RICHARD MILLE





CALIBER RM 33-02

www.richardmille.com



MERC POWER + RICCIARDO COMING

McLAREN IS THE TEAM TO WATCH



GP RACING

THE BOY WHO WOULD BE KING

GEORGE RUSSELL: NEXT IN LINE FOR THE MERCEDES SUPERTEAM

HOW NOT TO DO F1

Lessons from a famous failure

INSIDE

HAAS REBOOT: K-MAG & RoGRO OFF THE GRID

9 772633 815009 01>

UK £5.99
January
2021

Details designed to tempt.

The Audi Q3 Black Edition.

Search Audi offers

Official WLTP fuel consumption figures for the Audi Q3 Black Edition range in mpg (l/100km) from: Combined

Figures shown are for comparability purposes; only compare fuel consumption and CO_2 figures with other vehicles tested to the same technical procedures. These driving styles and vehicle load. Data correct at 01 November 2020. Figures quoted are for a range of configurations and are subject to change due to ongoing approvals/

30.7 (9.2) – 49.6 (5.7). CO_2 emissions: 209 – 150g/km.

figures may not reflect real life driving results, which will depend upon a number of factors including the accessories fitted (post-registration), variations in weather, changes. Please consult your Audi Centre for further information. Image for illustrative purposes only.







DESIGNED IN ENGLAND. RACED WORLDWIDE.

"...World's largest range of motorsport watches"

OMOLOGATOWATCHES.COM
T +44 1753 622555

OMOLOGATO®

GP RACING

1 ETON STREET, RICHMOND,
LONDON, TW9 1AG, UK



CONTENTS

JANUARY 2021

SECTOR 1

6 **IGNITION**
The burgeoning reputation of George Russell

8 **PARADES**
This month's best F1 images

18 **F1 INSIDER**
Grosjean crash inquiry launched; engine war latest

24 **F1 ANALYST**
Ben Edwards on why experience still matters

26 **UNDER THE HOOD**
Pat Symonds on format changes for F1

SECTOR 3

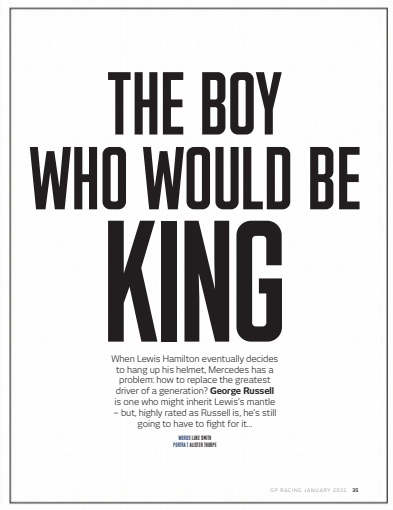
86 **SUBSCRIPTIONS**
Four issues of *GP Racing* for £19.99

88 **REPORTS**
From Turkey, Bahrain and Sakhir

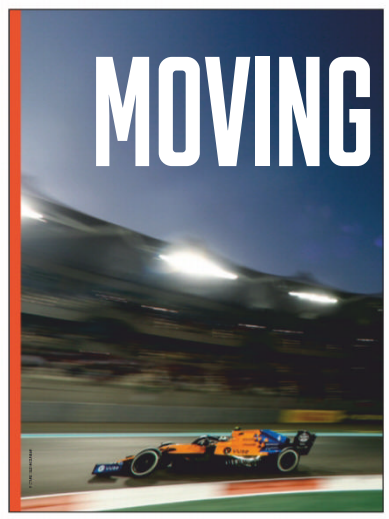
94 **PRODUCTS AND DOCUMENTARIES**
Reviews of the best F1 gear and a glance at some of the F1 documentaries currently on show

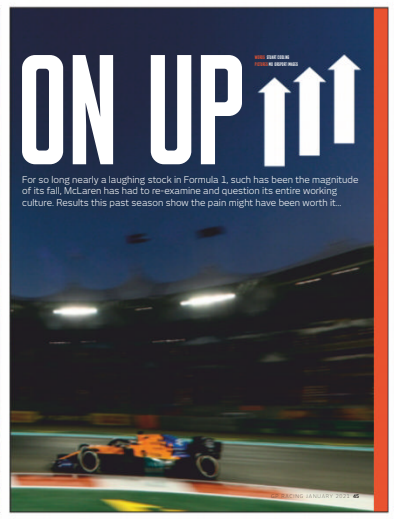
98 **FLAT CHAT**
Stuart Codling on a question of F1's taste



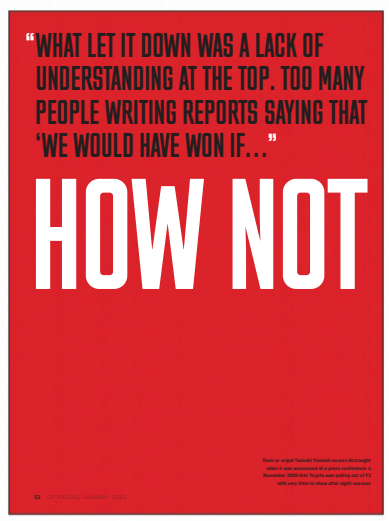


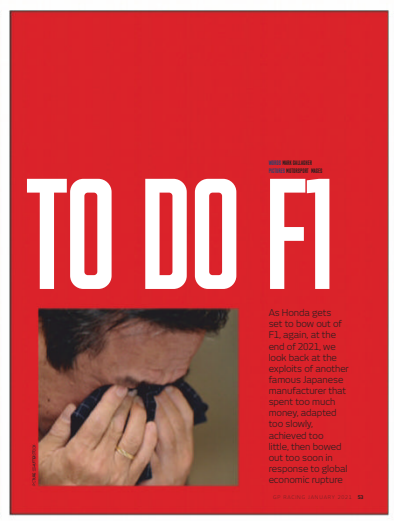
34
REGAL RUSSELL: THE BATTLE TO SUCCEED LEWIS



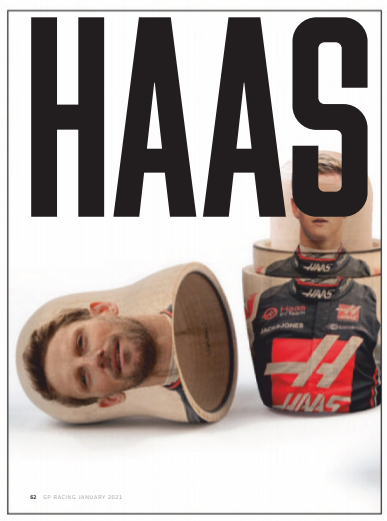


44
McLAREN: ON THE RIGHT TRACK AGAIN





52
WHAT WENT WRONG WHEN TOYOTA TRIED FORMULA 1





62
NEW FACES AT HAAS

42 **IN CONVERSATION WITH**
Williams Racing's acting team principal Simon Roberts

44 **McLAREN'S RENAISSANCE**
It's been a long road back, but McLaren is on the up again

50 **IN CONVERSATION WITH...**
...Lewis Hamilton as he reflects on winning his seventh world title

52 **DON'T DO IT LIKE THAT...**
The story of Toyota's failed attempt to conquer Formula 1

62 **HAAS: A NEW BEGINNING**
New drivers are only part of big changes at the American team

68 **NIKITA MAZEPIN**
Just who is the new Haas driver; Russia's latest F1 hope?

70 **NOW THAT WAS A CAR**
The McLaren MP4/6, the only V12-powered car to win a title

76 **NIGEL ROEBUCK'S HEROES**
The gentlemanly Innes Ireland

78 **MOTORSPORT SHOWCASE**
Season finales come under the Motorsport Images spotlight

F1 PRO

31 **STRAIGHT TALK**
Mark Gallagher on the addition of Saudi Arabia to the F1 calendar

32 **SUSTAINABILITY**
How Formula 1 is making progress towards its sustainability goals

IGNITION

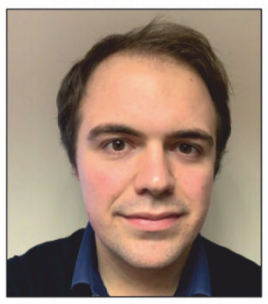
JANUARY 2021



Ben Anderson

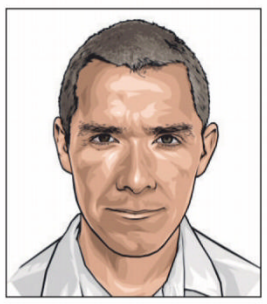
@BenAndersonF1

Contributors



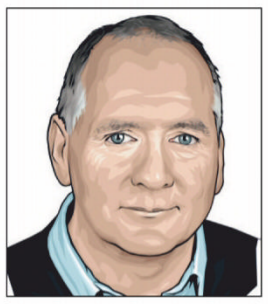
LUKE SMITH

Luke explains how George Russell has put himself in pole position for a Mercedes drive when it becomes available (p34)



STUART CODLING

Sustainability (p32), Simon Roberts (p42), McLaren (p44) and Haas (p62) all get the Codders treatment this month



MARK GALLAGHER

In addition to his column (p31), Mark examines Toyota's unsuccessful dalliance with F1 and details where it all went wrong (p52)



ALISTER THORPE

A regular behind the lens for *GP Racing*, Alister is responsible for the George Russell portrait that adorns our front cover this month

The growing reputation of 'King' George

In a sport as technologically dependent as motor racing, the respect of one's peers can count for as much as any trophy cabinet. Dan Gurney didn't win a world championship, and tasted victory in only a handful of F1 races in the 1960s, but he was still good enough to worry that decade's defining driver, Jim Clark. It's why the likes of Stirling Moss and Gilles Villeneuve were so revered, despite their achievements not matching the range of their abilities. But those who were there knew what the statistics couldn't say.

There's a long way to go before we can say this month's cover star, George Russell, definitively belongs in such rarefied company, but the way he finished his second F1 season by making an outstanding subsitute appearance for Mercedes in place of Lewis Hamilton strengthens the reputation Russell was already building among his peers – one that outstrips the limitations of his usual machinery.

With no disrespect intended towards Williams, Russell is much better than the FW43 allowed him to show. His fellow next-gen racers knew it, and the unexpected events of the Sakhir Grand Prix proved it beyond question.

During F1's coronavirus-enforced shutdown earlier this year, when many drivers passed their time racing online, Charles Leclerc was asked by one of his social media followers about drivers who would be proper contenders in the right car. Russell – who won F1's official sim-racing title during lockdown – was someone Leclerc said "for sure" would be up there in the right equipment.

That's why, when Russell suffered the ignominy of crashing out behind the Safety Car at Imola, there was an outpouring of support from fellow drivers past and present, rather than your typical internet pile-on. He consistently impressed far too many people – including double world champion Fernando Alonso – to be written off on the back of that mistake. After Sakhir, no one would dare...

It's a measure of Russell's character and maturity that in the face of that acute Imola disappointment he made a written apology to Williams for throwing away its best chance at scoring points in 2020. This is a further indication that Russell keenly understands his role within F1 goes far beyond hauling his usual back of the grid car into Q2 far more often than it deserves.

As Luke Smith's feature (page 34) explains, George Russell can be a real star of F1's future. He has the full support of Mercedes behind him, and a ringing endorsement from Lewis Hamilton no less. We've now also seen him tested further, in a car more capable than the FW43, and against a team-mate more fearsome than Robert Kubica 2.0 or Nicholas Latifi. Russell has shown the world what his peers already know to be true: that he belongs at the very front of Formula 1.

Team principals

Editor
Ben Anderson
President, Motorsport Network
James Allen
Vice President of editorial
James Dickens

Drivers

Group managing editor
Stewart Williams
Executive editor
Stuart Codling
Art editor
Frank Foster

Pit crew

Principal photographer
Steven Tee
Columnists
Pat Symonds
Mark Gallagher
Nigel Roebuck
Ben Edwards

Photo agency
Motorsport Images

Director, global client success
Sunita Davies

Production controller
Ben Webster

Advertising

UK sales manager
Ben Fullick

Editorial tel
+44 (0)20 3405 8100

Subscriptions

Email: help@asm.secureorder.co.uk
Customer hotline/ back issues
0344 848 8826
Digital marketing manager
Kaye Benfield

recycle
When you have finished with this magazine please recycle it.

Partners

Australia Mexico Poland

GP Racing is published monthly in the above territories.

Circulation queries Seymour Distribution Ltd, 2 East Poultry Avenue, London EC1A 9PT. Tel: +44 (0)20 7429 4000. Fax: +44(0)20 7429 4001. Email: info@seymour.co.uk. ISSN 2633-8157 (print) ISSN 2633-8165 (online). EAN 07713614480012. Printed by William Gibbons & Sons Ltd, 28 Planetary Road, Willenhall, Wolverhampton WV13 3XT.

© 1996 Autosport Media UK.

Reproduction in whole or in part of any photograph, text or illustration without written permission from the publisher is prohibited. Due care is taken to ensure that the content of *GP Racing* is fully accurate, but the publisher and printer cannot accept liability for errors and omissions. *GP Racing* is a member of the Audit Bureau of Circulations. We abide by the Editors' Code of Practice and are committed to upholding the highest standards of journalism. If you think we haven't met those standards and want to make a complaint, contact 0203 405 8100. Autosport Media UK Ltd is a part of Motorsport Network LLC

Subscriptions *GP Racing* subscriptions, Autosport Media UK, 3 Queensbridge, Northampton, NN4 7BF, UK. Email: help@asm.secureorder.co.uk. Tel: 0344 848 8826. Overseas Tel +44 (0)1604 251 454. *GP Racing*, ISSN 2633-8157 (USPS 25186) is published monthly by Autosport Media UK, 1 Eton Street, Richmond, TW9 1AG, UK. The US annual subscription price is US$68.37. Airfreight and mailing in the USA by agent named WN Shipping USA, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Brooklyn, NY 11256. US Postmaster: Send address changes to *GP Racing*, WN Shipping USA, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Subscription records are maintained at Autosport Media UK, 1 Eton Street, Richmond, TW9 1AG, UK. Air Business Ltd is acting as our mailing agent.

Thanks to Tim Bampton, Harry Bull, Emma Carden, Jenny Carroll, the FIA, Mike Gascoyne, Rebecca Leppard, Allan McNish, Stuart Morrison, Sophie Ogg, Charlotte Sefton

GP RACING IS POWERED BY motorsport NETWORK

BOTB

WIN YOUR DREAM CAR

TWO GUARANTEED WINNERS EVERY WEEK.

ANTHONY OVERINGTON WINS AUDI RS6 + £100,000



WIN YOUR DREAM CAR!

£35 MILLION WORTH OF PRIZES WON SO FAR

ENTER NOW AT BOTB.COM

Point your camera at me!



TOM BOWLES
RANGE ROVER VELAR + £20,000



CARL CREED
BMW M2 COMPETITION + £10,000



SAM KENWRIGHT
LAMBORGHINI URUS



STEPHEN MCHUGH
BENTLEY CONTI + £20,000


AMG
PETRONAS
Hewlett Packard
Enterprise
FOS

F1 PARADE
motorsport IMAGES

Fluttering ‘fetti is a Turkish delight

Lewis Hamilton has just won the Turkish Grand Prix and, with it, a record-equalling seventh world championship, so that made this the most important podium of the year. The pressure was on!

I was one of three ‘pool’ photographers allowed into parc fermé so I was able to photograph Lewis getting out of the car. You’re then allowed to stay provided you maintain a distance from team personnel.

There’s an element of luck as well as craft in shots like these. I’d been told there would be confetti, which means manual focus. You want the drivers’ faces sharp, which is tricky while they’re jumping around, but it all came together with this shot.



Photographer
Steven Tee

Where Istanbul, Turkey
When 3.16pm, Sunday 15 November 2020

Details Canon EOS-1DX MkIII 400mm lens, 1/800 @ F5

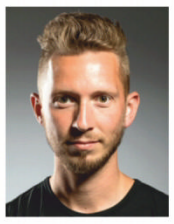
F1 PARADE
motorsport IMAGES

Miraculous escape from the flames

I was shooting the start of the race from Turn 2, which is where you expect to see most (if not all) of the action on the opening lap. Within a second or so of the last cars going through I heard a loud bang and saw an enormous fireball shooting into the sky.

So I ran towards it. And the scene I found was horrific, not least because I'm the Haas team's photographer so I know both the drivers very well. The car was almost unrecognisable.

For an instant you wonder whether you should be shooting an incident like this, but then instinct takes over and you do your job, just like the safety crew. There are people relying on you to document what's happened.



Photographer
Andy Hone

Where Sakhir, Bahrain
When 5.13pm, Sunday 29 November 2020

Details Canon EOS-1DX 500mm lens, 1/640 @ F4


FIA
OMP
OMP
MEDICAL
DELEGATE
F1
ACTION
ROAD SAFETY


BHR1845
RECOVERY PERSONNEL
COURSE
BAHRAIN 2020
8



F1 PARADE
motorsport IMAGES

No substitute for manual labour

Even after we'd learned that Romain Grosjean was safely out of his burning Haas and relatively uninjured, it was obvious there was going to be a long red-flag period while the barrier near Turn 3 was fixed and the wreckage removed. What was left of the car stood as a testament both to modern safety standards and the enormity of the accident.

The car had hit a part of the barrier which angles out slightly to create an opening for rescue vehicles to get onto the track. I found a group of marshals pushing and pulling the back half of Grosjean's car through the gap while others worked to clear the other side, where the front of the car had come to rest.



Photographer
Mark Sutton

Where Sakhir, Bahrain
When 5.25pm, Sunday 29 November 2020

Details Nikon D5
70-200mm lens, 1/250 @ F4.5

F1 PARADE
motorsport IMAGES

The calm after the desert storm

As a team photographer you get to know the drivers well, especially after a year such as this when we've all been in the same 'bubble'. After the podium and interviews I caught up with Checo as he was coming back to the paddock, knowing he would go to his room to get changed and there would be an opportunity for a shot like this.

Checo's manager Luis said it would be OK for me to go in, so I got to work. My Spanish isn't good enough to identify who Checo was talking to on the phone, and he soon ceased to register that I was there – maybe because I was using my new Canon R5 camera, which has a silent shutter...



Photographer
Glenn Dunbar

Where Sakhir, Bahrain
When 10.32pm, Sunday 6 December 2020

Details Canon EOS-R5 28-70mm lens, 1/500 @ F2


BOMBARDIER
Acronis
canada
Claro

F1 PARADE

motorsport IMAGES

When Russell spanked Bottas

As a racing enthusiast as well as a photographer, you always hope to be on the scene for moments such as this. A grand prix at the same venue, but with a different layout, opens up opportunities and this part of the circuit has only been used once before (in 2010). Then the chicane fed into a tight right-hander rather than a more flowing section, so it was less critical.

I thought this would be a spot where things would happen and indeed there was plenty of action here. This was a great moment. Bottas had gone wide a moment earlier and they arrived together, George super-committed with an audacious – dare I say it – Lewis-style manoeuvre.



Photographer
Charles Coates

Where Sakhir, Bahrain
When 9.27pm, Sunday 6 December 2020

Details Canon EOS-1DX MkII 600mm lens, 1/800 @ F4


INEOS
77
63
AMD
ETIHAD
EPSON
CROWDSTRIKE
ETIHAD
PETRONAS
PRIMAX
IWC
SCHAFFHAUSEN

01 | **NEW F1 SAFETY PROBE**
Grosjean accident prompts FIA investigation

FIA LAUNCHES GROSJEAN CRASH INQUIRY

01 **Motorsport's governing body will** conduct a thorough investigation into the circumstances surrounding Romain Grosjean's dramatic accident on the first lap of the Bahrain Grand Prix. It will focus on the effectiveness of all the safety provisions – from the car itself to the driver's personal safety equipment, the barriers, the marshals and the Medical Car – and identify areas for improvement.

> "WE KNOW THAT IF THE HALO HAD NOT BEEN THERE, I DON'T WANT TO THINK ABOUT WHAT WOULD HAVE BEEN THE TRAGEDY"
> JEAN TODT

"As with all serious accidents, we will analyse every aspect of this crash and collaborate with all parties involved," said FIA safety director Adam Baker. "With so much data available in F1, it allows us to accurately determine every element of what occurred, and this work has already begun. We take this research very seriously and will follow a rigorous process to find out exactly what happened before proposing potential improvements."

The Haas team and the Grand Prix Drivers' Association (of which Grosjean is a director) will also be involved in the investigation. FIA technical delegate Jo Bauer and head of competitor safety Nuno Costa began by spending several hours examining the wreck of Grosjean's VF20 with senior engineers from Haas the day after the grand prix.

While the circumstances leading up to the accident are clear and well-documented (see p90), there are details relating to the impact and its aftermath which bear further investigation, including why the car split in two and how part of it broke through the barrier. The fire itself is also a concern: while it's claimed the fuel cell remained intact during the impact, the ERS battery pack is understood to have caught fire, requiring another extinguisher to be deployed.

Grosjean struggled to free himself from the cockpit before the fire took hold. In a frank interview several days after the accident he described how he initially reconciled himself to the prospect of death before the thought of leaving his children without a father motivated him to try to free himself again. His left foot was trapped behind the brake pedal, which is why he emerged wearing only one boot, and his gloves burned black as he fought his way out of the inferno.



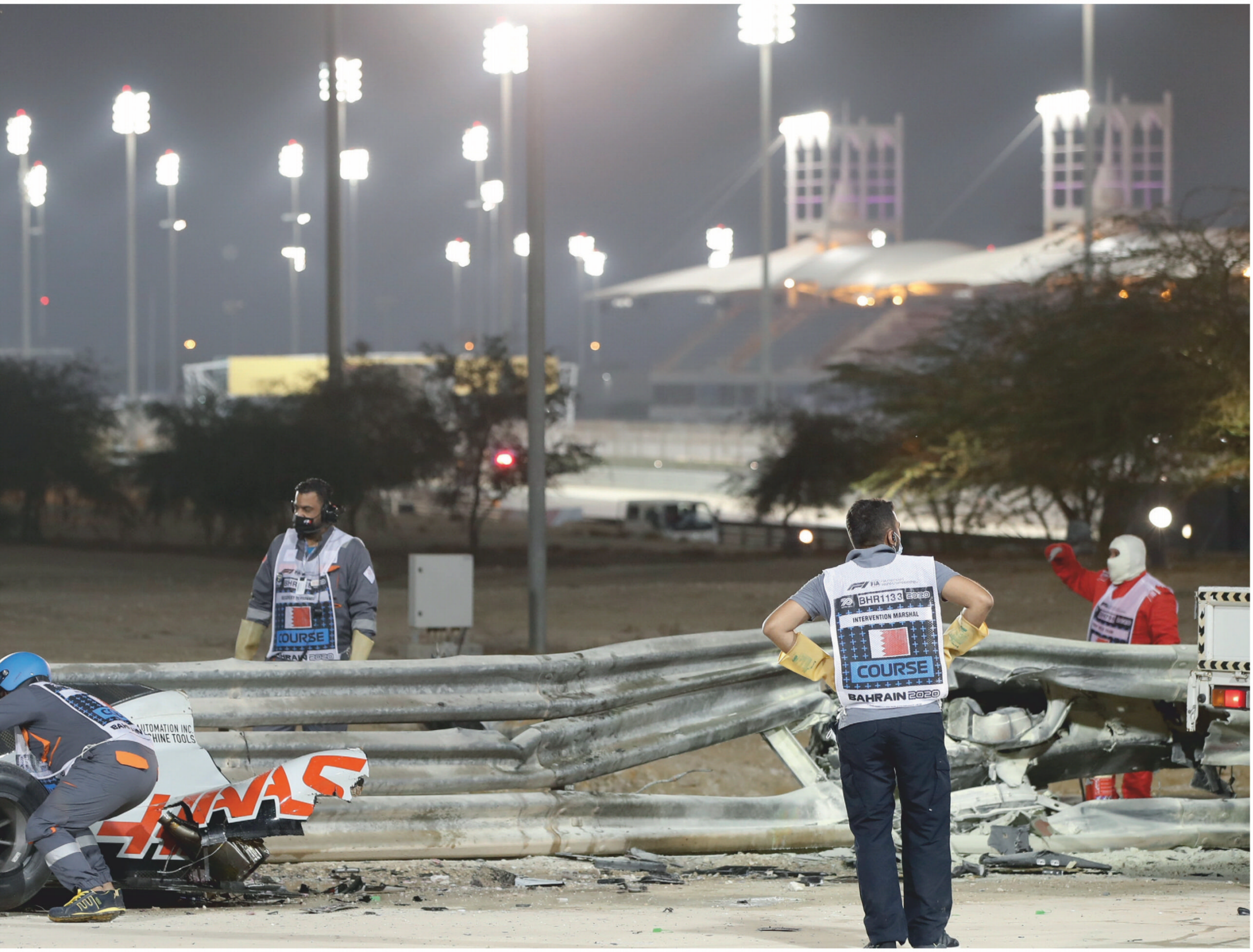
PICTURES: ZAK MAUGER; ANDY HONE

"The angle [of impact] was determined because he [Grosjean] touched the wheel of Daniil Kvyat and then went straight into the barriers in a place where you would not expect a car to leave the road," said FIA president Jean Todt. "But then the car, with 100kg of fuel, was cut in two. We need to understand that. It hit the rails at over 200km/h, and we know that if the Halo had not been there, I don't want to think about what would have been the tragedy. It seems the monocoque resisted very well. A lot of things were the result of improvement [in safety standards]: the monocoque, the Halo, the overalls. We need to understand the gloves because his hands have second-degree burns."

