix editor of *GP Racing's* sister magazine *Autosport* during the 1970s, was reporting on CanAm when Shadow made its debut. His recollections – and interviews with the principal cast, including Nichols himself – form the backbone of this niche but fascinating book.





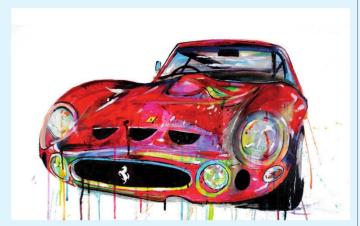


HAUT DE GAMME POSTERS

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London-based multi-media artist and motorsport fan Alexander Hall, the man behind the Haut de Gamme brand, can name Formula 1 star Daniel Ricciardo among his highprofile clients. Haut de Gamme prints also feature extensively in IHG hotels around the world. The champagne celebration on the podium after a race is the inspiration for the technique behind these prints of iconic sports cars, vividly rendered in a dripping paint effect.











ASSETTO CORSA COMPETIZIONE

Price £34.99 505games.com

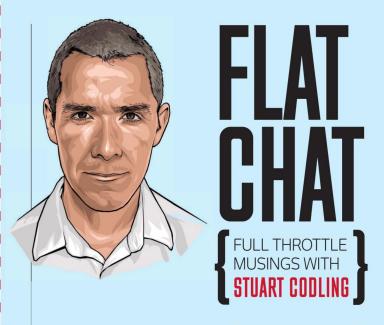
This racing-focused spin-off from Kunos Simulazioni's popular Assetto Corsa sim was a hit on PC when it was released last summer. Now it makes its way onto the Xbox One and PlayStation 4. That entails some trade-offs in terms of graphical fidelity compared with high-end PCs although you'd be hard pushed to notice once immersed in the action.

Assetto Corsa Competizione is the official game of the real-life GT World Challenge (formerly known as the Blancpain GT Series), and its painstaking modelling of the GT3 class attracted a great deal of interest from F1's Esports dabblers - including Charles Leclerc - during

the COVID-19 lockdown. Although there are Sprint and Endurance races (including the Spa 24 Hours), this is a proper simulation rather than an arcade-style game. The developer claims to have used Laserscan technology to model every wrinkle of the circuits, and the characteristics of the cars - from the likes of Lamborghini, Ferrari, Mercedes, McLaren and Porsche - are reproduced as precisely as possible. Kunos has also worked with Pirelli to finesse tyre performance.

An add-on Intercontinental GT Pack features extra tracks (including Suzuka and Mount Panorama) as well as more drivers, teams and liveries.







last season's championshipwinning Mercedes, not a ripple of complaint has emanated from Brackley. Likewise, successive generations of Haas chassis closely resemble Ferrari's back catalogue since Haas employs a perfectly legal (though

PERHAPS FI REALLY IS COMING BACK TOWARDS RENAULT

widely complained-about) technical partnership with Maranello. It buys as many components as it can from Ferrari; it is the very definition of a client.

Might this cosiness be in danger of being unpicked by the coming budget cap? Renault team principal Cyril Abiteboul has suggested that it could.

"Now that we have a budget cap that is low enough that the grid will be much more competitive, I'm curious to see what will happen to those collaborations between teams," he told *GP Racing's* sister title *Autosport*. "Because I think right now Mercedes is happy to let Racing Point copy its car. Whether it's legal or not legal isn't

my point – but they're very happy to help them in making their car very competitive. I will be very curious to see if that's still the case for 2022.

"Anyone will be a threat to anyone, that's the game changer."

You would be hard-pushed to find anyone not desirous of such a state of affairs. But Renault is a team with a recent history of permitting under-delivery to trudge in on the coat tails of over-promising, and I fear that Cyril's optimism may not be accurately reflected in what transpires over the next couple of years. For a start, there will still be huge gaps in resources and expenditure: in our feature on p50 this month you'll see both Otmar Szafnauer and Guenther Steiner admit their teams are spending less than the budget cap threshold of \$145m. Even if the larger teams undergo shrinkage pains as they downsize, they still have vast archives of data and research they can't unlearn.

Or perhaps Formula 1 really is coming back towards Renault, the one team in the field with no clients to speak of. Abiteboul has long said that Renault's aim was to beat the top teams while operating at 85% of their resources. Maybe this is his chance to prove that it can...

GP Racing has a podcast!

Search for 'Flat Chat with Codders' in your podcasting platform of choice.

DON'T BITE THE HAND THAT FEEDS YOU...

Given unfettered spending, racing series really do develop a practical and philosophical parallel with wedding cakes – they all end in tiers.

Arguments about how to rein in that spending, at least in Formula 1, have been raging since not long after the recession before the recession before last. What's interesting is that while the competitors have (grudgingly for the most part) knuckled under to FIA clampdowns on testing, mandatory long-life gearboxes and engines and such, a new ecosystem has gradually emerged — one in which smaller teams end up as clients or vassals to larger ones.

Compare the spread of laptimes across the grid with those of, say, 25 years ago, and you'll see the pace differential has come down from perhaps 8-10secs to 3-4secs per lap at certain tracks. And yet tiers remain, albeit fewer and more compact. F1 is currently a two-tier sport in which you cannot win unless you're driving for one of the top three teams, and the gap between them and

the rest of the grid remains substantial.

This state of affairs has persisted during the hybrid era, during which time the client-team system has evolved, founded upon the principle of powertrain powerbroking. The likes of Racing Point and Williams may gnash their teeth at being unable to get closer to the front, but when did you last see them vote against Mercedes? And while several midfielders have railed against the Racing Point car's close resemblance to

Currently, if you want to win in F1 you have to drive for one of the big three teams. But are the clients about to upset their masters?





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