Besides the various camera angles available from the



The FIA's inquiry into the accident will look in detail at the performance of the barrier (above) and why the car broke in two (above right)



commercial rights holder, the FIA will be able to gather data from other in-car safety features it has introduced in recent years. A driver-facing camera mounted within the cockpit captures images at 400 frames per second, enabling precise analysis of slow-motion footage, and every driver wears an in-ear accelerometer to monitor head movements during accidents. A data recorder on each car registers salient data, including speed and the forces acting on the car.

The FIA's Serious Accident Study Group, chaired by Todt and including doctors and engineers as well as presidents of the FIA's other sporting commissions, will collate all the investigative work before escalating it to the FIA's Safety Commission, chaired by Sir Patrick Head.

One key aspect of the incident is the role played by the Halo in protecting Grosjean from serious injury as the monocoque penetrated the barrier. When the controversial cockpit safety system was introduced, Grosjean was among the dissenters, describing it as "a sad day for Formula 1". He now says he was wrong: "It's only stupid people that don't change their mind. I wouldn't race any car without the halo."

The sheer violence of this accident demonstrates the need for constant vigilance on safety matters – even in crashes which do not result in serious injuries for those involved. While acknowledging the events in Bahrain vindicate the adoption of the Halo, the FIA will continue to explore safety improvements, regardless of pushback.

"He [Grosjean] was not the only one to comment on how important it [the Halo] was, having been against it earlier," said Todt. "That is not a problem. I'm not interested in being right. I'm interested in participating and to make the right decisions."

F1 INSIDER

RED BULL GETS FERRARI SUPPORT IN ENGINE ROW



02 **Ferrari has performed a U-turn** which may enable Red Bull to take up its preferred option of retaining its Honda hybrid powertrain when the Japanese marque withdraws from F1 at the end of 2021. Both Ferrari and Renault had opposed a proposal to freeze engine specs from 2022 until 2026, when a new engine formula was due to be introduced.

A freeze would enable Red Bull to take on the intellectual property of the Honda powertrain and run the power units in both its teams without having to invest in development, a technical domain outside its skillset.

But there were several obstacles to the freeze, of which Ferrari's initial opposition was just one. FIA president Jean Todt had pledged to introduce fuels from 100% sustainable sources from 2023 onwards, a desire which would have been incompatible with the engine freeze. Renault remains opposed to the idea of a freeze from the start of 2022. It had previously proposed that timing, only to have the idea blocked by... Red Bull (long before Honda's announcement). Renault then committed to building a new power unit for 2022.

The key to Ferrari's change of heart has been an agreement between the stakeholders to bring forward the introduction of the next-generation power units to 2025. Provided a specification can be agreed in the coming months, this is achievable. There's also the hope that if the new powertrain format can be made more affordable and less challenging to engineer, it may provide a more level playing field and tempt more manufacturers to join F1. While the V6 hybrid formula has enabled F1 to achieve levels of fuel efficiency hitherto thought impossible, that success has come at great cost. The power units have proved expensive to research and manufacture, and only Mercedes has succeeded in consistently being the most powerful and reliable.

Understanding Red Bull's situation, and talks with F1 and the FIA, are behind Ferrari's change of heart according to Binotto (below)



GP Racing understands Ferrari changed its stance after receiving assurances a convergence framework would be agreed before 2022, and that the next-generation engines would cost 50% less to develop than the current hybrids. After the debacle of 2020, the Scuderia is developing an all-new power unit for 2021, and it would harm Ferrari's competitive prospects if this engine also fell short and then a development freeze enshrined that disadvantage for the following three seasons.

"We understand their [Red Bull's] intention to keep using their Honda engine for the future," said Ferrari team principal Mattia Binotto. "We had meetings in the last days with F1 and the FIA. I think as Ferrari, we understand the situation.

"Knowing and understanding the situation, it's not the first time that Ferrari is acting in a responsible way in that respect."

But Ferrari and Red Bull may not yet get their way. Renault insists a 2022 freeze is incompatible with the development timeline it has mapped out, while Mercedes has rejected the idea of convergence, likening it to the kind of performance-balancing systems seen in other categories.

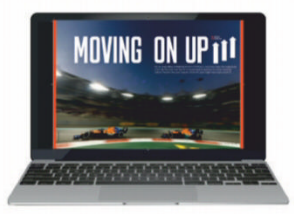
"I think this would be the beginning of the end [of F1]," said Mercedes boss Toto Wolff. ▶

THIS MONTH

GET THE WORLD'S BEST F1 MAGAZINE WHEREVER YOU ARE



★ **Download and read it on your PC, Mac or iPad**



★ **It's identical to the print edition**



★ **On sale the same day as the print edition**

Go to www.gpracing.com/digital-edition/

NEXT MONTH*





THE BEST OF THE BEST
What makes a Formula 1 driver truly stand out?

THE *GP RACING* AWARDS
You voted for them and it's time to reveal the winners

ON SALE JAN 28

> The true cost of COVID-19 to Formula 1
> The best grand prix images from 2020
> Now That Was A Car: Tyrrell 001
> How Ferrari plans to bounce back in 2021

PICTURES: STEVEN TEE; MARK SUTTON; STEVE ETHERINGTON.
*CONTENTS MAY BE SUBJECT TO CHANGE

CONTACT US ON letters@f1racing.com *GP Racing*, 1 Eton Street, Richmond, London, TW9 1AG

OFFICIAL

HESKETH RACING

CHRONOGRAPH

SOLD EXCLUSIVELY BY

RETROGP.com

HISTORIC MOTORSPORT MERCHANDISE



316L STAINLESS STEEL CASE

SCRATCH RESISTANT SAPPHIRE CRYSTAL

GRAIN LEATHER STRAP

PRECISION QUARTZ MOVEMENT

BESPOKE PRESENTATION BOX



SPECIAL OFFER

10% OFF THE RETAIL PRICE

USE THE PROMO CODE

HESKETH_308

www.retrogp.com

SCHUMACHER JR SIGNS FOR HAAS

03 **Just three more Formula 1** drives remained theoretically open for 2021 as this issue of *GP Racing* went to press ahead of the Abu Dhabi Grand Prix. Mick Schumacher, son of seven-times world champion Michael, was confirmed at Haas alongside Nikita Mazepin (see p68) just days before securing the Formula 2 drivers' championship at the final round.

Only Lewis Hamilton, Alex Albon and Daniil Kvyat remain out of contract. Hamilton's renewal with Mercedes is believed to be merely a formality, albeit one delayed by his COVID-19 diagnosis – though there are those who suggest Mercedes' choice of George Russell as a stand-in, rather than reserve driver Stoffel Vandoorne, was a negotiating ploy by team principal Toto Wolff. Albon's situation is rather more nuanced, and Red Bull has said it will wait until after the season has finished to decide whether he will be retained.

Mazepin faced not qualifying for a superlicence if he had a poor weekend in the F2 finale. He finished ninth in both races, dropping to fifth in the final standings, but still within the qualifying threshold. Schumacher also had a scrappy weekend, finishing sixth and 18th, but rival Callum Ilott's fifth and 10th were insufficient to overhaul Schumacher's points total.

Albon also has nervous times ahead. Red Bull team principal Christian Horner has ruled out the prospect of Albon returning to AlphaTauri. There, Daniil Kvyat is expected to be replaced by Honda protégé Yuki Tsunoda, who rose to third in the F2 standings by finishing first and second during the Sakhir GP weekend. Albon must therefore persuade Red Bull to retain him if he is to remain in F1.

GP Racing understands that Nico Hülkenberg and Sergio Pérez remain in contention for the second Red Bull seat. Pérez had appeared to rule himself out, calling a press conference in which he admitted to the possibility of taking a sabbatical, though he also said he already has "options to go back to F1 in 2022". But his finely judged – if slightly fortuitous – Sakhir GP victory served as a timely reminder of his credentials.

"SCHUMACHER WAS CONFIRMED JUST DAYS BEFORE SECURING THE F2 DRIVERS' CHAMPIONSHIP"



Mick Schuamcher tries the Haas for size during the Sakhir GP weekend



F1 MASTERMIND

Your chosen specialised subject: the world's greatest motorsport

Q1 Which three drivers are missing from this list of Germans who have won an F1 world championship race: Michael and Ralf Schumacher, Nico Rosberg and Sebastian Vettel?

Q2 What is the lowest number of races Lewis Hamilton has won in a single season?

Q3 Pierre Gasly's first F1 win came on his 55th start. Apart from Sergio Pérez, which two other current drivers needed more starts for their first win?

Q4 True or false: the only drivers to have led more world championship F1 races than David Coulthard are all world champions?

Q5 Sergio Perez's maiden F1 win at the Sakhir GP came after how many race starts?

Q6 With Lewis Hamilton missing the Sakhir GP, it will be the first time he has not finished a race in the points since when?

Q7 In which season were three Formula 1 world championship races held in the United States, and at what venues?

Q8 Including the races held at Portimão and Mugello in 2020, how many circuits have held only a single world championship F1 race: 8, 10 or 12?

Q9 How many wins did Benetton manage in its 16 seasons in F1: 27, 33 or 36?

Q10 True or false: Pietro is the fifth Fittipaldi to start a Formula 1 world championship race?

Q11 Which was the last team Johnny Herbert raced for in F1?

Q12 Up to and including the Sakhir GP, six of this season's F1 drivers made their race debuts with Williams. Who are they?

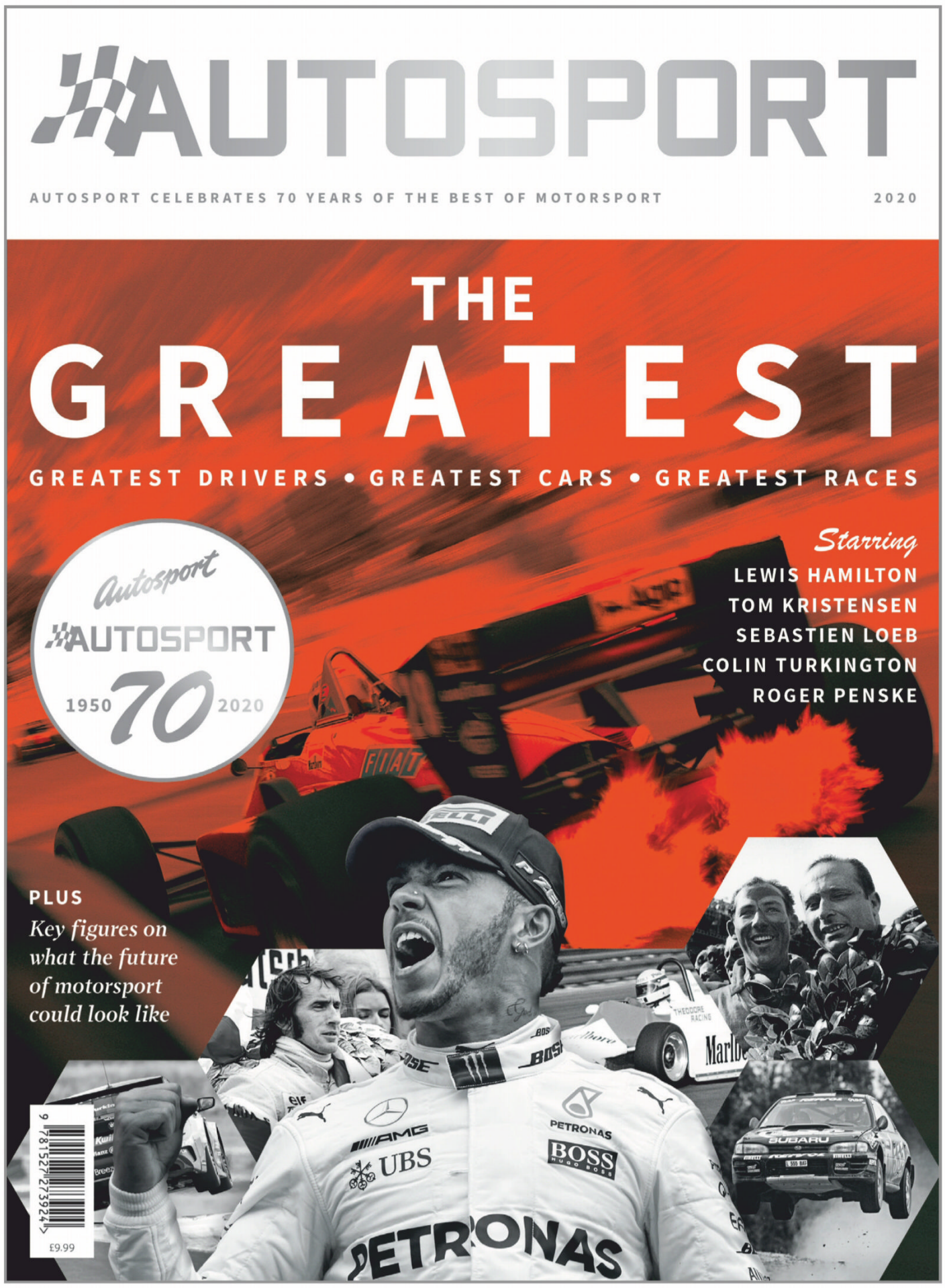
1 Wolfgang von Trips, Jochen Mass and Heinz-Harald Frentzen **2** One (in 2013) **3** Daniel Ricciardo (57) and Valtteri Bottas (81) **4** True **5** 190 **6** 2018 Austrian GP **7** 1982, Long Beach, Detroit and Las Vegas **8** 12 **9** 27 **10** False, he is the fourth **11** Jaguar **12** Jack Aitken, Valtteri Bottas, Nico Hülkenberg, Nicholas Latifi, George Russell and Lance Stroll

PICTURE: ANDY HONE

GP RACING
NEVER MISS AN ISSUE OF THE WORLD'S BEST-SELLING F1 MAGAZINE
WWW.GPRACING.COM

AUTOSPORT

196-page Autosport celebration



On sale now

WHSmith

Available in selected stores



THE F1 ANALYST

BEN EDWARDS

@benedwardstv

PICTURES motorsport IMAGES

WHY F1 STILL SEES VALUE IN AGEING DRIVERS

Two decades after bursting up to the top level of motorsport, Fernando Alonso and Kimi Räikkönen will be headliners again in 2021. With three world titles between them, plus several that slipped away, their impressive statistics set the scene.

Alonso has won 11 races more than Räikkönen, but Kimi has the higher number of podiums (103, including race wins). Add their joint tally together and it comes to 200 and counting. Fernando has half the number of Kimi's fastest laps (23), but Alonso has led one more race (84). And both have scored close to 1900 points in total.

Their records speak loudly, but at a time when young drivers such as Max Verstappen and Charles Leclerc have shown new talent can bring an extra zing to the equation, what is it about the old-timers that has convinced two teams to sign them up?

Eric Boullier, former team principal of Lotus then racing director at McLaren from 2014-18, worked closely with both Kimi and Fernando, so has a clear understanding of their value to a team.

"To be honest they are very different but they have one thing in common: they have the strongest determination that I have ever seen," Boullier says. "Fernando has a work ethic that is comparable to Michael Schumacher's – he is the hardest-working driver on the grid. Kimi comes across as very cool, like 'I don't care', which is actually not true at all. Behind the scenes he can be very direct.

"They work differently with those around them due to their unique personalities. Both can be perceived to be abrupt, but when they deliver on track it motivates everyone in the team to do more. Sometimes they persist in asking when studying details and looking for answers because they need to know they are being heard. Drivers of this calibre like to attract attention because they can guide and influence the car design in the way they want."

When Kimi was at Lotus, he was known to be unhappy with the feel of the power steering system in particular, as Eric explains: "He is one of those drivers who is very sensitive to the steering; we had to redesign the steering rack to give him the feel that he pushed for, and while you may think that we were just giving in to him, like a spoilt child, it wasn't like that because when we got it right he really started to deliver."

This innate understanding of the specific requirements needed for progress allows a veteran performer to push the team forward, and much of it comes from experience. That's why it can be so difficult for the rapid junior category champions to get their foot in the door in F1.

Boullier ran the Gravity Management young driver programme before becoming boss at Lotus, a group that helped Esteban Ocon early in his career. Ocon has gone on to deliver sound performances at Force India and Renault, but Eric was very aware of the extra challenges of Esteban moving up to the top rung.

"You have the junior categories like Formula 3 and Formula 2, where kids can develop and learn how to manage a tight group of people around them, but then suddenly they pop up in F1 and have hundreds of people around and at the beginning they get lost," Boullier adds. "They don't know who's doing what, and there's a series of processes and protocols to learn how to work in F1 which is very different from F2 or F3. This is a big step for them."

The change in mindset occurs in multiple arenas, including the ability to change the basic handling of the car. In single-make junior championships, teams can alter balance to suit a driver's style. At grand prix level, the handling of each team's car is based upon an aerodynamic concept around which the entire machine has been built. If the package was defined to encourage understeer but your new driver thrives on oversteer, there's a problem...

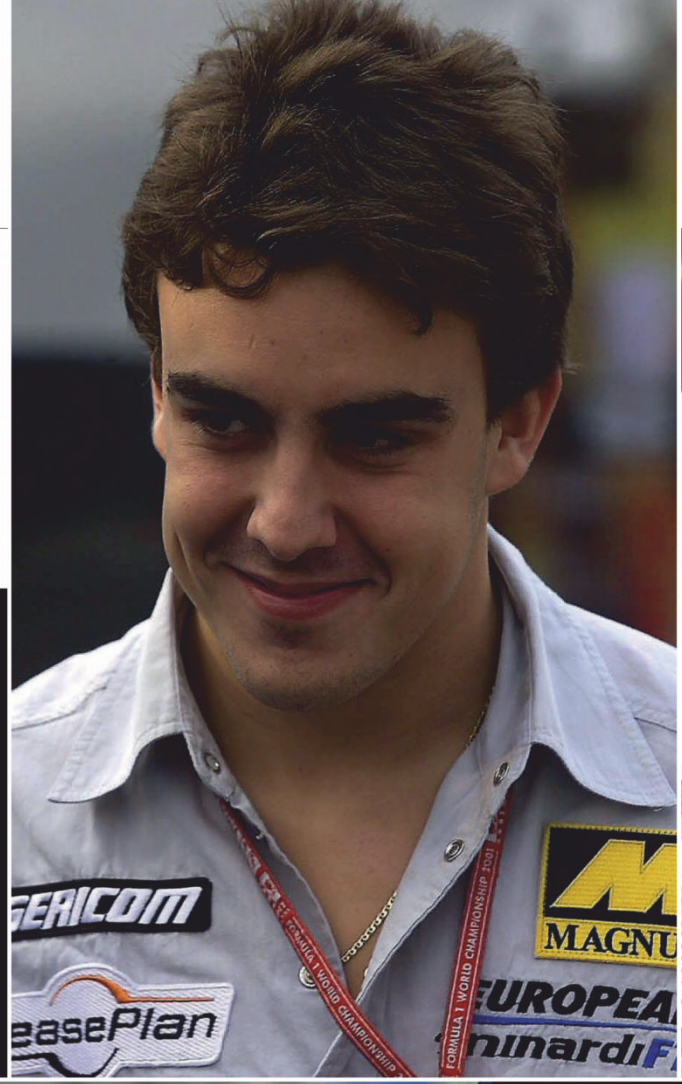
"In F1 the driver has to adapt his driving to the car, to the conditions and to the tyre compound that he has," Boullier adds. "That's why there's a lot of information for the young drivers to get hold of."

Eric worked with other newcomers such as Kevin Magnussen while at McLaren, and once again he saw those hurdles of the top tier causing reputational damage: "Same story – the step up from Renault World Series, a big, big change of world. He was eager and competitive, so he wanted to show that he could do well, but he made a few more mistakes than he should have done just because he wasn't ready yet."

So, what's the answer? Can F1 open the door more readily to talented youngsters and give them a better opportunity? When we look back to the start of Lewis Hamilton's career, McLaren provided him with a firmer grounding because rules on testing then were more generous. Boullier feels it's time to learn from that era.

"Between F2 and F1 there should be a proper testing programme for drivers, to learn how to handle the technical environment as well as the car itself," Boullier says. "It would allow novices a chance to handle the technical side and how to interact with the team. I believe a mandatory six-day rookie testing programme would make a huge difference."

And it would offer an opportunity to better balance the books between calculating old-timers and starry-eyed new kids on the block.



In 2001 Alonso started his F1 journey without too much pressure when he signed for Minardi



Räikkönen also entered F1 in 2001, but Sauber's better machinery put him higher up the grid than Alonso



After five successful seasons with McLaren, Kimi switched to Ferrari for 2007 and immediately won the title



By 2005, and in only his third season at a competitive team, Alonso was a world champion with Renault



Even after two years away from F1, Renault is looking to Alonso, 39, to move the team forward



Räikkönen's experience undoubtedly played a part in Alfa Romeo retaining him for 2021, when he will turn 42

PICTURES: STEVEN TEE; RAINER SCHLEGELMILCH; MARK SUTTON; MOTORSPORT IMAGES ARCHVE. ILLUSTRATION: BENJAMIN WACHENJE.



UNDER THE HOOD

PAT SYMONDS

PICTURES motorsport IMAGES

FORMAT WARS: TO SPRINT OR NOT TO SPRINT?

One of the most emotive topics of this unusual season has been the debate surrounding the introduction of sprint races. It is not a new topic, and in fact F1 commissioned research among fans in 2018 to solicit views on the subject.

The top-level aim of such a proposal is to deepen engagement with existing fans while enticing new fans into Formula 1. The idea of a sprint race, with a grid where the cars line up in an order where the fastest is not necessarily at the front, is to generate an exciting spectacle in itself while also increasing unpredictability for the main event on Sunday.

In doing this caution needs to be exercised because all sport should maintain meritocracy in deciding its victors, and it is even more important that the integrity of the competition is never compromised. That said, there are many examples where sports exist in an open knowledge of bias away from reward of excellence. Your golf handicap when playing your friends is one example. Horse racing is also a handicap event, where each horse is given weight, according to its ability, in an attempt to ensure each competitor has an equal chance of winning.



The majority of horse races are handicaps, where the aim is to ensure a level playing field for all competitors

The research done in 2018 revealed some interesting facts. Fans were generally in favour of sprint races and this support was relatively similar between avid fans and those who were not quite so engaged. There was also a reasonably even split between those who thought it should form part of the qualifying procedure, those who thought it should have a subset of the points system to count towards a single world championship, and those who felt there should be a stand-alone sprint championship in addition to the familiar world championship. Bearing in mind that initially the awarding of a point for fastest lap got a lukewarm reception at best, but once introduced became rather popular with fans and competitors alike, the support for a sprint race is encouraging.

One may ask why we need a sprint race at all. Is not the grand prix and qualifying format exciting enough already? And if we introduce new formats will they not detract from the main event? These are very valid questions and I have long argued, when new qualifying procedures are discussed, that we must not spoil the main event for the sake of the 'side-show'.

But a sprint race is not a side-show. It is an event in itself, and other sports, such as cricket, rugby and others, have shown short-form sports can happily co-exist alongside their thoroughbred ancestors. T20 cricket, for example, has led to a $2.55bn increase in revenue for the Indian Premier League with no detraction from other series.

A number of different formats have been proposed. A first suggestion was that the sprint race starting positions should be in reversed world championship order, and finishing positions of the sprint race should then determine starting positions for the main race. This had approval from the majority of teams if not, initially, from all drivers. The format has been debated at length since and has developed toward having a regular qualifying session on Friday with the order from this determining the grid for Sunday and then a separate sprint race, for a reduced number of world championship points, held on Saturday.

The starting positions for the sprint race could encompass some form of reversed grid, as is seen in F2 where the top eight cars start in reversed order with the others forming up behind them in the order in which they finished the feature race. The sprint race would probably be around a third of the length of a grand prix but points awarded need not be reduced by a similar amount – maybe 50% points would be the correct amount.

Whatever final format may be determined, there are certainly advantages in looking at a new format. Currently, although cars run on Friday and promoters gain valuable and necessary income from this, the television audience is miniscule ▶

PICTURES: SHUTTERSTOCK; MARK SUTTON. ILLUSTRATION: BENJAMIN WACHENJE

motorsport JOBS

RECRUITMENT DRIVEN BY PASSION

Find your dream job

Here at Autosport we've been helping people find great jobs in motorsport for over 60 years. Today we're launching a new global motorsport jobs site, where you can:

- **Find the latest jobs in motorsport**
- **Apply for a job with just one click**
- **Upload your CV and let recruiters find you**
- **Set up job alerts - don't miss out on your dream move**

Register at motorsportjobs.com today

motorsport NETWORK

Motorsport Jobs - A Motorsport Network Company



Sprint races are run in F2, where the results from the feature race are used to form a reversed grid

compared to Saturday and Sunday. The running on Friday, however, does add to the predictability of the Sunday race as teams hone their already near perfect set-ups for the conditions. This only detracts from the spectacle of the race by reducing jeopardy. In spite of the cars running for three hours on Friday, the lack of true competition means only specialist press cover the results. A new format could gain additional coverage on Friday evening and further encourage viewers to engage through the weekend.

There are risks involved. While the total mileage covered by the cars over the weekend should be similar, there is a greater risk of cars being damaged by incidents in a sprint race than there is in a practice session. However, the direct and indirect benefits to the teams should offset any possible increase in costs. There is also a perception that a sprint race would reduce the significance of the main event, but experience from other sports suggests this would not be the case. In fact, the additional points available for the main race will always elevate it to the premier position.

Of course, there are circuits, Monaco probably being the prime example, where any form of grid reversal will not produce a result based on a driver's or team's competitiveness and will merely highlight the frustration of the difficulty of overtaking. Equally, there are plenty of other circuits where the format could work well.

> "A NEW FORMAT COULD GAIN ADDITIONAL COVERAGE ON FRIDAY EVENING AND FURTHER ENCOURAGE VIEWERS TO ENGAGE THROUGH THE WEEKEND"

There is no suggestion this format should be adopted everywhere. Part of the interest will arise from the fact it will not be universal.

Every sport needs to adapt to survive. A modern audience may require different stimuli to the audience of yesterday. Next season, the last using the current iteration of car, would be an ideal opportunity to trial a new format at three or four venues. The forced adoption of different tracks this year has refreshed F1. Why not try similar with an altered format?

GP RACING
GET THE BEST F1 STORIES DELIVERED STRAIGHT TO YOUR DOOR
WWW.GPRACING.COM

GRAND PRIX GUIDE

THE MOST INNOVATIVE AND COMPREHENSIVE PLATFORM FOR FORMULA 1 DATA & STATISTICS

DESIGNED FOR iOS AND ANDROID MOBILE & TABLET PLATFORMS



NEWS : LATEST GLOBAL FORMULA 1 NEWS
SEASON SUMMARY : EVERY SEASON SINCE 1950
WORLD CHAMPIONSHIPS : EVERY ONE SINCE 1950
DRIVERS : 980+ DETAILED PROFILES
CONSTRUCTORS : 200+ DETAILED PROFILES
GRAND PRIX : 990+ DETAILED RESULTS
CIRCUITS : 70+ DETAILED PROFILES
ENGINES : 100+ MANUFACTURER PROFILES
TYRES : 10+ MANUFACTURER PROFILES
STATISTICS : 150+ AUTO UPDATED TABLES

Download on the App Store

GET IT ON Google Play

AVAILABLE IN 6 LANGUAGES

MOBILE.GPGUIDE.COM

GPGUIDE IS AN EXCLUSIVE PRODUCT OF RKADIA PARTNERS, LTD
COPYRIGHT © 2019 - ALL RIGHTS RESERVED
FORMULA ONE LICENSING BV OWNS THE FORMULA ONE TRADEMARKS

motorsport.com | PRIME

EXPERIENCE MOTORSPORT ON A WHOLE OTHER LEVEL

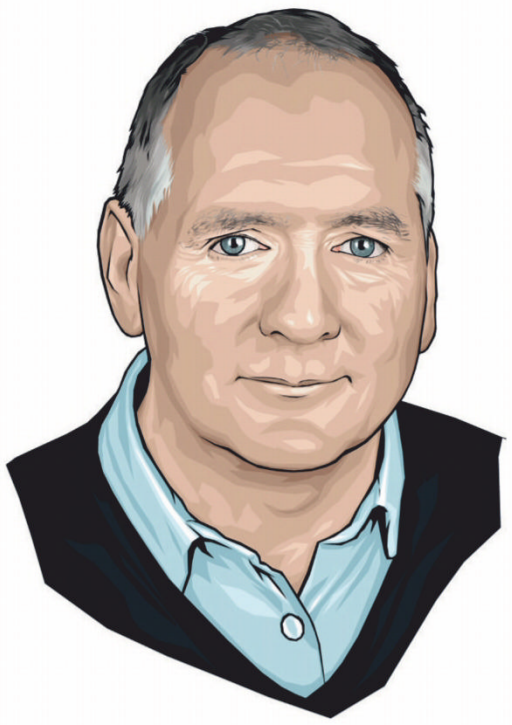
- UNMISSABLE STORIES AND OPINION
- EXPERT INSIGHT AND ANALYSIS
- NO ADS, NO DISTRACTIONS
- IN-DEPTH F1 COVERAGE

SUBSCRIBE NOW

MOTORSPORT.COM/PRIME

F1 PRO

Essential guide to the business of F1



STRAIGHT TALK

MARK GALLAGHER

@_markgallagher

SAUDI ARABIA IS ONLY PART OF THE PROBLEM

We live in an imperfect world, so while the news that Formula 1 is to hold a race in Saudi Arabia next autumn prompted howls of protest across mainstream and social media platforms, it is worth pausing to reflect on the championship's past before slamming the door on its future.

The media likes a good story about greedy sports bosses hoovering up money from corrupt regimes. It makes for great headlines and sneering prose, never mind that Formula 1 management has to find the cash for both the championship and its teams from somewhere. Imola and Portimão's pockets are full of fluff.

Back in 2011 I recall being invited on the *Nicky Campbell Show* on BBC Radio 5 Live by a researcher keen to have me talk about Formula 1's decision to continue visiting Bahrain, a country whose majority Shia population were staging protests against their Sunni rulers. What the researcher did not tell me was that I would be pitched against a Shia protester whose father was on hunger strike.



Races in Bahrain, Malaysia and Brazil mean Formula 1 is no stranger to human rights controversy

"How can you spin your wheels on the blood of my relatives?" was the first question, and the interview went downhill from there. In the interests of balance, the BBC had set out to find two extremes, breaking the scales of media justice in the process.

Formula 1 has long taken the dollar from any quarter and we have all had plenty of time to decide whether we want to support a multinational sport run by capitalists or not.

For 40 years Big Tobacco paid the bills. To this day Philip Morris remains F1's and Ferrari's biggest customer, while McLaren has reignited its passion for the sector with British American Tobacco and its 'nicotine delivery systems'. I spent a decade writing PR materials for Marlboro and promoting Benson & Hedges at Jordan. If flogging cancer sticks is not a threat to a human's rights, I don't know what is...

When the tobacco era began to wane, Bernie Ecclestone's decision to generate untold millions for Formula 1 and its constituent teams by selling world class sports events to governments meant beating a path to Malaysia and then that bastion of human rights, China.

Homosexuality is illegal in Malaysia, and was throughout Sepang's 19-year residency on the Formula 1 calendar, and the same is also true of Singapore. You could be fined, imprisoned or caned in either.

Saudi Arabia applies strict Sharia Law, with the death penalty the ultimate punishment for homosexuality, although fines, imprisonment and 'lashing' are more typical.

LGBTQ+ rights campaigners are rightly unhappy at the prospect of Formula 1 'sports washing' Saudi's reputation, but if Malaysia and Singapore didn't already highlight that topic then F1's annual visit to Putin's Russia ought to have. Here's a country where it's legal to be gay, but you are not protected by law, as vigilante beatings and prison sentences demonstrate.

Personally, I have always found Brazil problematic – Interlagos is a fantastic track, nestling alongside São Paulo's appalling favelas where you might be robbed or worse by destitute people stealing to survive. Even the electricity has to be nicked to power their slums.

Instead of complaining about next year's race in Jeddah, critics should use the powerful spotlight of F1 to do the thing which we in western democracies can practice with impunity: speak out as loudly as we want about whatever we wish.

This is precisely the moment to use the freedom and tolerance we cherish as a weapon against the intolerance we so dislike.

PICTURES: ANY HONE; RAINER SCHLEGELMILCH; ZAK MAUGER. ILLUSTRATION: BENJAMIN WACHENJE

FORMULA 1'S SEARCH FOR SUSTAINABILITY

The world is changing and F1 has to change with it to enjoy a prosperous future. But how much pain will that involve?

WORDS STUART CODLING
PICTURES motorsport IMAGES

Although fans generally shudder when they see the S-word connected with Formula 1, they're going to have to get used to it. Motor racing's highest echelon is predicated on pitting the drivers of the fastest and most advanced motor cars against one another on a global stage, but it's also a business.

And businesses increasingly need to demonstrate social and environmental responsibility. Corporate sponsors and investors no longer wish to be associated with profligacy and the plundering of the earth's resources.

Squaring sustainability with F1's competitive essence is a huge challenge, and one to which the stakeholders are rising. F1 recently published an update on its mission to become net carbon zero by 2030, a target first announced in November 2019. While much of the document was devoted to reiterating the key points of the plan, there was evidence of progress despite the disruption wrought by the COVID-19 pandemic.

F1 has renegotiated its energy-supply contracts so it receives all its energy from 100% renewable sources, and has reorganised the logistics of its broadcast operations to eliminate 70 tonnes of freight from each race.

The teams are also making progress. Mercedes has just achieved the FIA's Three-Star Environmental Accreditation standard, and McLaren was the first to achieve carbon-neutral certification – a decade ago. But the standards grow ever tighter, and recertification is required every five years.

"We are fully integrated in F1's programme, in parallel to the programmes we're running," says team principal Andreas Seidl. "Topics like plastic bottles, wasted food we produce and so on, is something we put a lot of focus on. We welcome all these initiatives, and at the same time try to support them because it's a necessity going forward."

Red Bull has also announced a 'No Bull' drive which aims to achieve net carbon neutral status for the 2020 season and reduce CO2 emissions by 5000 tonnes during 2021. Drawing up the plan required a comprehensive audit of the team's activities and the recognition that operating the cars on track represents just a fraction of its carbon emissions. Facilities, travel and transport amount to 93%.

Changing power tariffs, reorganising factory operations, rethinking travel arrangements and reducing single use-plastics are among the measures Red Bull is taking. Alongside that is a partnership with the Swiss-based Gold Standard Foundation, an organisation which enables companies to responsibly offset "unavoidable" emissions.

As governments draw up plans to phase out sales of cars powered by internal combustion engines (ICEs), F1 has a philosophical decision to make. Like it or not, the era of fossil fuels is drawing to a close. If in doubt, follow the money: nations which grew rich through the exploitation of resources beneath their soil are now diversifying with extraordinary haste.

But the ICE is destined to remain at the heart of F1 for the foreseeable future, regardless of what other initiatives the participants, the FIA and the commercial rights holder may take to embrace greater sustainability within their businesses.

"We're doubling down on hybrids," said F1's director of strategy and business development, Yath Gangakumaran, in a recent podcast for Motorsport Network's *Thinking Forward* series.

"We believe that there will be several routes to a lower carbon automotive industry, and we want to be associated with one we think will not just have a major impact positively on the automotive industry, but also will support our objectives as a sport.

"Everyone's talking about electric and hydrogen. And we have looked into that, as part of our next-generation engine, which will come in in five years' time. But they really don't have the performance characteristics we need as the pinnacle of motorsport, to allow our cars to go at the speeds we want and the distances we require."

F1 is betting on biofuels, reckoning that second-generation fuels of this ilk, particularly synthetic ones, will eliminate the disadvantages associated with the first. Once seen as a silver-bullet solution to the issues stemming from fossil fuels, biofuels have baggage of their own: growing the feedstock requires land which might otherwise be used for agriculture, potentially contributing to food poverty, as well as causing ecological damage such as deforestation when land is converted. Pollution from pesticide run-off is also among the portfolio of negatives.

Synthetic biofuels would potentially reduce the number of demerits while appealing to a car industry – and its customers – contemplating how existing vehicles might be fuelled once new ICE-powered ones are legislated out of existence. But will these fuels arrive in time to carry F1's big bet?



The ease with which huge amounts of freight can be moved around the world has resulted in more F1 races, and more sustainability issues

The carbon emissions from the transport of personnel, cars and other important facilities will have to be lowered if F1 is going to reach its goal of net carbon zero by 2030



















THE BOY WHO WOULD BE KING

When Lewis Hamilton eventually decides to hang up his helmet, Mercedes has a problem: how to replace the greatest driver of a generation? **George Russell** is one who might inherit Lewis's mantle – but, highly rated as Russell is, he's still going to have to fight for it...

WORDS LUKE SMITH
PORTRAIT ALISTER THORPE

SLUMPED DISCONSOLATELY AGAINST

a grassy bank at Imola while marshals shepherded his damaged Williams off the track, George Russell could not believe what he had just done. Having accumulated a near-spotless record through his Formula 1 career to date, he'd just committed one of the biggest don'ts in racing: shunting behind the Safety Car.

Running 10th and eyeing the prospect of scoring his first F1 point, Russell pushed too hard while trying to get warmth into his tyres before the restart, causing his Williams FW43 to spear left into the wall at the entry to Acque Minerali.

"It was such an amateur mistake," says Russell. "I felt just pure frustration and annoyance at the error I just made. It was such a schoolboy error."

The Imola blunder was all the more glaring because of the reputation Russell has built since making his F1 debut at the start of 2019. As part of Mercedes' junior stable, he theoretically holds the keys to a very long and successful F1 career – provided he can continue to demonstrate growth and improvement. For while Mercedes is clearly satisfied with its current driver line-up, it needs to maintain a succession plan for when a vacancy arises, and that means keeping young talents such as Russell in play.

Despite the limitations of Williams' cars in the past two years, Russell has made a name for himself as a future star by regularly outstripping the capabilities of his machinery. At the time of writing (pre-Abu Dhabi GP), he has only been outqualified once by a team-mate in F1, Valtteri Bottas in the Sakhir GP. But this seemingly gilded career trajectory has come close to stalling during this most peculiar of seasons, and that's what makes Russell's Safety Car imbroglio all the more significant: it was like that moment in any epic story when the protagonist has not only been put through the wringer, they've hit rock bottom.

Russell was seen as a key player in F1's driver market for 2021, given he was the most likely candidate to replace Valtteri Bottas at Mercedes were F1's champion team to decide change was required. Mercedes ultimately opted for continuity into 2021 and handed Bottas a one-year extension to his contract. This meant Williams could announce as early as mid-July that Russell would be staying put, seeing out the third and final year of his existing contract alongside Nicholas Latifi.

It's said that contracts are made to be broken, though, and Williams was a team in flux as new owners moved in. US investment fund Dorilton Capital acquired the team in September, replacing the Williams family, and commenced a full review – leading to questions over whether this review extended to the already-confirmed driver line-up. Doubts began to arise over Russell's future as Sergio Pérez entered the equation.

RUSSELL HAS MADE A NAME FOR HIMSELF AS A FUTURE STAR BY REGULARLY OUTSTRIPPING THE CAPABILITIES OF HIS MACHINERY

Having been dropped by Racing Point in favour of Sebastian Vettel, the Mexican veteran – who brings a respectable portfolio of paying sponsors – was scrambling for a seat, and running out of options as both Haas and Alfa Romeo passed. Dorilton was another entity to which Pérez's management paid a visit, and the threat that Russell might be ousted to make way for him was very real.

For although Russell had been the quicker of the two Williams drivers, thus holding the stronger performance case, commercially it made less sense to retain him since both Latifi and Pérez bring a substantial budget. By contrast, Russell has never brought any sponsorship, meaning if Dorilton's plan for Williams was to earn money quickly (or at least stem its losses), Pérez was the more attractive proposition.

Merit vs cash – F1's very own scales of justice. In its pomp, Williams would have taken the former, no question, but this august team's resolution has wavered in recent years. In 2012 it paired Pastor Maldonado with Bruno Senna, both paying drivers, and, while Maldonado scored that memorable win in Spain, the overall experience ▸



PICTURE: GLENN DUNBAR

2019 was a difficult debut season for Russell when the sparks didn't exactly fly as he learnt his trade, but he has upped his game in 2020

was such that Williams took on the more promising Bottas for the following season.

Mercedes motorsport boss Toto Wolff had a hand in proceedings then, as a Williams shareholder with a parallel involvement in Bottas's management group, and he sought to intervene once again over Russell. After a curious non-denial denial by Williams' acting team principal Simon Roberts (who said, during a press conference, "I'm not going to say anything about either of our drivers. There's so much speculation around, I don't want to inadvertently fuel it") Wolff made direct contact with the new owners to establish the lay of the land.

There is a powerful lever Wolff can pull – he sets the commercial terms of the team's engine supply – and yet he appeared to have been directed politely but firmly to mind his own business, saying afterwards, "There is a financial reality that I cannot judge at all. It's absolutely the discretion of the new owners and Simon to decide what they want to do going forward. It's a political decision and a commercial decision. We have to respect the independence of Williams and their decision-making process."

Russell remained defiant, saying the speculation had "been fed by the Pérez camp" to "apply pressure on other teams further down the grid, potentially Red Bull", but obviously wanted clarity about his future as swiftly as possible. Five days later Williams, belatedly perhaps, damped out the flames of speculation by confirming his position was safe.

As relaxed as Russell has been in public, he acknowledges this was an unpleasant period. "It's never nice to hear any speculation that your job is potentially up for grabs," he says. "But I was confident in what I could perform, and ultimately I had to do the talking on track."

So just how under threat was he? Pérez says there were "some talks, but nothing more than that", while Russell's camp was always confident internally that the speculation would pass. The interpretation that it was largely a kite-flying exercise by Team Pérez to exercise pressure elsewhere is probably correct.

RUSSELL'S STAR QUALITY COMES WITH MERCEDES' SEAL OF APPROVAL

The commitment to Russell is an important statement from Dorilton about the direction in which it wants to take Williams. It could easily have taken the money but recognised the importance of keeping faith in Russell. Pérez would have done a perfectly respectable job banking whatever points became available but is unlikely, after over a decade in F1, to develop further into a grand prix winner. Russell's star quality comes with Mercedes' seal of approval and his contribution to Williams has already been huge, acting as a beacon of positivity through a disastrous 2019 season, and helping its progression towards the midfield this year. All he was missing were some points.

Ever since his appointment in late 2018, Russell has been seen as a powerful statement that Williams wants the best young talent in at least one of its cars. In private, senior figures connected to the team have lamented its dalliances with pay drivers through the past decade, feeling this has contributed towards the team's downturn. Dorilton's decision to retain Russell appears to confirm the wider message from the team that the new owners are in for the long term and are prepared to invest to restore



Williams to frontrunning status.

While grand prix racing began as a sport for wealthy individuals, and remains an arena in which entrants can attain great riches, the modern F1 brand is built on the promise of the best drivers racing the fastest cars. Three sons of billionaires are set to be on the grid next year – Latifi, Lance Stroll, and Nikita Mazepin, who has joined Haas – so for Russell to have been cast out in favour of those buying their way in would do little to bolster the case for F1 being a meritocracy.

Mercedes is understandably keen to maintain the successful, apolitical and un-rancorous partnership between Hamilton and Bottas in its works team, and sometimes that has meant making difficult decisions regarding its junior drivers. Esteban Ocon found that out the hard way in 2018, when Lawrence Stroll's buy-out of Force India left him without a seat there, and an option at Renault closed when it hired Daniel Ricciardo instead. A year as Mercedes' in-house sim jockey followed and, although Ocon returned in 2020 with Renault, he has taken time to get back up to speed.

"That's how F1 is," says Ocon when asked to reflect on the similarity of his circumstances with Russell's. "It can be cruel sometimes."

PICTURES: STEVE ETHERINGTON; ALISTER THORPE





Russell remains in pole position to grab the next available Mercedes seat, whether that be as a replacement for Hamilton or Bottas

It was crucial for Russell's development that he avoided a similar fate to Ocon of a year on the sidelines, followed – assuming he found another seat – by a year of struggling to regain momentum. Mercedes, which has overseen his career progression since his F3 days, recognises this. Russell would not have been left on the shelf.

"He would have been a very strong reserve with us," says Wolff, "and we would have found an additional programme for him. I'm happy they decided in favour of him. He deserves it, his performances are outstanding."

Staying in F1 ensures Russell remains on a trajectory to one day land a full-time Mercedes seat, and 2021 will be the year to stake his claim – subject to two important caveats. If Williams can continue its recent upswing and get into the thick of the midfield, the opportunity will be there for Russell to prove why he should get another shot at the front of the grid when Bottas comes to the end of his contract. But Russell needs to not fluff it when such opportunities to shine arise.

That's why, as he sat at the side of the track at Imola, staring at his wrecked Williams and shooing away an enquiring marshal, Russell felt further away than ever from being an F1 frontrunner. The enormity of the blunder was not lost on him.

"I'll never forget this day, this mistake," Russell wrote on Instagram following the crash. "I'll learn from it, be stronger for it. I'm so sorry, to the whole team. No excuses." He also wrote a letter to the Williams team apologising for squandering its best chance of points for some time.

To teams running young-driver programmes, how one of their charges responds to moments such as this is every bit as important as positive on-track performance data. The likes of Hamilton, Michael Schumacher, Ayrton Senna and Alain Prost racked up multiple championships not only through being blisteringly quick behind the wheel, but also through galvanising their entire teams to do their best work. It's a measure of the respect Russell already commands that so many of his peers, and experienced F1 figures, reached out via social media to put a figurative arm around his shoulder.

"It will take some time to forget it, but what you do is mega, keep pushing," wrote ex-Haas driver Romain Grosjean.

STAYING IN F1 ENSURES RUSSELL REMAINS ON A TRAJECTORY TO ONE DAY LAND A FULL-TIME MERCEDES SEAT, AND 2021 WILL BE THE YEAR TO STAKE HIS CLAIM



PICTURES: GLENN DUBAR



"Brutal yes mate, though you'll be better for it," said Mark Webber. "All part of the polishing and continuing to lift the bar."

"Small blip in a long career ahead of you in F1," wrote David Coulthard. "Don't worry about it and keep showing us what you're made of."

Hamilton also composed a thoughtful, encouraging and widely shared note, and is happy to explain why.

"It was just important," Lewis says. "Looking at those that are in the early phases of their F1 career, I've been there. I know what it's like to have experiences like that. I just wanted to show that it's OK, and don't beat yourself up too much."

The sheer volume of support took Russell slightly by surprise. "It meant a huge amount to me," he says. "It was very surprising. Race winners, fellow drivers, ex-world champions, even people outside of Formula 1. Everybody knows that we are pushing to the absolute limit."

Russell has another high-profile fan in the form of double world champion Fernando Alonso, whose early F1 career followed a similar trajectory in that he was part of Renault's driver-development scheme and placed in a small team – Minardi – for his first season. Speaking before that blip at Imola, Alonso said, "George is the one that surprises me every weekend. He's driving the Williams with zero mistakes. I'm really surprised by his natural speed."

"It's very difficult, especially for us in the position we are when we are near the back of a grid, to really show what I can do," adds Russell, speaking before his Sakhir cameo for Mercedes. "I am obviously point-less at the moment in my 18 months to two years in F1, and to the outside viewers, it can be hard to recognise what a driver is doing is very difficult. So, to have the support of

18+

WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal, providing you various content: brand new books, trending movies, fresh magazines, hot games, recent software, latest music releases.

Unlimited satisfaction one low price
Cheap constant access to piping hot media
Protect your downloadings from Big brother
Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages
Brand new content
One site

AVXLIVE.ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open https://avxlive.icu



Lewis Hamilton has been impressed with Russell, as has Romain Grosjean, whom Russell is battling with here in this year's Italian GP

the likes of Fernando means a huge amount."

Alonso's success is proof that life at a backmarker team and the ensuing challenges can be a good formative experience in F1. Williams head of vehicle performance Dave Robson hopes Russell will ultimately look back fondly on the challenges of that first season in 2019, and notes Russell's development since then.

"He's exceptionally good," Robson says. "He has stepped up. The car's helped him a lot over the last year, but even so, I think he was very good at making the most of the situation last year. I think in some of that adversity, he probably learned. Hopefully he'll look back in five or 10 years' time and think that last year was actually very valuable, miserable though it was at times.

"He is really valuable. He's got the confidence, and now experience, to really guide us. He's got a lot more to learn, but has stepped up. He is a genuine talent and a massive asset to the team."

Russell is growing into the complete package – but could he one day be the heir to Lewis Hamilton's throne as both Great Britain's and Mercedes' foremost F1 star? The seven-time world champion sees no reason why not.

"What he's been able to do is similar to if you look at Alonso," Hamilton says. "A lot of the drivers coming in to one of the teams that are further back, having an opportunity to grow and improve and lead a team and make mistakes.

"I think this year, it's just been great how he's handled everything and what he's done with that car, to put it into Q2 quite often, and really delivering great results.

"I'm really impressed with his racecraft and how he's growing, and I really think he is the future. There are several drivers that are the future of this sport, but he's one of them and I'm really excited to see his progression. I've no doubt that he has the potential to be a future champion."

High praise indeed – but not praise Russell is willing to let go to his head. For all the hype that may be building around him, he wants to remain grounded and focus on delivering on-track instead of dwelling on his future or the added pressure of following in such esteemed footsteps.

"I obviously really appreciate these comments, without a shadow of a doubt – but it's almost background noise," he says. "I know I have to continue to perform week in, week out. As fantastic as it is getting a pat on the back and praise from these guys, I've got to back that up with the job that I do on-track.

"I've always tried not letting comments like this get into my head. I'm doing this sport for myself and my family. The biggest amount of pressure I have is from myself, and not from anybody else."


AMG
WILLIAMS
RACING
SOFTA
LAVA
TORINO, ITA

IN CONVERSATION WITH

WORDS STUART CODLING
PORTRAIT WILLIAMS

SIMON ROBERTS

The Williams acting team principal on moving to the team after 16 years at McLaren, and how new owner Dorilton intends to bring Williams from the back of the grid to the front

There have been a lot of changes this year for you and for the team. How different was your managing director role from what you were doing at McLaren? And then how much has it evolved since you took on team principal duties?

The managing director role was very similar to what I did at McLaren. Obviously it's a different team but, in terms of the scope of the role and responsibility, it was almost the same. But since then it's changed a bit. Since Claire [Williams] decided to leave I've had the chance of stepping up as team principal so now I'm much more involved with all the races rather than just some of the races, and everything to do with the top-level activities of the team.

How hands-on are the new owners, or are they keeping a watching brief at the moment?

They own nine other companies – this is their 10th acquisition – and all their other acquisitions, going back over the past nine or 10 years, have been long-term projects. We're slightly different, because we're a sports team, so it's new to them. Their philosophy is to let the local management team run the business, and they're there to support, to fill the gaps if we have any. Since they joined us, they've been on site a few times and been to a couple of races now. Things are really beginning to change back in the factory. We're doing quite a lot of investment, putting right things that needed to be done, investing in a few new things, and just making sure that everything's in good condition for going into 2021 and 2022. It's kind of the normal investment process you get in any team – you put a business case forward for something, there's a return on investment, or something gets fixed so there's improvement in performance, and everything's on a case-by-case basis.

They're super easy to deal with, obviously highly intelligent and great people, and they love what we do – they want to drive team performance, and also to keep the values and feel of the team. So it's still very family orientated, very diverse, which is important to them as well. We don't want to lose any of that, what Claire and Frank built over many years, but on the other hand it's a time of change, we really need to move on, and they're really helping us do that. They're back in the States so we have a management committee meeting with them once a week on Microsoft Teams, which goes pretty well. It feels like the right level of support – not overbearing, but asking the right questions.

Given your length of service at McLaren, how long did it take you to understand the organisation given that you were moving between teams who very much have their own way of doing things?

You never understand everything – I was at McLaren for 16 years but even then things used to surprise me from time to time. I knew it would take a minimum of three months to figure out what was going on, how things worked, what ticked and what didn't. That time has been and gone, and I'm not sitting here saying I know it all – I absolutely don't. With the COVID restrictions we've had, about 20% of people are on site in the engineering offices and a few more on the shop floor, but the shop floor works on a rolling shift pattern over four days [*GP Racing* is speaking to Roberts before his positive diagnosis in the run-up to the Turkish GP].

So it takes longer to get to know people and for them to get to know me too. But in terms of the day-to-day operation of the business, I feel pretty comfortable I've got my head around how things work. Nothing's broken, there's no big single issue. But lots of things can be improved, things we can do better, and we've set up some of that stuff already. Just strengthening some of the processes and making things a lot clearer with people to make it easy for them to do a great job. That's what I see as the main purpose of my role.

"NOTHING'S BROKEN, THERE'S NO BIG SINGLE ISSUE. BUT LOTS OF THINGS CAN BE IMPROVED, THINGS WE CAN DO BETTER"

What sort of timescales are you working to with all of those tasks?

On a personal level, I haven't mapped out a timeline. I have got a list of priorities, which is really about the sequence of getting things realigned or adjusted in a way that makes sense – there's no point fixing some things before others are in place. So that process has already started. Some things are already in a good way and we can go to the next step.

At a slightly bigger picture we were kind of caught a little bit, because of the homologation of so many components for next year, there are things we'd like to change which we can't. On the one hand, it holds us back a little bit. On the other hand, it makes life easier, because it's not a whole new car. We see this as an opportunity internally to reset things in the team that would normally be a massive risk.

MOVING

PICTURE: GLENN DUNBAR

ON UP

WORDS STUART CODLING
PICTURES MOTORSPORT IMAGES

For so long nearly a laughing stock in Formula 1, such has been the magnitude of its fall, McLaren has had to re-examine and question its entire working culture. Results this past season show the pain might have been worth it...



When

McLaren last won a grand prix, the world was a very different place. One Direction sat atop the US album charts. Google Plus still existed. Shares in Facebook were a snip at $23.99 (in August 2020 they reached $303.91). Felix Baumgartner had just demonstrated the thrilling extent of human endeavour by jumping from the edge of space. There was a James Bond film in the cinemas. You could still buy a BlackBerry, and people were. Donald Trump was arguing *against* a recount in the US election.

It was 25 November, 2012.

Third in the constructors' championship with the spoils of seven race victories jostling for space in its amply stuffed trophy cabinet, and with the feeling that better reliability might have earned Lewis Hamilton or Jenson Button the drivers' title, McLaren was already in the process of failing. A gearbox breakage in Singapore, caused by sand left over from the casting process, provided the final nudge for Hamilton to sever his ties with the team which had nurtured him since karting. In the design office, work proceeded on the MP4-28, a car which would only demonstrate competitive pace once, at a pre-season test, and then only because elements of the front suspension were accidentally fitted upside down.

Several seasons in the competitive wasteland followed, the result of complacency, hubris, technological over-reach, and out-of-touch leadership. During the French GP weekend of 2018, a British tabloid newspaper published an excoriating exposé of management practices at McLaren, centring around the use of inexpensive confectionary as an incentive. 'Freddo-gate' painted a picture of a leadership both out of touch with and despised by the factory floor – why else leak to a newspaper? – and it prompted many of the changes bearing competitive fruit today.

Two years later and McLaren has fought its way into top three contention for the first time since 2012, but now it's on a different trajectory – an upward one. It remains proud of its history as one of Formula 1's most competitive teams but is no longer blinkered by it. The process has been painful – casualties include Ron Dennis, the architect of modern McLaren – but this is a team which now has its sights set realistically on race victories in the future.

"IN THE BARCELONA TEST WE COULD CLEARLY SEE WITH THE CAR THAT WE'D DEFINITELY MADE A STEP FORWARD"
ANDREAS SEIDL

It was incredibly important that McLaren demonstrated solid progress in 2020, its first season with a car developed under recently installed technical director James Key, and superintended by team principal Andreas Seidl, who joined from Porsche in May 2019. These were early days for an organisation still in the process of change after the bout of bloodletting which followed Dennis's removal in a November 2016 boardroom coup. But McLaren had been in the business of making excuses for too long in this decade, and there was already evidence of improvement: the 2019 MCL34 car, designed with input from former chief engineer Pat Fry – on a short-term consultancy contract while Key served gardening leave from a previous role – eliminated many of the weaknesses of its predecessor. The MCL35 needed to continue this trend, and the initial signs were good.

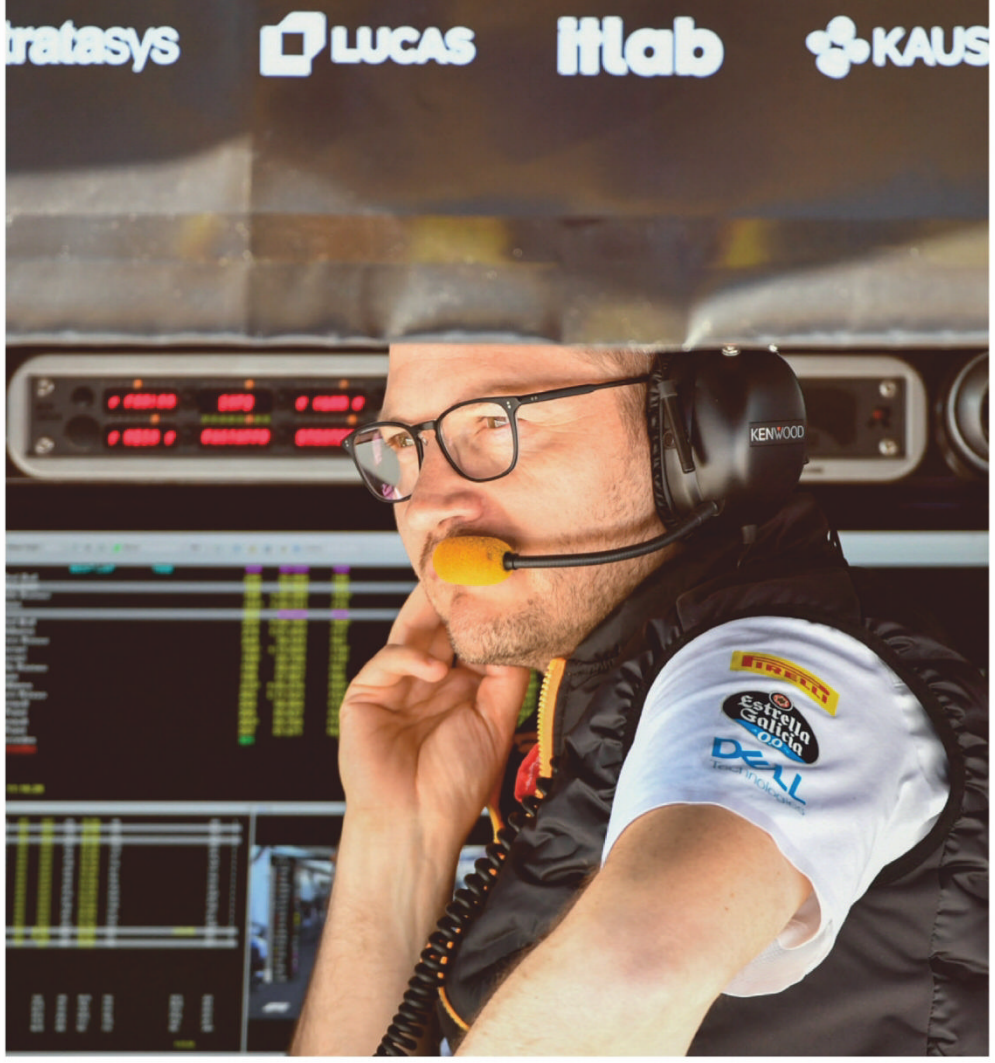


"In the Barcelona test we could clearly see with the car, in terms of the improvements we wanted to achieve, solving some of the weaknesses from last year, that we'd definitely made a step forward," confirms Seidl. "Even not knowing what the competition was doing.

"We could also see we'd taken a big step in reliability compared with previous seasons, which was a nice reward for the hard work done back home, as well as by the race team. Because that was very much a weakness in previous years, and we could see both in the mileage and the laptimes that we'd had a good test. Also, the figures we expected to come from the development we could actually measure on track. So, we left with a positive feeling."

Curious as it may seem in retrospect, at that point the spread of COVID-19 was still not being treated with the gravity it merited. McLaren was the only team to insist all visitors to its Brand Centre sanitise their hands. As testing ended, the biggest story on the news agenda was the FIA's 'confidential settlement with Ferrari'. The onset of the pandemic revealed a great deal about the state of McLaren below the surface.

When McLaren personnel tested positive for Coronavirus ahead of the scheduled 2020 season opener, Seidl and CEO Zak Brown acted decisively to withdraw the team from the event while F1's other stakeholders dithered. Seidl then stayed on in Australia until all the quarantined





Seidl (top) is pleased with McLaren's progress. The early podium for Norris (above) was a bonus for the MCL35, the first car built under James Key (below)



PICTURES: MARK SUTTON; STEVEN TEE

personnel were able to leave. But the pandemic also exposed shocking weaknesses in McLaren's finances. Other teams also faced shortfalls and had to furlough staff, but McLaren isn't just a racing team, it's a multi-faceted group of automotive and technology companies. It has had to resort to drastic measures, including 1200 redundancies across the group and the sale of the McLaren Technology Centre campus.

"It was obviously very difficult to deal with this crisis during a period where you couldn't speak to your people face to face because lockdown was happening," says Seidl. "Everything had to happen via remote communication and videos and so on, which is obviously not what you want when what you have to transfer is a very uncomfortable message. And in the end, we asked our people a lot. Sending them on furlough, asking for pay cuts and so on, was brutal. But in the end, it was the only way to make sure we came out of this crisis in a healthy way."

Financially it was in the best interests of all the stakeholders to begin the season as soon as possible, but even then the pandemic continued to act as a disruptor. Better-resourced teams such as Mercedes had seen it coming and prepared car upgrades to be ready for build as soon as the factories came out of shutdown. Others were only just bringing employees out of furlough. That wrought a competitive order in which Mercedes enjoyed a dominant position with Red Bull second quickest despite a temperamental car. This, along with the pegging-back of Ferrari's engine, and Racing Point making unexpectedly heavy weather of exploiting its cloned 2019 Mercedes, set-up a tightly contested battle behind the leading two teams.

"We had a strong first half of the season," says Seidl, "and straight away we had a highlight with the podium of Lando, which was a great reward for everyone who had to go through these difficult times. And it was good to see how the spirit was in the team, how we approached it together.

"In terms of performance, I would say in this first half of the season we never had the third fastest car. On average it was probably fourth or fifth fastest. But we maximised results and we benefitted from Racing Point, Renault and Ferrari leaving a lot of points. We had expected Ferrari and Racing Point to be out of reach, so this was very positive. We had a competitive car and two drivers that were always pulling it off."

McLaren's race operations were generally sharp, barring a few pitstop issues early on, but it lost several prime points-scoring opportunities either through bad luck – such as Carlos Sainz's tyre delamination in the British GP, while running



Sainz leads his 2021 replacement Riccardo in the Sakhir GP. Seidl has been impressed with Ricciardo's performances this year

fourth – or the onset of reliability issues (an engine-related exhaust issue meant Sainz didn't start in Belgium). Since 2021 development will be limited by a token system, some of which McLaren must spend adapting its car to a Mercedes powertrain, the team pushed aggressively through the 17-race 2020 season. Among the developments was a new front-end aerodynamic philosophy which it introduced on Sainz's car for practice at Mugello and on Norris's car at Sochi. Norris was tasked with racing the new nose in Russia even though both drivers had expressed reservations; since other developments further down the car were in the pipeline, and depended on the effectiveness of the new nose, it *had* to be evaluated in race conditions.

"We had to pull forward [the upgrade] because of the token system next year," says Seidl. "And unfortunately it didn't work straight away. It's the first time in this year and a half since we made this reset to the team that we've experienced something like that, because we've always been riding a positive wave. It's part of the journey we're in, and it was actually good for me to see how the team reacted to that. "We managed to stay calm, analyse what had happened and make our way out of it, making the right conclusions, and then managed to introduce the upgrade the way we expected it. If you look at the last races, we've had a competitive car. This has kept us in the battle."

Since arriving at McLaren, Seidl has repeatedly returned to the theme of "focusing on the basics" and establishing clear management hierarchies. His hiring by Brown was part of the process of dismantling the "matrix" management system which McLaren had pursued – alone among F1 organisations – since the early 2000s. Inspired by the aerospace industry, it eliminates traditional divisions of responsibility. Adrian Newey has cited the system, and the levels of inertia it wrought by encouraging empire-building and

PICTURE: ANDY HONE

giving too many people too much influence, as one of his reasons for leaving in 2005. McLaren now operates a totally conventional racing team structure in which production, technical development and race operations have clear leaders. The last piece slotted into place last January when Andrea Stella was promoted to racing director, joining production director Piers Thynne and technical director Key in a senior management triumvirate which reports to Seidl, who reports to Brown.

"The most important thing last year [2019], and it was in the task I was given from Zak and the shareholders, was to clearly put on the table where I saw the deficits in the team," says Seidl. "One of the reasons I wanted to join McLaren was because of the great history the team has, the great success it's had in the past. But at the same time, we all had to realise that success in the past doesn't give us any guarantee of it coming again.

"So that was task number one to put on the table: where we see the deficits in the team, and then define together, as a team, a clear path for how we want to get back to the front, how we want to reduce these deficits. And how we want to get in a position at some point in the future to be fighting at the front again. So, we put up a clear plan and then it was important for us that we work on this plan and make the steps that should come from executing it. And again, I'm very happy with the progress I'm seeing there so far."

Eliminating the vices of the old management structure – and the built-in hubris attendant upon McLaren's status as one of F1's most successful teams – has brought real change already. Other elements of McLaren's journey back to the front of the grid require a longer runway, such as the redevelopment of the 21-year-old windtunnel. Since it was the first functioning element of the MTC, and the rest of the facility was built around it, the windtunnel is difficult and expensive to upgrade to moden standards.

Expediency has dictated McLaren spend the past few years using the Toyota tunnel in Cologne, a practice Racing Point has recently abandoned in favour of an arrangement with Mercedes. The MTC windtunnel upgrade project is deemed so important that it is continuing despite McLaren's recent financial turbulence.

"We need to be realistic that it will take time," adds Seidl. "We need to be patient also – ambitious, but patient in order to put everything in place. For example, the infrastructure projects that take a lot of time to finish, and then you get the benefit from this upgraded infrastructure.

"And in terms of the team, I'd say having gone through a period of having no success, it was important to kind of press the reset button, to build up this confidence that we can actually do it.

"WE HAVE SOME AREAS, LIKE RACE STARTS, RACE STRATEGY, RELIABILITY, WHERE WE ACTUALLY COMPETE WITH THE BEST"
ANDREAS SEIDL

With the gap to the front, you need to be brave to go for new ways and trigger aggressive developments without fear of failure. That's something we try to encourage – we don't accept any blaming culture within the team. We have to accept that if we go aggressive, to make the steps we have to make, that stuff goes wrong from time to time. And I can see the benefits of that approach."

Next season Daniel Ricciardo will replace Ferrari-bound Sainz. Though it was an enforced change – Sainz tied up his Ferrari deal, albeit with Zak Brown's approval, during the lockdown hiatus – Ricciardo was undoubtedly the best available replacement. He will be at the very least like-for-like in terms of consistency, and he's one of F1's most committed overtakers, an apolitical team player, and a proven race winner.

That experience will be valuable in a team which, above all, is racier than it used to be. Over the past two seasons a mutual confidence has grown between the team and drivers, such that it feels able to put in place strategies which demand much of them. Norris's Austria podium was built on a late call to change tyres which required him to do a lot of overtaking. The result, apart from another trophy, is that you can buy t-shirts emblazoned with "Scenario 7" – McLaren's code for turning the engine mode up and going for broke. A simple strategy call has launched a thousand social media memes...

Seidl speaks of how impressed he's been by Ricciardo's performance at Renault this year. Ricciardo's reputation should cement McLaren's new-found confidence as it embarks on what will be an interim season before the new technical rules come in to force in 2022.

"We know the gap to the front in terms of performance is still huge, but we've closed the gap to Mercedes a bit in terms of laptime deficit," says Seidl. "We have some areas, like race starts, race strategy, reliability, where we actually compete with the best. And these little highlights boost the self-confidence in the team without being arrogant – that it's actually possible to do it.

"It's now down to us to put together all the important ingredients to fight back in the future, which we're getting in place over the next couple of years: the Mercedes power unit, the driver line-up, the new infrastructure. In the end it's simply down to us, as a team, to work to make it happen."


AMG
UBS
CROWDSTRIKE
PETRONAS
Hewlett Packard Enterprise

IN CONVERSATION WITH

WORDS FIA PRESS CONFERENCE
PORTRAIT MOTORSPORT IMAGES

LEWIS HAMILTON

The most successful driver in F1 history tells us what it means to him to have equalled Michael Schumacher's record of seven world drivers' titles after winning the recent Turkish Grand Prix

Lewis, a wonderful race today [in Turkey], a wonderful season in 2020. What would you like to say. How do you sum it all up?

My dad always used to tell me to do my talking on the track, so I don't really have a huge amount to say. The performance hopefully shows what I'm capable of and what we could all do together. In the sense of young kids out there it's important for them to see. I dreamt this when I was five years old, to be here in Formula 1 and it's so important to hold onto your dreams, to dream big, for all of us, it doesn't matter how old you are. It's taken a long time to get here but I'm forever grateful to the guys that have helped me. My team, for believing in me, Ron [Dennis] for taking me on when I was a kid, Mercedes, who continued to support me all the way from 13 years old to today. Particularly to my family.

I hope they are feeling fulfilled. My parents sacrificed so much for me to be here and I never take that for granted. Hopefully we've earned the respect. There is more to do. This is a world championship and it's the pinnacle of my life so far, but there is a much bigger win that we all need to work together towards and that's pushing for equality and that's pushing for equal opportunities for all these kids that are out there so we can create a better future.

You've made lots of powerful statements against racism this year but you becoming the most successful racing driver ever is possibly the most powerful of all. What does that mean to you – and what message to you think that sends out to the world?

It's obviously no secret that I've really walked this sport alone: the only black person here, or the only person of colour here. When I was younger, I didn't have anybody in the sport that looked like me and it was easy to think it's not possible to get there, but hopefully this sends a message to the kids that are watching. Hopefully they can see it doesn't matter where you come from.

Whatever your background, it's so important to dream big. And if you are looking at places, industries, that you don't see someone of the same background as you, or the same ethnicity as you, or with the same religion, create your own path. Because that's what we did. Tough doesn't even describe how hard it's been. That's the most important message for kids: to dream as big as possible and not give up.

In the UK there is a growing feeling that you should now be knighted for what you're doing, both on and off the track. What would it mean to you to receive such an accolade – and could we see Lewis Hamilton racing in Formula 1 into his forties?

I don't think I'll be here in my forties, but I'm only 35. I feel young and fresh. Every year we talk about this and I naturally get the questions and I don't really have anything different to say.

When I think about that honour, I think about people like my grandad who served in the war, I think about Captain Sir Tom Moore, who got knighted and waited a hundred years for that incredible honour. The people that are running hospitals, the nurses and doctors who are saving lives during the hardest time ever. I think about those unsung heroes and I don't look at myself as an unsung hero. I've not saved anybody. It is an incredible honour that a small group of people have had bestowed upon them. All I can say is that standing today, and hearing the national anthem I'm very, very proud. I am a very proud Brit. To be up there representing a nation. Having the flag over your head, over number one, that is such an incredible honour.

> "MY PARENTS SACRIFICED SO MUCH FOR ME TO BE HERE AND I NEVER TAKE THAT FOR GRANTED"

You're the most successful driver in Formula 1 history but there are still a lot of critics out there who always say you're just winning because you have the best car...

I think I deserve my respect. I think I have that with my peers. However, I couldn't have done this without that amazing group of people behind me – but there is another great driver who is alongside me, who has the same car who obviously didn't finish where I finished. I do notice that there are these interesting comments from past drivers, particularly. I really, really promise you, and hope that I stand by my word, when I stop in 10, 20 years from now and look back, I want to be embracing and encouraging the next youngsters that are here, whether it's Lando [Norris], whether its George [Russell], whoever it may be, whether it's Max [Verstappen]. I know how hard it is to do the job and I know how this world works. Of course you have to have a good team and of course you have to have a great car.

It goes back the same all the way down to karting. You've got to have the right equipment, and that's something that will always be in this sport. But then it's also what you do with it that really counts.

“WHAT LET IT DOWN WAS A LACK OF UNDERSTANDING AT THE TOP. TOO MANY PEOPLE WRITING REPORTS SAYING THAT ‘WE WOULD HAVE WON IF…”

HOW NOT

Team principal Tadashi Yamashina was distraught when it was announced at a press conference in November 2009 that Toyota was pulling out of F1 with very little to show after eight seasons

WORDS MARK GALLAGHER

PICTURES MOTORSPORT IMAGES

TO DO F1



PICTURE: SSHUTTERSTOCK

As Honda gets set to bow out of F1, again, at the end of 2021, we look back at the exploits of another famous Japanese manufacturer that spent too much money, adapted too slowly, achieved too little, then bowed out too soon in response to global economic rupture

‘IT’S GLOCK’.



For many, these fateful words mark the pinnacle of Toyota’s contribution to Formula 1 between 2002 and 2009. Timo Glock, struggling with dry tyres on a wet track, handing Lewis Hamilton his first world title on the final lap of the 2008 Brazilian Grand Prix, to the disbelief of race winner Felipe Massa, and the complete disgust of local fans.

In some ways it was ‘peak Toyota’. Although Glock and team-mate Jarno Trulli both finished the race in the points, the team achieved fifth place in the constructors’ championship and the parent company was proclaimed the world’s largest car manufacturer just two months later, the die was cast for an ignominious F1 withdrawal a year later. Any remaining dreams of F1 glory were dashed on the rocks of the 2008 financial crisis.

Team principal Tadashi Yamashina wept during the November 2009 press conference when his boss Akio Toyoda, president of the company and grandson of the founder, announced the team’s immediate withdrawal from F1. Toyoda apologised for Toyota’s failure to win a single race, cited the difficult economic circumstances which had meant the company posted a £2.9billion loss the previous May, and avoided mention of the fact they had signed a new Concorde Agreement just weeks earlier.

It all looked so very different when, in 1999, Toyota announced its intention to enter F1. Toyota Motorsport’s avuncular boss Ove Andersson confirmed that the team would remain located at its traditional hub in Cologne, Germany, from where it had masterminded seven World Rally Championship titles.

An early visit to the factory showed it to be of a size and scale not previously seen in F1 circles. With corridors wide enough to drive a car through them, the state-of-the-art manufacturing facilities were scaled to facilitate provision of customer rally cars and spare parts. Engine and gearbox manufacturing was done in-house, the race team honed through two years of participation in sportscar racing, and the wind tunnel and chassis rigs were already in situ.

The team’s entry was duly submitted in 2000, with the initial plan being to race in 2001. This was soon shelved, Toyota forfeiting an $11million bond to F1 in the interests of having a full year of testing. Initially the plan was to attend as many races as possible and test the day after. That changed as it became clear the test mule was not competitive but, as Allan McNish recalls, the testing programme was not without its merits.

“It allowed a lot of reliability running and to get some fusion among the team personnel,” he recalls. “In the end, the race car had very little in common with the test car apart from the engine.”

McNish’s participation came as the result of his involvement in the team’s assault on Le Mans in 1999 where he drove one of three Toyota GT-One entries. Out of contract after the race, McNish was about to sign for Audi when he received a call from Andersson.

“He asked me if I’d be interested to have a chat about a Formula 1 programme which, to be frank, I had heard about but never considered,” McNish says. “It wasn’t ideal timing for me in terms of age – I was 32 when I hit the first race – and I was very established in sportscars by that point, but this was an opportunity that was never going to come back.”

With team-mate Mika Salo, 35, Toyota’s bosses were clearly aiming for maturity and experience, but McNish recalls that in the time between him being signed by Andersson and the start of testing things began to change.

“When I signed Ove was leading the charge and the structure was quite clear, but the closer it got to the first race the less he was leading and the more other people came around him. Generally they were from a non-motorsport background.

“Sometimes it felt like the blind leading the blind. When we started out there was only one engineer on the race team with Formula 1 experience, so when we turned up in Melbourne for the first race it really was the first race in the true sense of the word. There was quite a lot of naivety at the beginning.”

2002 started well enough, Salo finishing in the points in two of the first three races, but it was a false dawn that led Toyota’s management to recalibrate their targets upwards.

“At the beginning we were reasonably competitive but that was because we had been driving the car since November,” admits McNish. “Most teams had only had their cars two or three weeks beforehand. With our understanding of the car, and some decent reliability, we had already reached the peak of performance by the time we got to Melbourne whereas everyone else



Toyota opted to base its Formula 1 operations at the company’s hub in Cologne





It was former rally man Ove Andersson (left) who led Totoya into F1. The team's factory was huge, state-of-the-art and lacking in nothing



was just scratching the surface.

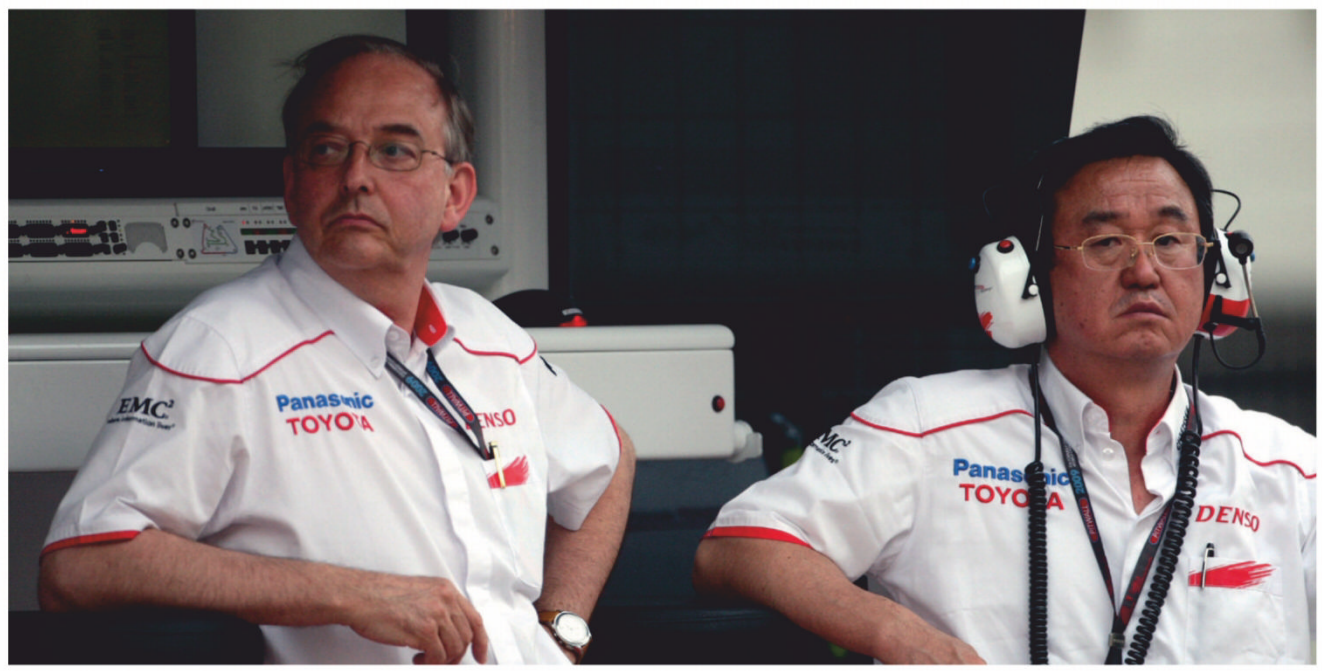
"After the first races the expectation went from being merely 'respectable' to suddenly we had to finish in the top six in the constructors'. That put a lot of pressure on people and the frustration started to build."

On the operational front the rigour of F1 was also taking its toll, the Gustav Brunner-designed TF102 having 'zero development' during the season as the factory came to terms with the relentless nature of the championship.

"The first year was a big lesson for the team," adds McNish. "Being able to build, test and race a car is fine, but when you have to do all three at the same time that's a different story. We had open testing at the time, so we were testing the 2002 race car extensively, racing that car and also building the 2003 car. It was a massive amount of work and took them by surprise."

On the management front one of the figures who had taken centre stage was Tsutomo Tomita. He cut his teeth at Toyota working on engine design in the 1970s, rising through the ranks to take overall charge of the company's motorsport programmes in 1996. Tomita is credited with putting together the strategy to enter Formula 1 and, as a board member, securing the necessary funding. The plan was to do everything in-house, Ferrari style, resulting in a workforce whose





McNish and Salo (left) were the team's first drivers in 2002 but were quickly discarded. Andersson had gone by the end of 2003 as well, replaced by John Howett (below, left with Tadashi Yamashina in 2008)



numbers dwarfed the opposition.

The team finished its debut season 10th in the constructors' championship, with no further points finishes. Only Arrows lagged behind, and that team went out of business mid-season. For a company that prided itself on being world class, this looked and felt like failure. Change was instant, the axe falling on both McNish and Salo, replaced by Toyota's newly crowned CART Champ Car champion Cristiano da Matta, and French veteran Oliver Panis.

The 2003 season produced a slight improvement, but eighth in the constructors' – ahead of declining Jordan and diminutive Minardi – was no cause for celebration. Tomita moved into Cologne and Andersson was semi-retired, remaining on as a consultant.



"THE PLAN WAS TO DO EVERYTHING IN-HOUSE, FERRARI STYLE, RESULTING IN A WORKFORCE WHOSE NUMBERS DWARFED THE OPPOSITION"



Ralf Schumacher (right), already a race winner, joined for 2005. Yamashina did have some good times with the team (below) celebrating Glock's 2009 Singapore podium with Howett





Toyota Racing's first pole position came at Indianapolis in 2005, thanks to Jarno Trulli, but it was rendered useless when all of the Michelin runners withdrew from the race

This news came as an unpleasant surprise to the team's latest recruit, technical director Mike Gascoyne, recently lured from Renault.

"When Ove approached me, I did not realise how difficult the situation was," Gascoyne reflects. "He explained they wanted to take the performance to the next level, had great facilities and wanted to do things properly. That's really what you want to hear, so I went for it only to find that when I turned up, literally on day one, Ove was on his way out."

Instead, Tomita opted to bring in John Howett, who had worked in the Team Toyota Europe rally team with Andersson back in the 1970s before embarking on a 20-year career with Toyota and Lexus. Here was a company man, through and through.

"Whenever I went to Japan with John I realised how astute he was with the Japanese bosses, particularly at boardroom level," recalls Gascoyne. But all was not well back in Cologne. "I was constantly fighting a rearguard action," continues Gascoyne. "At Renault I had enjoyed the full support of Flavio Briatore, but when I joined Toyota at Ove's invitation, I found that John had been put in charge and that he and I came at things from a very different perspective.

"I would be told that the technical budget was €384million (£343million) but that I should aim to trim 2% off that, or my challenge would be to save 5%. That made no sense to me, so I would say to John 'just tell me how much I have to spend?' He did not understand that money spent properly translated into laptime. He was a corporate guy, but I wanted to go racing, and that was the difference."

Arriving at the end of 2003 Gascoyne had little influence over the 2004 car, which carried the team to another eighth-place finish in the constructors' championship, this time with fewer points than the previous year.

"The team showed me the TF104's aero numbers," continues Gascoyne, "which is how they measured everything. They were happy with them, but were complaining that the car had a braking problem. I had a look at the aero and it was 20% down on where Renault was, so trying to match [Fernando] Alonso's braking point was a waste of time. We didn't have a braking problem, we had a downforce problem!"

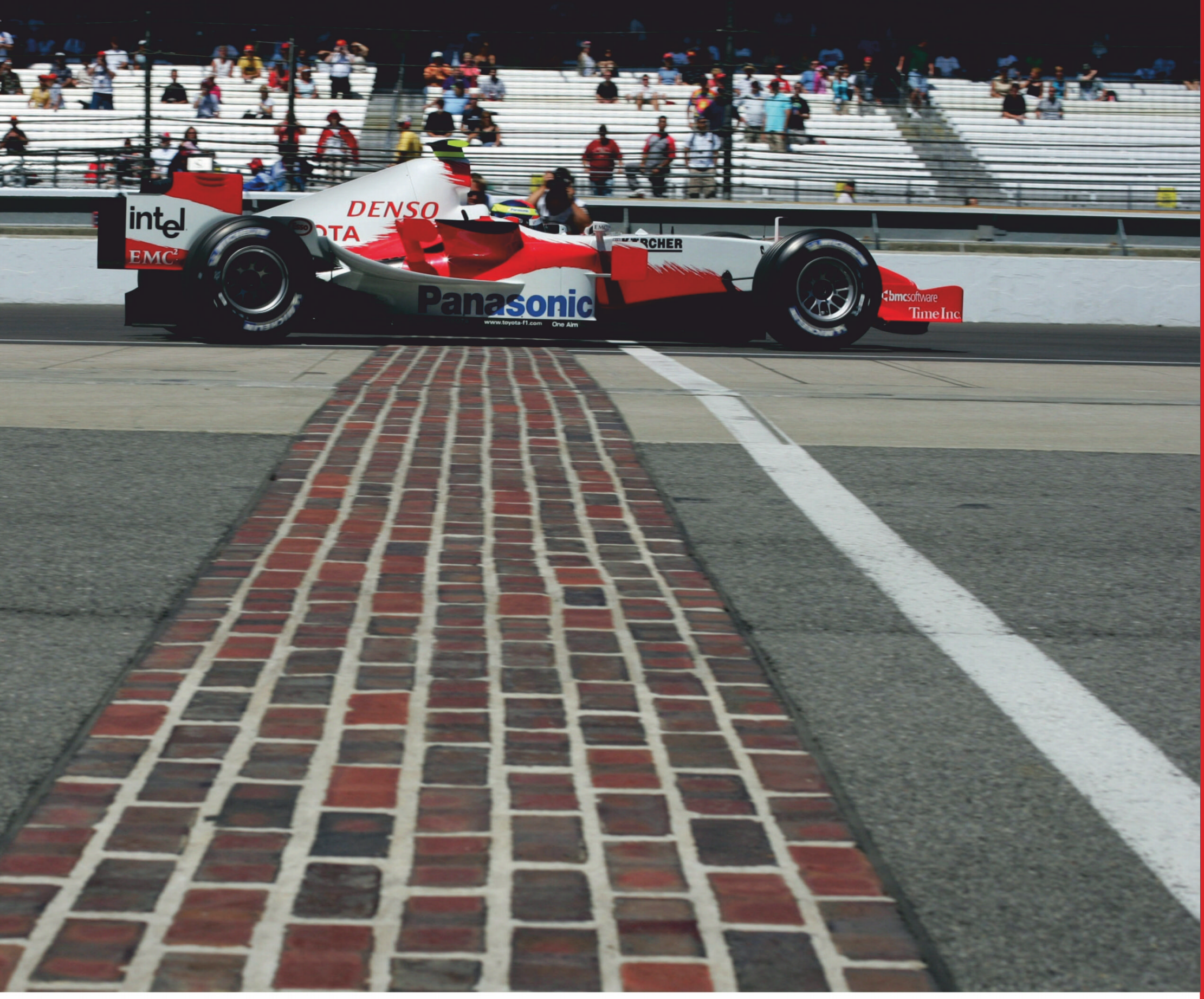
Neither da Matta nor Panis lasted the season, the former dropped mid-year and the latter retiring before the season was out, Ricardo Zonta and Jarno Trulli being drafted in as replacements. Stability was a distant concept.

"It was very easy for them to point the finger," suggests McNish. "It's like football managers being changed, it's only one person compared to the whole team, so it's quite an easy change for them to make."

Engineering a team's performance through driver changes is seldom successful, but McNish points out it can give a corporate team owner the impression they are at least doing something



Mike Gascoyne joined the team at the end of 2003 and soon got frustrated with the way the operation ran, but stayed until 2006



about the team's (lack of) performance.

For 2005, and the arrival of the first car produced under Gascoyne's technical leadership, Trulli was retained and Ralf Schumacher signed from Williams. Schumacher's deal was eye-watering, evidenced by an astonished but delighted manager Willi Weber seeking refuge in the Jaguar motorhome during the course of the 2004 European Grand Prix at the Nürburgring.

"They've just signed him," Weber admitted to his audience, "and someone is running down a corridor in Tokyo waving a fax and shouting 'we've signed Schumacher'. But they've got the wrong one!"

The new season started in promising fashion, Trulli putting the TF105 second on the grid in Melbourne (under the new and short-lived amalgamated qualifying system) and racing strongly behind Giancarlo's Fisichella's Renault before a blistered tyre dropped Trulli to ninth. Gascoyne was summoned to Japan to be told that qualifying second and finishing outside the points was unacceptable, only for Trulli to qualify and finish second in Malaysia, and repeat the feat after starting third in Bahrain. The corporate knives were sheathed.

Although there were three more podiums in Spain (Trulli), Hungary and China (Schumacher), the performance ebbed as other teams improved. Schumacher took a jubilant pole position at Toyota's home grand prix in Japan but could only finish eighth, while pole for Trulli at Indianapolis was rendered pointless as a result of the infamous tyre debacle that led to only the Bridgestone runners starting the race. Toyota's shift from Michelin to Bridgestone was another move Gascoyne found frustrating.

"That was not my decision," he says. "This was corporate Japan making a deal based on first fit [of road tyres to cars] and nothing to do with what was right for the Formula 1 programme. Had it not been for what happened in Indianapolis I believe Jarno could have won that race and we'd have beaten Ferrari into third place in the constructors' championship."

As it was, Toyota finished fourth, 12 points behind the Scuderia, and suddenly it looked as though the long-awaited surge in performance was gaining real momentum. Then came 2006, and a tough start with midfield qualifying performances in the first two races resulting in only a single world championship point.

The difference between the Bridgestone and Michelin tyres wasn't just a factor of grip. They were rounder in profile and had stiffer sidewalls, which had implications for both aerodynamics and chassis dynamics – awful timing for a team which had spent months working on a 'zero keel' front end. It meant having to rethink the front end completely, which would have a cascade of effects further down the car.

2006 was the year F1 downsized from 3-litre V10s to 2.4-litre V8s, which meant the engines were physically shorter. This was simply one change too many for the resources available, for it would require a completely new monocoque



The TF106B in Schumacher's hands in Belgium in 2006. The team failed to build on a good 2005 and Schumacher left F1 at the end of 2007

design or a new (longer) gearbox – or both. At launch the TF106 simply had a spacer fitted between the tub and the engine to retain the existing wheelbase. The definitive 2006 car, with zero-keel front suspension and new geometry, plus a larger fuel tank to replace the spacer, wouldn't be ready until later.

A podium for Schumacher in Melbourne (the season started with Bahrain and Malaysia) indicated the potential within the package, but by then Gascoyne found himself pulled into a meeting at which he was presented with an eight-point list of things he had done wrong.

"I remember number three," he recalls, quoting from memory, "'The executive makes too many decisions based on gut feel and experience.' This was the problem, because in racing you have to make a decision and go with it, but the Toyota Way was to follow the process, get all the information and reach a conclusion six months down the line."

The Toyota Way is a set of principles that guides the management of Toyota Motor Corporation. There are 14 principles in total, which include *Kaizen* – a working process based on continuous improvement – and *Genchi Genbutsu* which literally means 'go and see for yourself to thoroughly understand the system'.

Gascoyne demanded too much independence in order to make the quick decisions he felt were necessary for Toyota to properly compete rather than merely participate. He was shown the door.



Trulli gave Toyota its final podium in Japan in 2009, in what was arguably the team's most competitive season. But by then it was too late...

The team slid to sixth in the standings in 2006 and 2007, Tomita returning to Japan, replaced by Yamashina. An improvement to fifth in 2008 was followed by a strong start to 2009 with three podiums from the first four races, plus a front row lockout and a fastest lap. Then came the catastrophic financial results from head office...

Looking back on the programme, with frequent driver changes early on, inexperienced management learning the ropes and a desperate need to fulfil President Toyoda's desire to win The Toyota Way, it is clear that the language of F1 was one the Japanese giant struggled to master.

"It was a missed opportunity," says McNish. "A very good university for people, including some real talents such as Dieter Gass, Jens Marquardt and Richard Cregan who went on to achieve a lot in motorsport.

"Ultimately, Toyota had too many high objectives in F1 without a deep understanding of what it would take to achieve them. It stumbled at the beginning, picked up a bit of momentum, got to the point where it could start to fight for wins but by then world events had overtaken it."

Gascoyne agrees: "They were close to getting it right. I never had any issues within my design team, we just wanted to get on with the job, and there were very many really good people. What let it down was a lack of understanding at the top. Too many people writing reports saying that 'we would have won if....'.

"I used to say that the only report that matters is the results published by Bernie Ecclestone's business at 4 o'clock on the Sunday afternoon. I'm not sure they liked that."

Turn your garage into a showroom





Robust interlocking floor tiles

Easy to fit

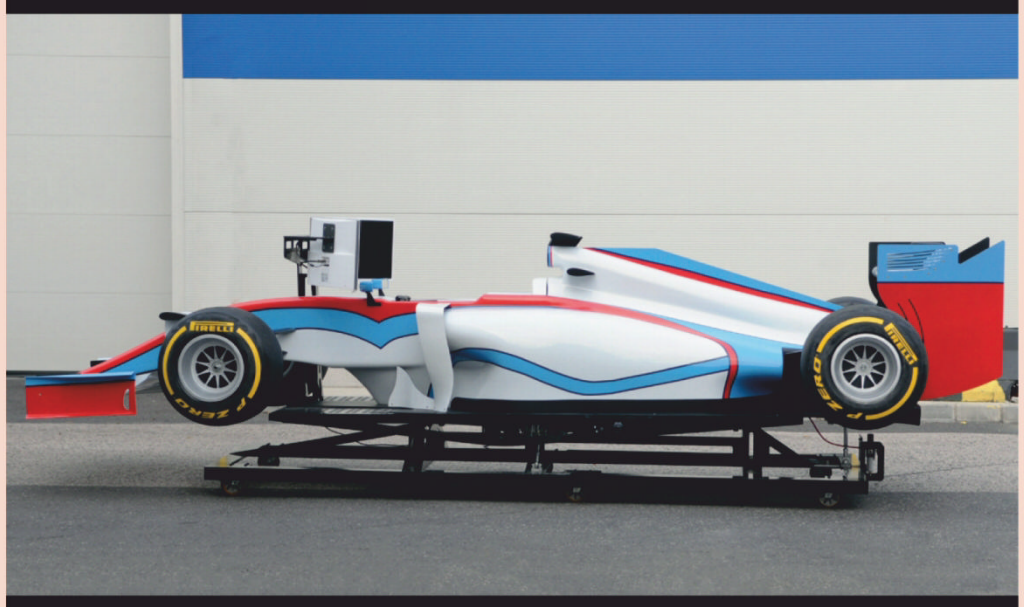
No messy adhesives

Choice of 11 attractive colours

DYNOTILE

Call 01676 523386
www.dynotile.co.uk

P1simulator.com



Formula Simulator Cars and Show Cars For Sale

www.p1simulator.com

VIRAGE-F1.COM











VIRAGE F1 is the place to find very rare motorsport memorabilia items.
Offering original race helmets, official replicas, race suits, gloves, shoes, Nomex and more.
From the golden age to the modern era, every item has been selected with passion and carefully authenticated.

+33 6 85 84 55 24 | contact.viragef1@gmail.com



Award Winning Tattoo Moisturiser

One of the major issues with tattoos is aftercare. Tattoos need ongoing maintenance to ensure they maintain their radiance and to protect them from fading in the sun - colours such as red are especially prone to fading.

This Dual Action Tattoo Moisturiser absorbs quickly and deeply allowing the tattoo and the skin around it to enjoy a sense of calm while injecting a boost of nourishment. Perfect for freshly inked tattoos and for the maintenance and protection of existing skin art.

Available online at urbanjack.com



HAAS



REBOOTED

Romain Grosjean and Kevin Magnussen have been shown the door after another underwhelming season for Haas. But that's not the only big change blowing through the American-owned team...

WORDS STUART CODLING
PICTURES MOTORSPORT IMAGES

Sometimes you have to go backwards before you move forwards. That now is the seemingly counter-intuitive goal of the Haas team as it contemplates the implications of a miserably uncompetitive 2020, its worst season in Formula 1 to date.

Even before the season was supposed to begin, the team nursed concerns over the direction of development. Not only was it failing to make progress, it was actively going backwards as new components failed to influence car performance as expected. Once racing finally resumed in July there was no respite, just a continuation of the slide towards the back of the grid.

Its solution to that has been drastic: it stopped development completely in 2020 and has been painstakingly working its way backwards through the design timeline to establish where things started to go wrong, the aim being to understand how the divide between theory and practice opened.

In a separate but related move, the team has binned both its drivers – one of whom, Romain Grosjean, has been with Haas since day one and once saw it as a potential springboard to joining Ferrari.







Nikita Mazepin with father Dmitry. Mazepin Jr is just one half of the resetting of the team's driver line-up for 2021

The arrival of Nikita Mazepin (see p68) and Mick Schumacher amply demonstrates the economic and political realities of modern F1 and how they trump continuity – or, indeed, loyalty.

"I wouldn't call it shit, I'd call it… difficult," muses team principal Guenther Steiner when invited to summarise 2020 in a single word. "A difficult season. It just started on the wrong foot with the coronavirus after Australia. Not knowing how the pandemic was going to go, when the season would restart, and then the negotiations over the Concorde Agreement. It's difficult to piece things together when everything around is falling down…To survive the season was challenging in many respects, but I think the good thing is we came out OK. We're still here."

Haas was facing an existential crisis even before the pandemic took hold. It took on title sponsorship from Rich Energy in 2019, an arrangement which seemed dubious given the conduct of individuals connected with that business. Nevertheless, word had been circulating that team owner Gene Haas was looking to sell, so it was a logical move and at first Rich Energy appeared good for the money. Payments then stopped mid-season, just as Haas was going through a rough patch on track when performance upgrades failed to work.

Haas operates an unusual business model in that it buys as many components as the regulations permit from Ferrari and outsources much of the mandatory independent design and construction to Dallara. Theoretically this makes for an agile business with low overheads, but it also dictates having fewer resources to throw at problems. When the VF20 hit the track in February looking like a mild evolution of the troubled VF19, it confirmed that the financial belts had been tightened.

As early as March, before the 2020 season was originally due to start, Gene Haas spoke of the team coming to the end of a five-year evaluation cycle, and that its performance this year would be crucial to whether he would commit to another five. "If we have another bad year," he explained, "then it would not be that favourable."

The axe was therefore already out of its sheath when the pandemic struck and the racing season was hastily rearranged. Like many teams, Haas furloughed the majority of its staff. Unlike its rivals – and this is the most telling indicator of its financial and competitive predicament – it shelved all onward car development. Predictably, the VF20 has been a dud on track, the more so for having to run lower downforce levels to offset its Ferrari engine's reduced grunt. But the axe hasn't swung; political developments such as a reduced budget cap and the new Concorde Agreement, which enshrines a franchise value in the active teams, made it worthwhile continuing.

"Without the commercial settlement being more equal," says Steiner, "and the financial regulation with the budget cap, we wouldn't be around. I can say that openly now. It would have made no sense for us, and for some others, to be around. We couldn't get to the budgets the big teams were spending – three or four times as much. That meant we'd never get there, performance-wise. Why hang around? OK, so you've got a job, but people who are ambitious don't want to stay when you're second or third from last.

"I'm not critiquing the big teams. They've put themselves in a very good position. The risk is that at some stage the whole F1 castle comes tumbling down because small teams can't afford to take part or don't want to spend the money to be fighting not to be last. Then the big teams say, 'There's no point in being here because we're not competing against anybody' and the whole thing comes down.

"With the lower budget cap, the playing field should become more level – if not at the beginning, in the middle term – and we'll still be around. We've reorganised ourselves to stay here for the long term. There's no point in complaining about how bad everything is and was. We need to rethink everything we do. We're not just hanging in there, we're making decisions to move forwards and upwards."

"THERE'S NO POINT IN COMPLAINING ABOUT HOW BAD EVERYTHING IS AND WAS. WE NEED TO RETHINK EVERYTHING WE DO" GUENTHER STEINER

These ambitions are contained within an inexact time frame. VF20 development has remained static; Gene Haas was understandably unwilling to commit to further investment until the Concorde Agreement was nailed down, by which time (mid-August) it was pointless to resume development because of the timescales involved. New parts would take weeks or months to design and build, which required great piles of money to be spent on a potential benefit for just a few races at the tail end of the 2020 season.

Given the ongoing review into where development effectiveness has gone



The promotion of Ferrari Academy driver Mick Schumacher to a Haas race seat should help strengthen ties with Ferrari

Steiner knows the team will struggle to recover performance in 2021 but can at least start to focus on the 2022 regulations

This season it quickly became obvious that Haas would be battling with Williams to avoid finishing last in the constructors' championship



awry, Haas made the strategic decision to focus its resources on mitigating the effects of the rules tweaks coming for the 2021 season. Centred around reducing the dimensions of the floor area and eliminating certain items of aerodynamic furniture, these changes add up to a blunt tool to reduce downforce levels. The impact will not be uniform across all teams and, in the case of Haas, may make a car which is already difficult to drive even more so. Not ideal given the relative inexperience of those who will be charged with driving it. The case may be that 2021 is a year of muddling through for Haas.

"Obviously we're not performing because we stopped developments," says Steiner. "My hope is the future is better, but it's going to be difficult to recover next season because in F1 you can't make performance changes quickly. It will be challenging, but the good thing is we're here to stay.

"2022 brings new regulations so we can start to focus on that and not worry too much about performance during the 2021 season. For sure we'll worry, but not as much as we would have done otherwise. You have to look for the good things in this crisis – in my opinion it's only possible to go uphill from here."

Scoring 93 points and finishing fifth in the constructors' championship in 2018 represents the peak for Haas in F1 so far. The rot set in the following year, when the VF19 proved unpredictable and prone to great swings in performance when ambient temperatures changed. A new aero package introduced at Barcelona (race five) only exacerbated this characteristic and the team struggled to get to the root of it. One of its more baffling quirks was a tendency to overheat the surface of its tyres without bringing the rest of the carcass up to working temperature, rendering the tyres useless quickly. Among the VF20's vices is a disconcerting sensitivity to changes in wind direction, particularly mid-corner when the car is in yaw.

This has informed the team's 'back to the future' mindset: there's no point in pushing on with developments which aren't working. To paraphrase a truism incorrectly attributed to Albert Einstein, repeating a failed course of action and expecting a different result won't get you far in F1.

"It's been challenging, but sometimes that's helpful because it helps you think clearly again about what you need to do," says Steiner. "If you have half-decent results it can be tempting to think you're doing OK. We've been able to stand back and analyse everything, to make changes to go back to how we were in 2018. It might take a year or two to get there, but if we look back and see how we did it then, and where we deviated or didn't go forwards, we'll find out.

"This – being half-good – was part of the problem in 2019: in qualifying we were good, so we kidded ourselves we were OK when we weren't. This year we realised we couldn't just keep on hoping, we had to do something about it. That's why we've gone back over everything, being sceptical about ourselves, not believing our own propaganda."

While it's common for drivers to be ejected whenever an F1 team undergoes a period of enforced introspection and renewal, the decision to drop both Romain Grosjean and Kevin Magnussen appeared brutal. Especially so since Grosjean's career trajectory once appeared to be heading in the direction of Maranello, while Magnussen seemed to flourish in the less corporate environment. It's difficult to envisage a pair of rookies bringing something new to the table and, while Steiner likes to frame the change as part of a wider process of doing things differently, he concedes there are greater issues at play.

"We needed some change because we can't just keep doing more of the same," he says. "Doing the same thing doesn't take you anywhere. Also, the landscape has changed. The financial impact of a driver is now more important than it was before.

"For sure, drivers aren't happy when you let them go, and they say you did everything wrong. I can live with that. It's just a decision – we've been loyal to people, but we need to make changes to keep the team going in the right direction. I'm not blaming them for doing anything wrong – it's just a change of direction. Priorities have changed within the team."

"WE NEEDED SOME CHANGE BECAUSE WE CAN'T JUST KEEP DOING MORE OF THE SAME. DOING THE SAME THING DOESN'T TAKE YOU ANYWHERE" GUENTHER STEINER

It's understood Gene Haas considers his work in F1 – publicising his machine tools empire – to be accomplished, and that he is willing to entertain offers. It's possible that Mazepin may bring more than just a budget – after all, his father Dmitry tried to buy Force India in 2018 and continues to be outraged that Lawrence Stroll whistled it out from under his nose. A civil case brought by Mazepin via his PJSC Uralkali empire against Force India's administrators was being weighed in the Royal Courts of Justice as this issue of *GP Racing* closed for press.

Schumacher's promotion from the Formula 2 ranks, meanwhile, can be taken as a signal of closer ties with the Ferrari mothership after a couple of years in which it seemed Alfa Romeo was the preferred junior partner. Simone Resta, parachuted into Alfa by Maranello as technical director in 2018 before being recalled in mid-2019, is now being transferred to Haas to sort out its issues – or, as Ferrari's Mattia Binotto put it rather more diplomatically, "to strengthen the American team's technical department". Perhaps a Racing Point/Mercedes-style relationship might be in the offing?

The chances are that even though the cars will be relatively unchanged come 2021, there will be a very different look and feel to Haas. Can we look forward to a *Dallas*-style battle of the billionaires playing out as a minor subplot to the on-track action in the coming years? Don't rule it out...


Haas
F1 Team
HAAS
RELLI
CK&JONES
stich

RUSSIA'S NEW HOPE

Mick Schumacher's graduation to F1 with Haas naturally stole headlines, but what of his 2021 team-mate? Nikita Mazepin is out to prove he's much more than just another in the recent line of sons of rich fathers graduating to F1...

WORDS
OLEG KARPOV
PORTRAIT HAAS

CV

Nikita Mazepin
Age 21
Born Moscow
2020
5th in FIA F2 (2 wins)
2019-2020
Third in F3 Asian
2019
18th in FIA F2; Mercedes F1 test (1 day)
2018
Second in GP3 (4 wins); Force India F1 tests (3 days)
2017
FIA F3 Euro; Force India F1 tests (3 days)
2016
Formula Renault, BRDC F3 (1 win) and FIA F3 Euro; Force India F1 tests (2 days)
2015
MRF Challenge, Formula Renault and Toyota Racing Series
2012-2014
European and World Karting

What do you know about Nikita Mazepin? You're probably aware that he has a rich dad. Maybe you've heard he once hit Ferrari Junior Callum Ilott in the face. And now, having lost out to Ilott in Formula 2, he's beaten him to a 2021 Haas seat alongside Mick Schumacher.

Well, there's a lot more you need to know. The paths of Mazepin and Schumacher have crossed before, towards the end of their karting careers when they were team-mates in the works TonyKart team, and Nikita boldly claims that he was "a lot better" than Mick. In fact, it was maybe Schumacher Sr who left the bigger impression on Nikita.

"Mick's father was handling his career at the time," Mazepin tells *GP Racing*. "He was very down to earth and straightforward. You can imagine how a surname like that can open doors – especially in a world as small as karting. They had the opportunity to jump from category to category with the best equipment, the best professionals, but that's not how they went about business. Michael never took advantage of his name. There were no privileges, no breaks."

Mazepin's karting career ended on a strong note, finishing World KF1 runner-up to Lando Norris in 2014. But from there it got complicated. Nikita struggled in the junior single-seater formulae – which he puts down to specifics of his driving style.

"It was clear I was suited to cars with a stable rear," he admits. "When I tried Formula BMW – small wheels, no downforce – it was very difficult. I didn't understand what was going on. Where's the speed? Where are the results?"

After no wins and just a couple of podiums in his first year and a bit in single-seaters, including Formula Renault 2.0, New Zealand's Toyota Racing Series and India's MRF Challenge, Mazepin moved up to F3, yet progress still wasn't evident.

But a lack of tangible successes in junior series didn't prevent him working with F1 teams. In 2016 Nikita was announced as a development driver for Force India. He drove eight days of official testing over three seasons. Is it worth hiding that it was more the father's money, not the son's results, that helped the team 'see the potential' in the young racer?

And yet, if Nikita is to be believed, the lack of results nearly led to him ending his career before GP3 saved him.

"I had an understanding that if I don't produce results, then probably my career is over," Mazepin said of his own expectations ahead of 2018. "But after the first test I already understood this car fits me perfectly. I found what I've been looking for, all my years of racing in F3. That generation's GP3 was the best car for my style."

GP3 re-launched Mazepin's career. He finished runner-up, behind only the late Anthoine Hubert. For 2019, Mazepin got promoted to F2 with ART, with whom George Russell had won the previous year's title.

The path to F1 seemed open. As well as signing for one of the best junior teams in F2, Mazepin began active preparation to debut in the world championship. In addition to an official test day with Mercedes in a current F1 car, he had several private outings with a two-year-old machine on tracks that host grands prix. He will not speak of it on the record, but it is no secret in the paddock: Mazepin – not for free, you must imagine – has practiced in Mercedes F1 machinery for the past two years.

Sounds familiar? Yes, after the Strolls and the Latifis we'll see another pairing in F1 comprised of a billionaire father and a sufficiently able son. Nikita Mazepin's story is also the project of his father, a Belarus-born Russian businessman and chairman of Uralchem, a huge Russian chemical company.

Mazepin Sr dictated "it was either racing and education, or just education. No other option" so Nikita also studies at Moscow State University. In 2019 it was looking like he might need to fall back on that education. His ART team-mate Nyck de Vries won the F2 title, while Mazepin languished in 18th.

"I lost all motivation and all the self-confidence I'd built up in 2018," he explains. "It was very hard to race for ART. They had a very experienced and supremely talented racer in the second car. If a car is going well, then 'why aren't you going as well in it?'. The set-up, their philosophy dictates, must work for both drivers. And that definitely helps pick out the stars – the likes of Lewis [Hamilton], whoever else – you put them in a two-wheeled car and they'll still go fast. But I needed more time, that's my particularity."

Mazepin insists 2020 was almost his last chance. After splitting with ART, Nikita, in his own words, "bet everything on red". The Mazepins brought their own Hitech team into F2, and things improved. Despite a weak start, Mazepin took two wins and finished the campaign fifth. It is a decent rebuke to those who believe he hasn't earned his F1 call-up.

"I think F2 doesn't let anyone doubt that it's one of the hardest junior categories in the world, and since I'm in a new team you definitely can't say I have a better car than my rivals do," he insists. "So it's a good response. But it's not my goal to explain something to someone. I do my talking on the track."

McLAREN


HONDA
Shell
GOODYEAR


FOSTER
Marlboro
Shell


HONDA
1
Shell
GOODYEAR

MP4/6

The first and only V12-powered championship winner

NOW THAT WAS A CAR

No. 94

WORDS
STUART CODLING
PICTURES
JAMES MANN



World championship history documents an almost seamless span of McLaren dominance between 1984 and 1991, a period bookended – coincidentally – by McLaren drivers taking their third and final world titles: Niki Lauda in 1984, Ayrton Senna in 1991. In hindsight as well as in period, it's tempting to view such long-running excellence as virtually inevitable, a consequence of deep pockets furnishing top engineers and drivers with the best of everything.

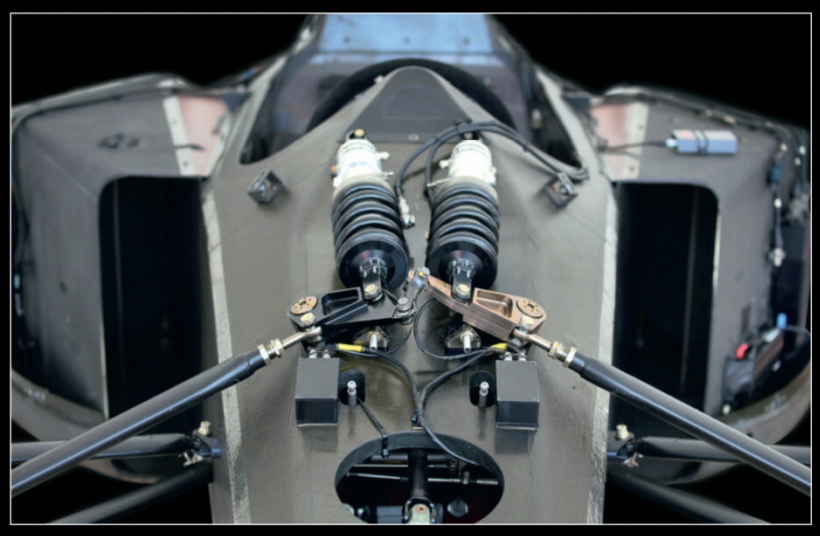
As with the current pre-eminence of Mercedes, it's also easy to overlook how challenging it is for a team to maintain that peak. But by the middle of 1990 McLaren was an organisation which, if not in crisis, was painfully aware of how quickly its



opposition was catching up, and how much work lay ahead to keep the intensely competitive Senna satisfied he had the best machinery on the grid.

Keeping Senna happy was one of several plates McLaren's designers, and engine partner Honda, had to spin. In 1988, despite Formula 1's impending reversion to naturally aspirated engines, Honda produced an all-new turbocharged 1.5-litre V6 which enabled Senna to secure his first world title after he and team-mate Alain Prost won 15 of the season's 16 races between them. For the following year it conjured an unblown 3.5-litre V10 which carried McLaren to 10 wins from 16 events, though Prost pipped Senna to the title in rancorous circumstances then took the number-one plate to Ferrari.

Since the mid-1980s it had indisputably been the case that a



"HONDA SIGNALLED ITS INTENTION TO FIND MORE HORSEPOWER BY ADDING TWO CYLINDERS, DYNO-TESTING A V12 AS EARLY AS OCTOBER 1989"



car bearing the distinctive Honda insignia on its engine cover enjoyed the most horsepower on the grid. Now, however, the margin was no longer as substantial as it once was. Ferrari won three races in 1989 with the radical 640 and might have won more but for that car's miserable early (un)reliability; and the mighty Williams, following an anonymous and anomalous 1988 season with Judd power, was returning to the front and notching up victories again with a new Renault V10. There was a feeling, too, that after the svelte, low-line MP4/4, McLaren's follow-up, the MP4/5, had succumbed to bloat, and had grown reliant on barn-door wing profiles to generate downforce.

In other circumstances these might have been grounds for an all-new design, but that would have to wait. Key engineer Steve Nichols followed Prost to Ferrari and technical director Gordon Murray declared himself fed up with F1's increasingly prescriptive technical regulations. Fearful that if Murray were allowed to 'retire' another team might offer him a big enough salary to change his mind, McLaren boss Ron Dennis greenlit Murray's pet project, the F1 road car, to keep his boundless creativity suitably occupied.

On top of all this, Honda signalled its intention to find more horsepower by adding two cylinders, dyno-testing a V12 as early as October 1989. The new engine would require a mule car for on-track evaluation, so prudence dictated McLaren contest 1990 with a B-spec of the MP4/5, while chief designer Neil Oatley worked in parallel on the C-spec mule car as well as the definitive home for the V12, the MP4/6.

But while the MP4/5B proved quick enough to win races, it was also a handful and required considerable debugging over the course of the season, partly because the real-world characteristics of its new, dramatically arched rear diffuser required experience to understand. Mike Gascoyne, one of the aerodynamicists who worked on MP4/5B before moving to Tyrrell, subsequently claimed he cloned the diffuser design from photos of Mauricio Gugelmin's inverted Leyton House at the start of the 1989 French GP. A new floor and diffuser improved McLaren's car, as did further iterations of the Honda V10, to the extent that Senna questioned the wisdom of the V12 when he first sampled it in the MP4/5C mule car in June 1990.

Nevertheless, McLaren pressed on with the V12 car. That summer, Oatley was joined by Ferrari refugee Henri Durand as head of aerodynamics. These were fraught months as Senna's behaviour became almost as irrational as it was when Prost was in situ, and competitive pressures drove him to the absurd lengths of taking Prost out at the start of the Japanese GP. This provisionally tied up the world championship in Senna's favour but set him at loggerheads again with FISA, a body he believed institutionally biased in his ex-team-mate's favour under its controversial president, Jean-Marie Balestre.

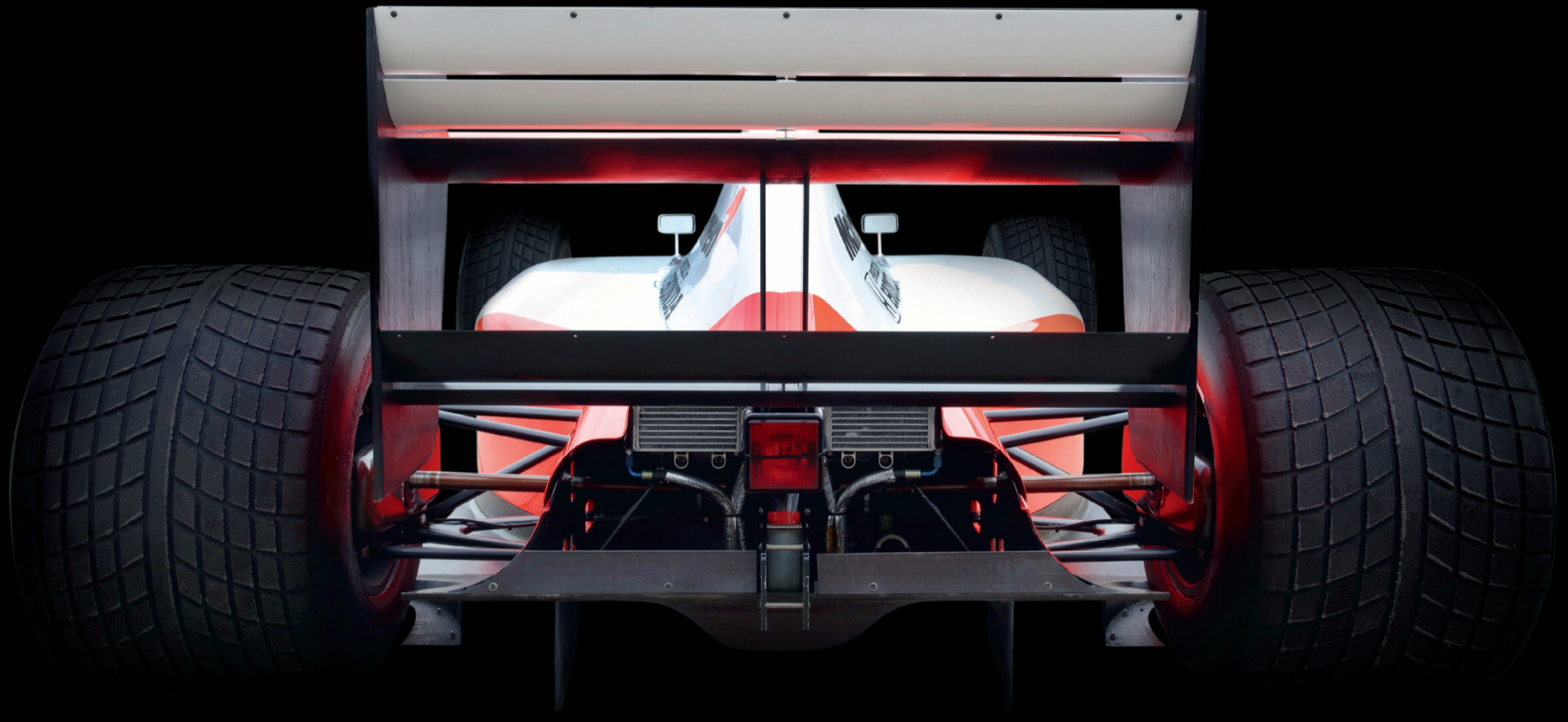
Over the winter Senna headed to the beach, as was his wont, while McLaren completed work on MP4/6. The additional length of the V12 required a new monocoque and a larger fuel tank, for the new engine's theoretical extra grunt came at the price of increased thirst. As with MP4/5, McLaren deployed a recently introduced high-modulus carbonfibre material which promised greater stiffness, which would be required because the car's overall length grew by 4cm. While the overall shape of the car, including the nose treatment and the sweep of the engine cover, was broadly similar, the cooling architecture had to change to suit the requirements of the V12, dictating a new sidepod profile and external ducting.

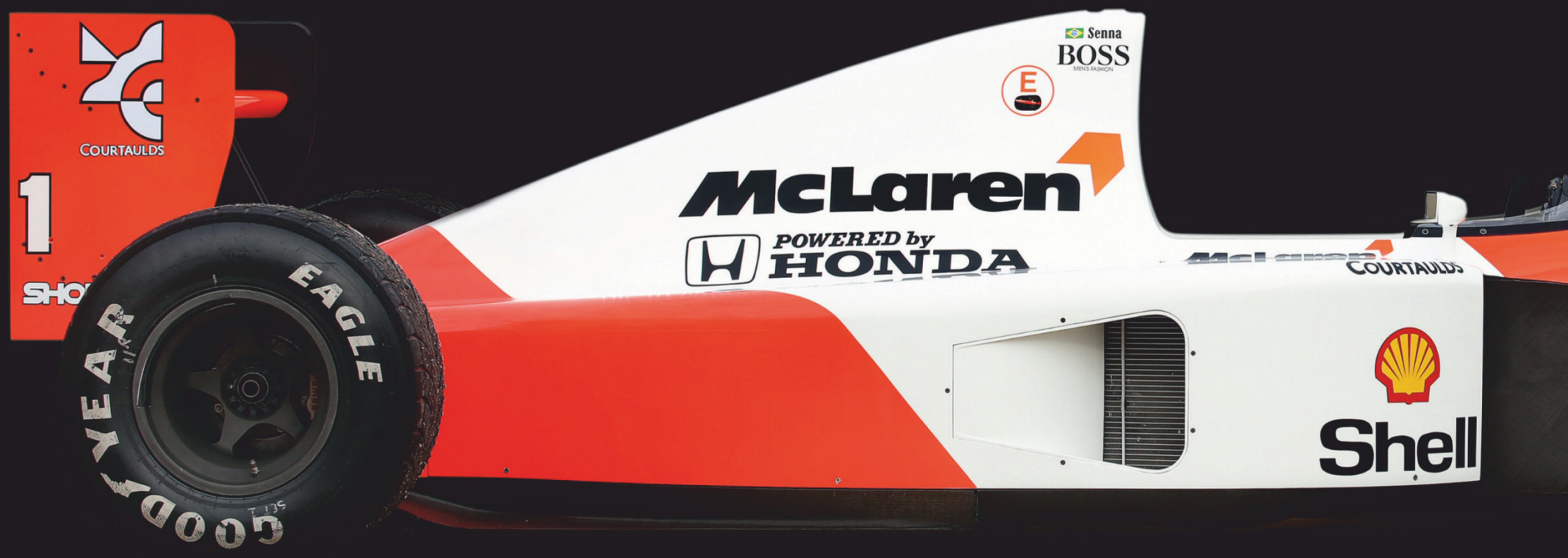
In tandem with suspension geometry changes, the springs and dampers at the front were now pushrod rather than pullroad-actuated, and packaged in a style similar to Ferrari's, lying almost horizontally along the nose. This enabled the low-line nose treatment to be retained while providing a roomier cockpit for the drivers, which was a priority since Gerhard Berger, Prost's replacement, found the MP4/5B's

McLAREN MP4/6

NOW THAT WAS A CAR

No.94



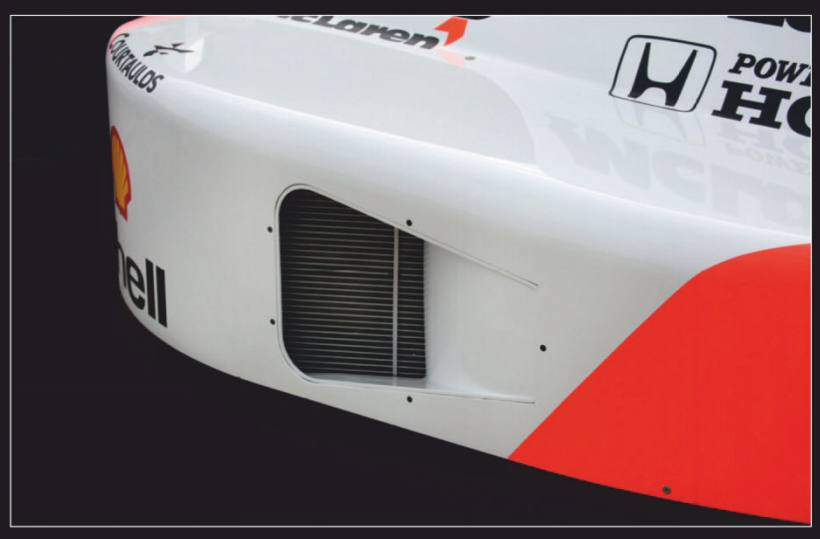


accommodation too cramped for his frame.

When Senna first tested the MP4/6, at Estoril early in 1991, he emerged from the cockpit palpably unenthused, telling reporters, "I don't know what they [Honda] have been doing. There is not enough progress and not enough power."

Though its overall displacement was virtually identical to the V10, and its cylinders were inclined at a narrower angle (62 rather than 72 degrees) the RA121 V12 occupied more real estate within the car and required larger, heavier radiators to cope with the increased heat rejection which came with a higher theoretical rev ceiling. The block was 50mm longer at 670mm, on account of Honda reducing the diameter of the cylinders by just 2mm (from 92 to 90) while slashing the stroke from 52.5mm to 45.8mm. It's hardly surprising, then, that on initial acquaintance Senna's right foot detected what felt like a lack of grunt: short-stroke engines tend to have a user-unfriendly torque curve and an appetite for high revs.

The new RA121 was no heavier than its predecessor, at 150kg, on account of the V12's better resonance characteristics enabling Honda to delete the balance shaft required in the V10. But in testing, rivals performing acoustic analysis to determine how high the various engines were revving noted a curious anomaly: the RA121 appeared to be peaking at 13,000rpm,



NOW THAT WAS A CAR

No.94

McLAREN MP4/6

while its predecessor had reached 13,800 during 1990.

Honda appeared to be shielding its new engine from public failure by running it in a conservative state of tune. Scant wonder Senna was raging; it's unlikely the V12 was achieving the claimed 720bhp, while the final iteration of the V10 had been good for 690bhp. Behind the scenes, Honda redesigned the engine to achieve a bore/stroke ratio of 86.5mm/49.6mm (according to engineering papers released after the company's withdrawal from F1), introduced during 1991 as the "Version 3" unit seen in the car photographed here.

While Ferrari's pace in testing was ominous, from the first race its 642 proved to be obligingly poor, such that the Scuderia introduced a new car mid-season – which was little better. But Williams now had a chassis designed with aerodynamic genius Adrian Newey's input allied to the new Renault RS3 V10 engine. The FW14 was the class of the field in 1991, but problems with the semi-automatic gearbox along with a handful of unfortunate on-track incidents cost Nigel Mansell and Riccardo Patrese dearly in the early races.

Senna was therefore able to bank victories in the first four races of the season, including his first on home soil in Brazil, where he lost most of his forward gear ratios and was so exhausted by the effort he had to be lifted from his car. Mansell then threw away a winning position in race five, Canada, by waving to the crowd on the final lap and missing a downshift, stalling the engine. With 11 rounds to go Senna led the championship with 40 points while Mansell had scored seven – but the balance was about to change, and Senna knew it.

"The Williams is now very quick indeed," Senna told reporters. "It's very hard for me to keep up the rhythm. Honda are working hard to improve the engine but the Williams chassis is much better than ours. If we don't get some new equipment then we're going to have trouble on our hands."

A revised induction mechanism introduced at Monaco had failed to address Senna's misgivings and, after parking his MP4/6 on its roof while trying to take the notorious Peraltada

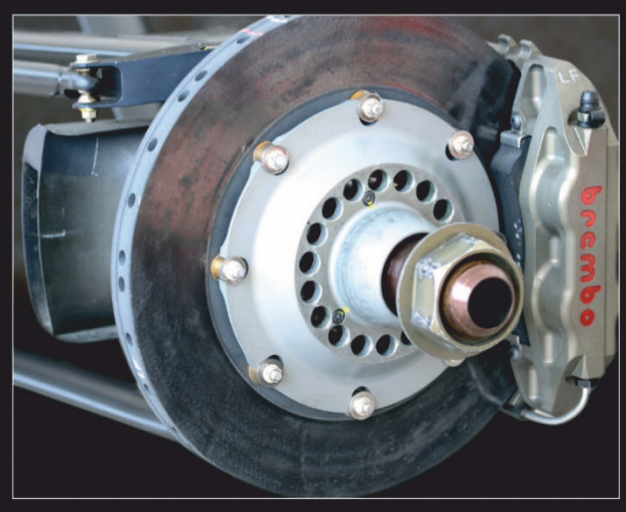
“WHEN SENNA FIRST TESTED THE MP4/6, AT ESTORIL EARLY IN 1991, HE EMERGED FROM THE COCKPIT PALPABLY UNENTHUSED”











corner flat out during qualifying for the Mexican GP, he is said to have let rip at Honda’s trackside engineering chief Akimasa Yasuoka: *“You are losing me the world championship.”* Patrese annexed pole in his FW14 and headed a dominant Williams 1-2 in the race, while Senna finished more than 57 seconds adrift.

More potent fuel from Shell, and the introduction of the Version 3 engine at Silverstone, enabled the RA121 to deliver on its claimed power and pass the 14,000rpm threshold, but the new fuel suffered teething problems in the form of inaccurate cockpit read-outs which forced Senna to back off at Paul Ricard. He ran out of fuel at Silverstone and Hockenheim – on the last lap. All the while Mansell was gaining ground.

McLaren had also been chipping away at the perceived shortcomings of the chassis, introducing a variable ride-height system and revised suspension linkages. But this wasn’t enough for Senna and in Hungary, despite the arrival of lighter cylinder heads, he gave his engineers the hairdryer treatment once again. He then set pole and won the race, which prompted him to issue an apology.

Senna won from pole again in Belgium, where Mansell retired, and although Mansell won in Italy Senna crossed the line second. That gave Senna an 11-point cushion, which increased when Mansell was disqualified in Portugal after a pitlane blunder by the Williams crew. Despite winning in Spain, Mansell was running out of races to make up the deficit and, when he spun out of the Japanese Grand Prix, Senna had the championship so far in the bag he was able to donate victory in the race to Berger.

Appropriately, after Honda’s labours, the drivers’ title was settled on the engine supplier’s home soil. It was the first world championship for a V12 engine – and it’s likely to remain the only one. McLaren entered a B-spec of the MP4/6 in the opening rounds of 1992 but the active-suspension Williams FW14B was utterly out of reach, and V10s would now become *de rigueur* for over a decade.

RACE RECORD

Starts 36
Wins 8
Poles 10
Fastest laps 5
Podiums 11
Constructors’ championship points 148

SPECIFICATION

Chassis Carbonfibre monocoque
Suspension Double wishbones with inboard pushrod-actuated coil springs over dampers
Engine: Honda RA121E V12
Engine capacity 3497cc
Power 720-760bhp@13500-14500rpm
Gearbox McLaren six-speed manual
Tyres Goodyear
Weight 575kg
Notable drivers Ayrton Senna, Gerhard Berger

NIGEL ROEBUCK'S FORMULA ONE HEROES

INNES IRELAND

PICTURES motorsport IMAGES



When the mood took him Ireland was blindingly quick but his career suffered from some poor luck and a number of big crashes

INNES IRELAND WAS FEISTY AND TOUGH, yet essentially a gentleman, and as humane an individual as I have known in racing. A character is what he was, and among the fastest drivers of his generation. Take the Oulton Park Gold Cup in 1960, where his Lotus 18 simply left the rest behind – 'the rest' including Rob Walker's similar car, driven by one Stirling Moss. When the mood took him, Ireland could hack it with anyone, but invariably his luck was poor, and that day was typical in that the car eventually broke.

There was always a strong element of fatalism in Ireland, and indubitably his career was signposted by a number of sizeable accidents. Innes was under no illusions about Lotuses of the time, reluctantly accepting that if Colin Chapman's radical cars were mighty quick, they were also mighty fragile: "Setting off on a lap of Spa, lad, it was best to put your imagination on a very low light. Something would break, and you'd come in, and they'd Sellotape it together, or whatever, and send you out again..."

In the mid-nineties one of my occasional auction visits involved items from Ireland's career, and one lot – a pair of overalls – was a stark reminder of those perilous days. In the catalogue, they were described thus: 'The blue cotton two-piece racing suit worn by Innes Ireland during practice for the Monaco Grand Prix of 1961, both trousers and top with accident damage and cuts made by first-aiders'.

Innes told it this way: "We had this new wrong-way-round gearbox on the Lotus, and in the heat of the moment I got second instead of fourth, locked the back wheels solid, and that was that. Came out of the tunnel without the car..."

Among those who stopped at the scene was Moss, a close friend. "Innes had been thrown down the road, and was pretty knocked about," Stirling remembered, "but although he was in a lot of pain, his priorities were clear. 'Wedding tackle OK?' he asked, and I reassured him that all seemed well. "Goodo," he said. "Now, give me a cigarette..."

Compounding the problems of a man who shunted many times was his inability to tolerate analgesics. His identity bracelet, another item in the auction, bore the legend, 'Innes Ireland – A Rh Pos – Allergic to morphine'. To whisky, though, Innes had no such aversion, and he always maintained that 'Scottish wine' was a painkiller beyond compare.

To see his overalls in the auction room that day, was a reminder of a different time, for nearby were other driving suits from the modern era, all festooned with patches. The light blue cotton suits of 60 years ago were supplied to the drivers by Dunlop, and carried the company's logo, but the only other badge displayed by Ireland was that of the BRDC.

Colin Chapman presents Innes with a Lotus Elite road car, but money was never a priority for Ireland



After making his name with Lotus sportscars, Innes came into F1 with the factory team in 1959, hitting the headlines early the following year when the 18, Colin Chapman's first rear-engined car, made its debut. At Goodwood and Silverstone – against such as Moss and Jack Brabham – Innes was untouchable, and the following year, at Watkins Glen, scored the first grand prix victory for Team Lotus.

By this time, though, the devoutly unsentimental Chapman had concluded – not unreasonably – that the team's future lay with

Jim Clark, and within weeks of victory at the Glen, Ireland was brusquely dropped. He was a trusting man, and part of him, I think, never got over what he saw as a betrayal of his loyalty.

Even in the late sixties Innes had come to hate increasing commercialisation in a sport he always considered a romantic vocation. "The decision to give up racing," he wrote in his autobiography, "has been the most difficult thing I have ever done. Perhaps, if I had not lived with the belief that motor racing was the 'Sport of Gentlemen', the decision would have been easier. I have never been able to equate money to motor racing."

The times, they were indeed different.

All Arms and Elbows contains all manner of anecdote from an immensely colourful career, but Ireland told me that it was very much a pasteurised version of his original manuscript. "Would have ruffled too many feathers, I suppose," he said. "Well, that's what the bloody libel lawyers thought, anyway…"

In this era, when minor drivers have managers who have deputies who have assistants, it is hard to take in that once there were folk – at vastly greater risk than now – who raced F1 cars for shekels, and thought themselves lucky to be paid at all for doing something they loved. "Even so," Innes would murmur, "I must be one of few drivers who left the sport with less money than when I arrived."

He had absolute contempt for the avariciousness of Formula 1 in later years. In 1992, immediately after the Italian Grand Prix, I was invited to the 30th anniversary celebrations of the *Club International des Anciens Pilotes de Grand Prix* in Venice. Around 40 retired drivers were present, and most had been at Monza,

> **THE DECISION TO GIVE UP RACING HAS BEEN THE MOST DIFFICULT THING I HAVE EVER DONE**
>
> **INNES IRELAND**

where the story of the weekend was Nigel Mansell's emotional announcement that he would not be staying with Williams for 1993.

"To say I've been badly treated is a gross understatement," Mansell had said of Frank's refusal to go the extra millions, at which Ireland was first apoplectic, then sad. "How the hell," he muttered, "can anyone walk out on the best team for the sake of money? How much can one man spend, for Christ's sake?"

Innes was on fine form throughout that trip. A few of us knew that he was being treated for the prostate cancer which would eventually claim him, but he never complained about it. For all he got himself into endless scrapes in the course of a highly spirited life, his innate dignity was never threatened.

After retiring from driving in 1967, Ireland took up journalism. An unusually well-read man, he could write beautifully: few words on motor racing ever moved me like his piece for *Autocar* on the death of Clark.

The last time I saw Innes, in the autumn of 1993, was at the memorial service for James Hunt, another charmingly anarchic character of the kind for which F1 cries out in this depressingly 'woke' age. It was of course a moving occasion, but most poignant of all was that the lesson was read by Ireland, whose own time was near. A month or so later he was gone, aged only 63.

Innes was a good friend of mine, someone I miss to this day, and whenever I'm asked about him, one particular memory always springs to mind. I was sitting with him on the flight back from Hockenheim one year, and Heathrow approached before Innes was quite ready for it. As the tyres chirruped on the tarmac, his seat belt was undone, his table down, his seat back. In one hand was a cigarette, in the other a scotch. There was not, I pointed out, a single rule he had left unbroken. "Right, lad!" he beamed. I could have said nothing to please him more.



Although he raced most of his F1 career in works and privateer Lotuses, Ireland also drove BRP's own chassis in 1963 and 1964

motorsport IMAGES

SHOWCASE



SEASON FINALES

The last race of a season is the time for celebrations and commiserations, and usually a goodbye or two

Nico Rosberg surfs his Mercedes team members after claiming the 2016 title in Abu Dhabi. Rosberg's season-long battle with team-mate Lewis Hamilton took so much out of him that five days later Rosberg announced his immediate retirement from F1

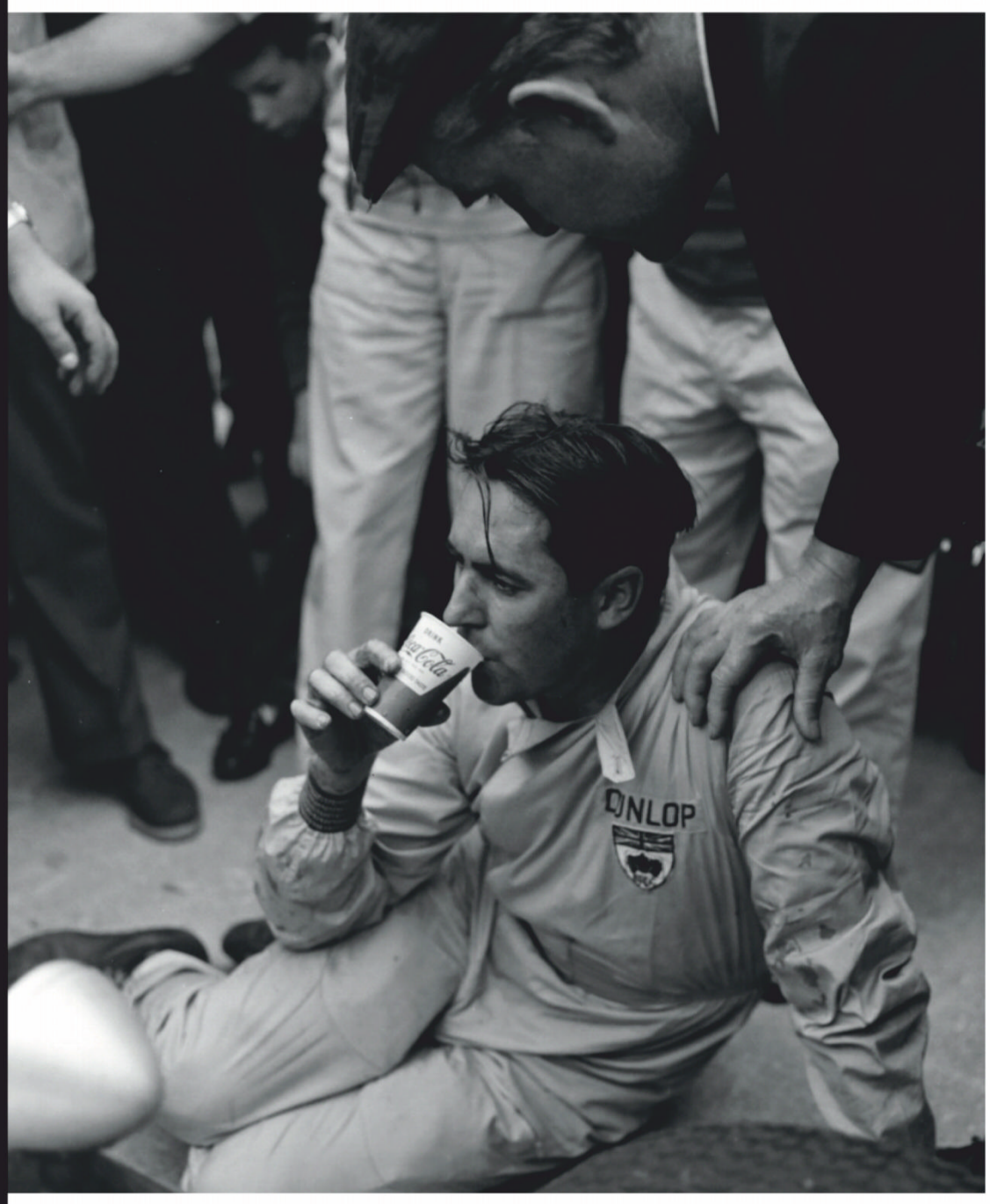




This is Jack Brabham after crossing the line in the 1959 US GP at Sebring to finish fourth, and thus confirming his first world title. Brabham was forced to push his Cooper the last 400 yards after running out of fuel on the last lap

Sebastian Vettel's poor start to the 2012 Brazilian GP was made worse when he was tipped into a spin by Bruno Senna and dropped to 22nd. But, aided by a Safety Car and rain, Seb recovered to sixth, enough to claim his third consecutive title

Brazil in 2006 and the traditional end-of-season driver photograph with a relaxed Michael Schumacher. Michael had already announced his 'first' retirement from F1, in Italy, but would return three seasons later with Mercedes









"And I've got to stop because I've got a lump in my throat" was how Murray Walker announced Damon Hill's victory in the 1996 Japanese GP to clinch the world title. Once Hill's championship rival, Williams team-mate Jacques Villeneuve, had retired from the race Hill's crown was assured, 21 years after the death of his father Graham

It is one of the most famous season finales in Formula 1 history. This was the scene at Fuji Speedway on the morning of the 1976 Japanese GP. Conditions hadn't improved massively by the time the race eventually started, but start it did, and then James Hunt made history



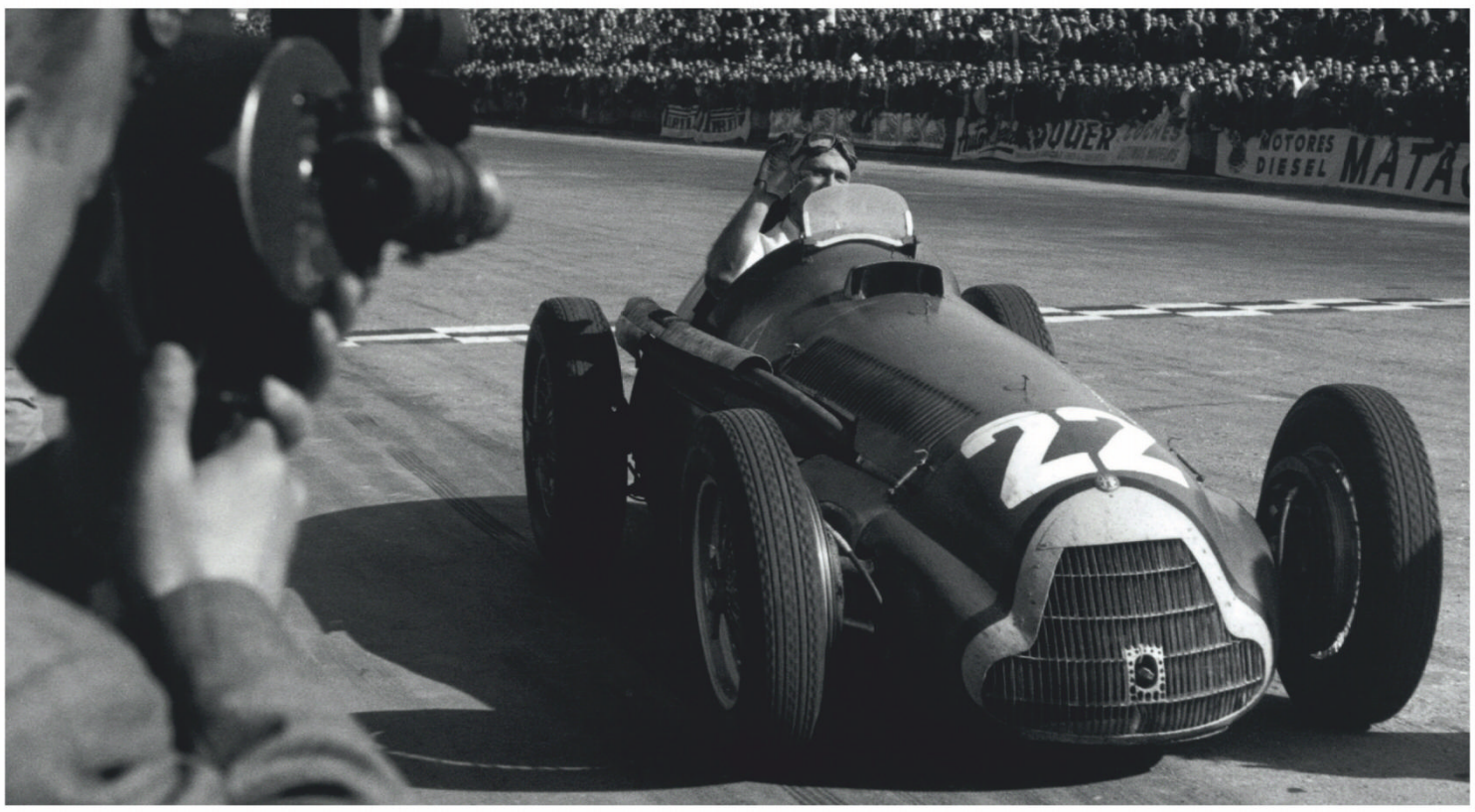
This is the imprint left after Michael Schumacher's Ferrari sidepod collided with the rear-left tyre of Jacques Villeneuve's Williams in the 1997 season-ending European GP at Jerez. The pair were battling for the lead of the race, and the title, and when Schumacher retired as a result of the clash the crown went to Villeneuve



Sebastian Vettel and a very wet Helmut Marko (Red Bull adviser) celebrate Vettel's first world championship in 2010. Vettel had just won the Abu Dhabi GP to beat Fernando Alonso, Mark Webber and Lewis Hamilton to the title, and it was the only time during the season that Vettel actually sat atop the points standings

Spain hosted the last race of the 1951 season at the Pedralbes street circuit in Barcelona. Juan Manuel Fangio had narrowly missed out winning the first world championship a year earlier but this time he made no mistake. The Alfa Romeo driver won by nearly a minute and clinched the first of his five titles





The first eight Mexican GPs were held at the Magdalena Mixhuca circuit, which ultimately became the Autódromo Hermanos Rodríguez. In 1970 a record crowd of 200,000 turned up, primarily to see home hero Pedro Rodríguez in the last race of the season, but crowd control became a major issue and the race was nearly cancelled

Nico Hülkenberg led 30 laps of the last race of 2012 in Brazil until a spin allowed Lewis Hamilton ahead on lap 48. Nico attempted to regain the lead on lap 54 and although Hülkenberg's car got airborne it was Hamilton who retired. Hülkenberg was then given a drive through penalty and he finished fifth



When the Canadian GP first appeared on the F1 calendar September and October dates were the norm. However, 1978 – the first time the race was held in Montreal – was the only year it concluded a season and the bad weather added a new dimension of getting stuck in the mud, as Derek Daly's Ensign did after a practice spin



François Cevert's only world championship F1 victory came in the last race of the 1971 season, the United States GP at Watkins Glen, the first win for a Frenchman since 1958. It was during the same GP two years later that Cevert tragically lost his life



The 2001 Japanese GP at Suzuka was only supposed to be Mika Häkkinen's last race before a season-long sabbatical from Formula 1. The 1998 and 1999 champion wanted a break to spend more time with family but by mid-2002 that turned into a full-blown retirement from F1



The joys of success... Ferrari hadn't completed the championship double since 1979 but some of the team went red wig mad after the Malaysian GP in 2000. Michael Schumacher had already won the drivers' title but at Sepang the Scuderia also clinched the constructors' crown



The remains of Allan McNish's Toyota TF102 after the Scot's huge crash at 130R in qualifying for the 2002 Japanese GP. Toyota's first season in F1 hadn't gone well and it was hoping for a good showing on home soil to end the season but this shunt caused McNish to miss the race









The final GP of 2009, won by Sebastian Vettel from Red Bull team-mate Mark Webber, was unremarkable as a contest but, aside from it being the inaugural grand prix at the Yas Marina circuit, it was also Formula 1's first ever day-into-night race

Graham Hill and Jo Siffert, both in Lotus 49Bs, and the Matra MS10 of Jackie Stewart battle for the lead of the 1968 Mexican GP. Stewart and Denny Hulme were Hill's only championship rivals going into the race but Hill made sure of his second title with victory

Kimi Räikkönen went into the last race of 2007 with only an outside chance of the title, but his orchestrated victory in Brazil was enough to pip McLaren drivers Lewis Hamilton and Fernando Alonso to the championship by a single point





Mika Häkkinen and McLaren team-mate David Coulthard celebrate after Häkkinen's victory in the 1998 Japanese GP. The helmeted Häkkinen had just got out of his car already knowing that the championship was his after rival Michael Schumacher retired mid-race

GP RACING SUBSCRIPTION OFFER

GIVE THE GIFT THEY CAN OPEN AGAIN AND AGAIN

TREAT THE F1 FAN IN YOUR LIFE TO THE WORLD'S BEST-SELLING F1 MAGAZINE THIS CHRISTMAS

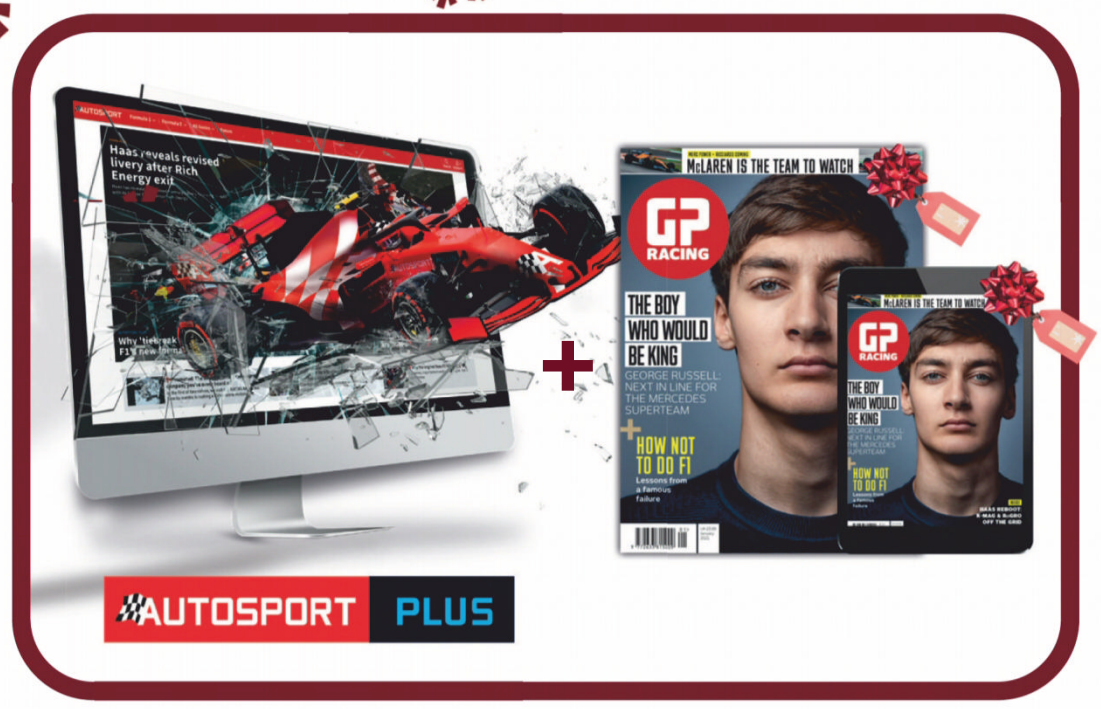


SUBSCRIPTION OFFER



WHAT MAKES GP RACING THE PERFECT GIFT THIS CHRISTMAS:

- DETAILED INSIGHT
- STUNNING IMAGERY
- EXCLUSIVE INTERVIEWS
- THE BEST F1 WRITERS
- FREE HOME DELIVERY
- SAVINGS OF UP TO 68%



ACCESS EVEN MORE ONLINE

Our print + digital bundle option includes **Autosport Plus**, giving access to exclusive long-reads, in-depth analysis, technical insight and expert opinion on autosport.com.

The print + digital bundle also gives access to the digital magazine for iOS devices, so GP Racing can be enjoyed anytime, anywhere.

SUBSCRIBE ONLINE:

WWW.AUTOSPORTMEDIA.COM/OFFER/GPXMAS

Terms and conditions: Offer valid for UK subscriptions only and for the print + digital package only. You will be charged £49.99 and recieve 12 issues of GP Racing magazine. You will need to select the start issue to be February 2021 for the subscription to begin with the first available issue after Christmas. You will be emailed instructions of how to gain access to your digital subscription. Savings are based on the standard UK cover price. Offer ends 31 December 2020.

FINISHING STRAIGHT

RACE DEBRIEF

F1 WORLD CHAMPIONSHIP ROUND 14

THE TURKISH GP IN 3 KEY MOMENTS



Lewis Hamilton confirmed his seventh world title with an outstanding victory in difficult conditions

1 Lewis seals the deal with a battling drive to victory

It was almost inevitable Lewis Hamilton would seal his seventh world championship at the Turkish Grand Prix, but for a long time it looked unlikely he would do so in such emphatic fashion.

F1's best team looked lost in Istanbul, struggling on the cold, gripless asphalt. Istanbul Park was resurfaced ahead of F1's return, but no one told Pirelli, so the tyre supplier brought its hardest compounds expecting to need maximum protection against massive cornering forces through Turn 8.

The result was that no one could get the tyres up to temperature correctly, so spent most of Friday sliding around aimlessly. These are the fastest F1 cars ever, but they were three seconds or more from Sebastian Vettel's 2011 pole time...

Hamilton called the experience "terrifying" as he finished the day more than eight tenths off the pace. Then it rained. There was so little grip in the wet that cars were spinning wheels in sixth, and drivers were spinning on the straights. It was nuts.

Hamilton scraped through Q1 in 14th and finished Q2 2.5s slower than Max Verstappen's Red Bull. In Q3, Hamilton was sixth – nearly 4.8s adrift. "The track feels terrible," Hamilton said. "It's like driving on ice. I didn't spin, I didn't make any mistakes. I did everything I could with what I had."

If there's one thing you can count on, it's Lewis doing the best he can with what he has. A strong start carried him up to third but for the first half of the race he looked in trouble. He struggled to stay on track, lost ground and got stuck behind Sebastian Vettel's Ferrari while complaining constantly about the brakes not working.

But as the track dried and others began to struggle, either keeping worn inters together or making new ones work, Hamilton's race came alive. After taking the lead from Sergio Pérez's fading Racing Point it still seemed there was no way Hamilton could make it to the finish without stopping again, but he made his single set of inters last 50 laps and set the sixth fastest time of the race with two to go. It was an amazing turnaround, helped by a call to fit three-lap old tyres at his only pitstop rather than a brand-new set.

"The key today was just keeping my wits about me," said Hamilton, whose tyre management again allowed him to reach heights others couldn't – including Valtteri Bottas, who limped out of the title race with a lapped run to 14th in a car damaged by a first-lap collision with Esteban Ocon.

Stroll led the majority of the race from his first pole but finished ninth as his pace disappeared



2 Stroll's missed chance as Pérez scores podium

Racing Point didn't factor in practice and only just scraped through Q1, but Lance Stroll has form in the wet. He was fourth fastest in Q2 then nailed pole in Q3 as Racing Point got the intermediate tyres working while others couldn't. This marked a fantastic rebound for Stroll, after a sequence of disappointing races coupled to a bout of COVID-19.

Stroll's comfortable early lead evaporated after the Virtual Safety Car was scrambled on lap 14 after Antonio Giovinazzi broke down. Front tyre graining – a phenomenon that occurs when the rubber is not up to temperature so tears apart and distorts the tread pattern – set in and Stroll couldn't cope. He stopped for a fresh set that also grained, so fell to ninth as his pace evaporated.

"I don't know what happened, I don't understand," Stroll said after the race. The team claimed front wing damage worsened the problem, but it also looked as though the Racing Points were carrying a rear-biased set-up that offered incredible traction at the expense of front grip. A drying track would exacerbate the challenge of managing the resultant understeer. Too much understeer means front tyres sliding, which equals graining.

Blanking off brake ducts to heat the tyres also played a key role for all teams here. Pérez fared better by nursing his first set of inters to the finish, and he clung to second. "One more lap on those tyres, I think they would have exploded," Pérez said. "The vibrations were very bad towards the end."

3 Max's weekend unravels as Ferrari rebounds

Max Verstappen called this a "race to forget" after finishing sixth on a weekend he mostly dominated.

Verstappen topped every practice session and was nearly two seconds clear of second placed team-mate Alex Albon in Q2 and Q3, but Red Bull couldn't work the intermediate tyre in Q3, so Verstappen (on extreme wets) was beaten to pole.

Verstappen was furious, and his mood darkened further after a terrible start and an error-strewn race, during which he understeered off the track and into a wild spin while running behind Pérez. Albon had a similarly topsy turvy run to seventh and was "confused" as Red Bull lurched from stunningly fast to off the pace then back again.

At least Verstappen found some explanation, as it was found after the race his front wing was seven degrees out of adjustment on one side. "What can you do as a driver? Almost nothing works as a result of that," he complained later.

Conversely, Ferrari recovered from what Leclerc called "a disaster" in qualifying – "we are six seconds off?" he asked with incredulity after ending up 14th – to finish 3-4, with Vettel back on the podium and Leclerc almost stealing second from Pérez on the final lap.

Leclerc furiously scolded himself for his Turn 12 braking error, calling himself "fucking stupid", while Vettel had by far his strongest race of the year, and McLaren's Carlos Sainz finished on the tail of all three after a superb charge from 15th on the grid.

With an incorrectly adjusted front wing on his Red Bull, Verstappen's race was a disaster



PICTURES: STEVE ETHERINGTON; CHALES COATES; MARK SUTTON

RESULTS ROUND 14

ISTANBUL / 15.11.20 / 58 LAPS



1st	**Lewis Hamilton** Mercedes	1h42m19.313s
2nd	**Sergio Pérez** Racing Point	+31.633s
3rd	**Sebastian Vettel** Ferrari	+31.960s
4th	**Charles Leclerc** Ferrari	+33.858s
5th	**Carlos Sainz** McLaren	+34.363s
6th	**Max Verstappen** Red Bull	+44.873s
7th	**Alexander Albon** Red Bull	+46.484s
8th	**Lando Norris** McLaren	+61.259s
9th	**Lance Stroll** Racing Point	+72.353s
10th	**Daniel Ricciardo** Renault	+95.460s
11th	**Esteban Ocon** Renault	+1 lap
12th	**Daniil Kvyat** AlphaTauri	+1 lap
13th	**Pierre Gasly** AlphaTauri	+1 lap
14th	**Valtteri Bottas** Mercedes	+1 lap
15th	**Kimi Räikkönen** Alfa Romeo	+1 lap
16th	**George Russell** Williams	+1 lap
17th	**Kevin Magnussen** Haas	+3 laps/loose wheel

Retirements

Romain Grosjean Haas	49 laps - floor damage
Nicholas Latifi Williams	39 laps - accident
Antonio Giovinazzi Alfa Romeo	11 laps - gearbox

Fastest lap

Lando Norris: 1m36.806s on lap 58

TYRE COMPOUNDS USED



Hard (C1) **Medium** (C2) **Soft** (C3) **Inter** **Wet**

CLIMATE	AIR TEMP	TRACK TEMP
Wet	13°C	16°C

DRIVERS' STANDINGS

1 Hamilton	307pts	12 Ocon	40pts
2 Bottas	197pts	13 Vettel	33pts
3 Verstappen	170pts	14 Kvyat	26pts
4 Pérez	100pts	15 Hülkenberg	10pts
5 Leclerc	97pts	16 Räikkönen	4pts
6 Ricciardo	96pts	17 Giovinazzi	4pts
7 Sainz	75pts	18 Grosjean	2pts
8 Norris	74pts	19 Magnussen	1pt
9 Albon	70pts	20 Latifi	0pts
10 Gasly	63pts	21 Russell	0pts
11 Stroll	59pts		

motorsport STATS

FINISHING STRAIGHT

RACE DEBRIEF

F1 WORLD CHAMPIONSHIP ROUND 15

THE BAHRAIN GP IN 3 KEY MOMENTS



1 Halo averts catastrophe in Grosjean shunt

Divisive on its introduction in 2018, the Halo cockpit protection system unequivocally proved its worth during the Bahrain Grand Prix when Romain Grosjean emerged largely unscathed from a fiery accident in which he hit a trackside barrier while travelling at 137mph. The impact force of 53 times the force of gravity sheared the Haas in two as the front half sliced through the barrier.

This was an accident some 30 seconds in the making and with several contributory factors. Several drivers were out of position, either as a result of problems in qualifying (Carlos Sainz and Lance Stroll) or poor starts (Valtteri Bottas, Esteban Ocon, Charles Leclerc and Daniil Kvyat). Bottas would later attribute his slow start to conservatism on the clutch paddle as he tried to avoid wheelspin; the result was that from second on the grid he lost out to Max Verstappen, Sergio Pérez, Alex Albon and Daniel Ricciardo on the run down and through Turn 1, then had to slow up as Albon and Ricciardo fought it out ahead of him in Turn 2.

Behind Bottas, Ocon was trying to reassert himself alongside Lando Norris and Pierre Gasly. As Norris lifted to avoid hitting the back of the Mercedes, the others swooped and Gasly cut across the McLaren's front wing, breaking it. Norris's loss of momentum meant his team-mate Sainz, now right behind after starting 15th, had to check up in turn.

Sainz's sudden deceleration prompted the cars travelling three abreast behind him – Leclerc, Vettel and Stroll – into evasive action and Vettel inadvertently sent Stroll off-track to the right. The result was a concertina effect on the approach to the right-hand kink of Turn 3. As the stragglers then arrived on the scene, Grosjean jinked right in an attempt to pass but failed to notice Kvyat on his right, and it was this impact which sent Grosjean into the barrier after the exit of Turn 3.

The medical car arrived within 10 seconds, and from the initial impact to Grosjean's extraction fewer than 30 seconds elapsed. New FIA regulations this year have doubled the time the drivers' suits are expected to resist flames, from 10s to 20s, which may also have contributed to Grosjean escaping with only minor burns to his hands and ankles.

While this is a testament to F1's safety procedures, room remains for improvement: this was the first of two occasions in which marshals crossed the track. On the second instance – when Pérez's Racing Point halted with suspected ERS failure – the track was still 'live' and the marshal was almost hit by Norris as he crossed.



The Halo was an instrumental part of the survival cell that saved Grosjean's life in his Bahrain crash

2 Traffic frustrates Verstappen's pursuit of victory

Although Max Verstappen and Red Bull made all the usual right noises over the radio on the slow-down lap, saying second place behind Lewis Hamilton was the best they could have expected, later they would admit to misgivings. Both Mercedes cars only had one new set of hard-compound tyres for what was expected to be at least a two-stop race, a potential strategic weakness, and Hamilton was missing a tail-gunner after Bottas suffered a puncture early on.

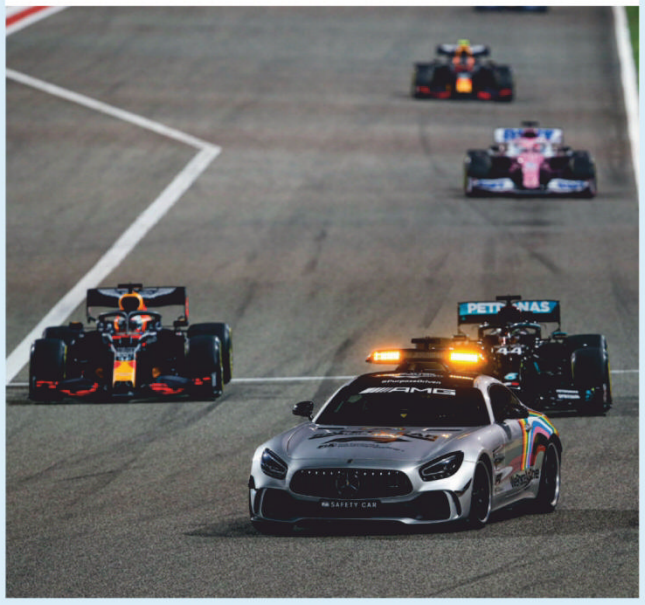
After a long red-flag hiatus while the barriers were fixed, the grid was reset in the order the cars had passed the second Safety Car line on the original opening lap. That put Hamilton on pole from Verstappen, Pérez, Bottas and Albon, and the newly crowned champion led away from the restart with Verstappen in pursuit, and Pérez and Albon dwindling specks once Bottas stopped for tyres.

Verstappen hung on in the opening stint but what ultimately scuppered him was a long Safety Car period called on the opening lap, when Kvyat tipped Stroll onto his roll hoop at Turn 8. This meant the race didn't get under way properly until the end of the eighth lap, enabling Hamilton to pit at the end of lap 19 for another set of used mediums without fear of Red Bull attempting an undercut: had Verstappen pitted earlier, he would have emerged in traffic.

After Verstappen stopped for his first set of new hards at the end of lap 20 he was able to match Hamilton's pace. But when Red Bull went for the undercut at the next round of pitstops, bringing Verstappen in a lap earlier than Hamilton, the right-rear was slow to engage and the stops shook out with Hamilton 3.776s ahead. Without the slow stop Verstappen would have been on Hamilton's tail.

Verstappen's third stop might have given him an advantage in the closing laps, but the race was destined to finish behind the Safety Car after Pérez's car expired, enabling Albon to inherit third.

The first Safety Car prevented Verstappen from exploiting Hamilton's lack of hard tyres



3 McLaren consolidates at Renault's expense

Fourth and fifth place for Lando Norris and Carlos Sainz strengthened McLaren's grip on third place in the constructors' standings as Racing Point lost both its cars and Renault failed to translate its superior qualifying pace into a strong race.

Norris took the restart ahead of Ocon, having got ahead before the red flag, then passed Ricciardo. Renault attempted an undercut by stopping its drivers early, on laps 16 and 17, but McLaren responded quickly so Norris emerged still ahead. Ricciardo and Ocon spent much of the balance of the race fighting each other.

Sainz, from 13th on the reformed grid, made an unusual strategy of starting on the soft-compound tyres work, stretching them to the end of lap 21. That pitched him out just behind the Renaults and he made short work of both as Ocon appeared to be holding Ricciardo up.

Despite a slow second and final stop for hards on lap 39, Sainz still had the Renaults covered, and both McLarens overhauled the one-stopping AlphaTauri of Pierre Gasly in the closing stages.



Norris heads Ocon early on as McLaren held the upper hand over Renault in Bahrain

PICTURES: ANDY HONE; ZAK MAUGER

RESULTS ROUND 15

SAKHIR / 29.11.20 / 57 LAPS



1st	**Lewis Hamilton** Mercedes	2h59m47.515s
2nd	**Max Verstappen** Red Bull	+1.254s
3rd	**Alexander Albon** Red Bull	+8.005s
4th	**Lando Norris** McLaren	+11.337s
5th	**Carlos Sainz** McLaren	+11.787s
6th	**Pierre Gasly** AlphaTauri	+11.942s
7th	**Daniel Ricciardo** Renault	+19.368s
8th	**Valtteri Bottas** Mercedes	+19.680s
9th	**Esteban Ocon** Renault	+22.803s
10th	**Charles Leclerc** Ferrari	+1 lap
11th	**Daniil Kvyat** AlphaTauri	+1 lap
12th	**George Russell** Williams	+1 lap
13th	**Sebastian Vettel** Ferrari	+1 lap
14th	**Nicholas Latifi** Williams	+1 lap
15th	**Kimi Räikkönen** Alfa Romeo	+1 lap
17th	**Antonio Giovinazzi** Alfa Romeo	+1 lap
17th	**Kevin Magnussen** Haas	+1 lap
18th	**Sergio Pérez** Racing Point	+4 laps/engine

Retirements

Lance Stroll Racing Point	2 laps - accident
Romain Grosjean Haas	0 laps - accident

Fastest lap

Max Verstappen: 1m32.014s on lap 48

TYRE COMPOUNDS USED



Hard (C2) **Medium** (C3) **Soft** (C4) **Inter** **Wet**

CLIMATE	AIR TEMP	TRACK TEMP
Dry into night	25°C	28°C

DRIVERS' STANDINGS

1 Hamilton	332pts	12 Ocon	42pts
2 Bottas	201pts	13 Vettel	33pts
3 Verstappen	189pts	14 Kvyat	26pts
4 Ricciardo	102pts	15 Hülkenberg	10pts
5 Pérez	100pts	16 Räikkönen	4pts
6 Leclerc	98pts	17 Giovinazzi	4pts
7 Norris	86pts	18 Grosjean	2pts
8 Sainz	85pts	19 Magnussen	1pt
9 Albon	85pts	20 Latifi	0pts
10 Gasly	71pts	21 Russell	0pts
11 Stroll	59pts		

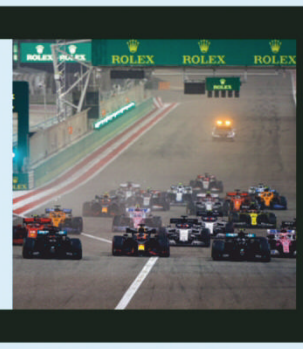
motorsport STATS

FINISHING STRAIGHT

RACE DEBRIEF

F1 WORLD CHAMPIONSHIP ROUND 16

THE SAKHIR GP IN 3 KEY MOMENTS



1 Mercedes tyre blunder costs Russell victory

George Russell's mother couldn't speak, such were the overwhelming emotions of the night, but the family was full of pride, despite terrible disappointment at the outcome. "That was yours today" is what Russell said his father told him on the phone, and of course he was right.

For 63 of this race's 87 laps Russell had everything under control. Pending a final stint showdown with Valtteri Bottas, who was chipping away at the gap, Russell looked set to cap an outstanding debut for Mercedes in place of unwell world champion Lewis Hamilton with victory.

That it all fell apart so spectacularly was principally down to a communication error in the pits. It was the sort of pitstop – servicing both cars consecutively on the same lap under Safety Car conditions – that was wholly unnecessary but which Mercedes usually performs faultlessly.

But this time Russell's crew failed to receive instructions telling them he was coming in *before* Bottas, because Russell, in the stewards' words, "transmitted over the top of that message" from the pitwall. A glitch in Mercedes' radio system prioritised the wrong message, explained track engineering director Andrew Shovlin. Thus, Bottas' new front tyres were fitted to Russell's car by mistake. "It was just a colossal fuck up," said team boss Toto Wolff.

The moment of realisation came while attending Bottas. He was stationary for 27.4 seconds while the crew refitted his ageing hard tyres, leaving him a "sitting duck" as he struggled to regenerate temperature for the final sprint to the flag.

Russell was called straight back in to correct the mistake, dropping him to fifth. But all the cars ahead, Sergio Pérez's Racing Point, Esteban Ocon's Renault, Lance Stroll's Racing Point, and Bottas, were on much older tyres for the restart.

Russell still had 19 laps to win this race for a second time. He picked off Bottas with a gutsy move at the Turn 7/8 chicane, DRS'd past Stroll at Turn 1 and overtook Ocon at Turn 4 to lie second with 14 laps to go. With 10 to go, Russell had Pérez's 3.4s lead cut to 2.3s.

Then disaster struck again. A left-rear puncture, most likely a result of running off-line to overtake, meant another pitstop, which dropped Russell to 15th. He fought back to ninth, behind Bottas, then survived a post-race investigation by the stewards that resulted in a €20,000 fine for Mercedes.

But it's Russell's outstanding performance that will live long in the memory. He was shoehorned into Hamilton's car at short notice, had to wear boots a size too small, and learned an unfamiliar car on



Although Russell's first stop, when he switched to hard tyres, went well, disaster was lurking...

the fly. He topped Friday practice, came within 0.03s of stealing pole from Bottas (two tenths off was Russell's target), made a great start and had the race seemingly in the bag, until disaster struck...

"This is not a sad day," Wolff insisted. "We learned that George is somebody to count on in the future. He has all the ingredients a future star needs."

Too right.

2 Pérez lucks in but also stakes Red Bull claim

Sergio Pérez was the other outstanding performer in this race, and should probably now be in pole position to take the second Red Bull seat away from Alex Albon, who endured yet another disappointing weekend.

Pérez would have finished third had Mercedes not imploded, while Albon laboured to a top six finish after a "scrappy" race in a car that was again good enough to fight at the front in Max Verstappen's hands.

The seminal moment came when Pérez passed Albon round the outside having been speared off the track by Charles Leclerc at Turn 4 on the first lap. Pérez's recovery from the back of the pack was outstanding, and he also made decisive moves on Stroll and Ocon, which put him in prime position to win the race when luck finally came his way.

Racing Point learned from its Imola mistake and this time left Pérez out on hard tyres for the restart, and he arguably deserved his slice of good fortune after engine failure the previous Sunday robbed him of third and handed that podium finish to Albon.

Mercedes was not certain Russell would have passed Pérez had their showdown materialised, and Pérez's performance was all the more remarkable given suspected ERS failure at the previous race meant he felt his older replacement engine was down on power.

Most telling of all was Christian Horner's slow shake of the head when Albon failed to escape Q2 while Verstappen qualified within a tenth of pole...

Pérez recovered from last to score his first F1 win and further enhance his Red Bull chances



3 Leclerc penalised for 'reckless' accident

Max Verstappen and Charles Leclerc should have been in prime position to capitalise on Mercedes' pit blunder, but both were eliminated in a first-lap accident for which Leclerc was handed a three-place grid penalty.

Having been often criticised for driving too aggressively, this time Verstappen was circumspect after briefly going three-wide with Valtteri Bottas and Sergio Pérez on the run to Turn 4.

Verstappen backed off, Pérez dived for Bottas' inside, while Leclerc – who qualified an outstanding fourth in a Ferrari Sebastian Vettel couldn't carry out of Q2 – attempted to go inside Verstappen.

Leclerc locked brakes and clattered into Pérez, forcing Verstappen wide to avoid a crash. Unfortunately, that avoidance carried Verstappen into a gravel trap, which in turn put him into a wall. Verstappen kicked out in frustration after alighting his broken Red Bull.

"I don't know why they were being so aggressive and so reckless," he fumed as another potentially big result for Red Bull-Honda went begging.



After a good qualifying, Leclerc ended his and Verstappen's race on the first lap

PICTURES: STEVE ETHERINGTON; ANDY HONE; GLENN DUNBAR; CHARLES COATES

RESULTS ROUND 16

SAKHIR / 6.12.20 / 87 LAPS



1st	**Sergio Pérez** Racing Point	1h31m15.114s
2nd	**Esteban Ocon** Renault	+10.518s
3rd	**Lance Stroll** Racing Point	+11.869s
4th	**Carlos Sainz** McLaren	+12.580s
5th	**Daniel Ricciardo** Renault	+13.330s
6th	**Alexander Albon** Red Bull	+13.842s
7th	**Daniil Kvyat** AlphaTauri	+14.534s
8th	**Valtteri Bottas** Mercedes	+15.389s
9th	**George Russell** Mercedes	+18.556s
10th	**Lando Norris** McLaren	+19.541s
11th	**Pierre Gasly** AlphaTauri	+20.527s
12th	**Sebastian Vettel** Ferrari	+22.611s
13th	**Antonio Giovinazzi** Alfa Romeo	+24.111s
14th	**Kimi Räikkönen** Alfa Romeo	+26.153s
15th	**Kevin Magnussen** Haas	+32.370s
16th	**Jack Aitken** Williams	+33.674s
17th	**Pietro Fittipaldi** Haas	+36.858s

Retirements

Nicholas Latifi Williams	52 laps - oil leak
Max Verstappen Red Bull	0 laps - accident
Charles Leclerc Ferrari	0 laps - accident

Fastest lap

George Russell: 55.404s on lap 80

TYRE COMPOUNDS USED



Hard (C2) **Medium** (C3) **Soft** (C4) **Inter** **Wet**

CLIMATE	AIR TEMP	TRACK TEMP
Dry into night	21°C	24°C

DRIVERS' STANDINGS

1 Hamilton	332pts	13 Vettel	33pts
2 Bottas	205pts	14 Kvyat	32pts
3 Verstappen	189pts	15 Hülkenberg	10pts
4 Pérez	125pts	16 Räikkönen	4pts
5 Ricciardo	112pts	17 Giovinazzi	4pts
6 Leclerc	98pts	18 Russell	3pts
7 Sainz	97pts	19 Grosjean	2pts
8 Albon	93pts	20 Magnussen	1pt
9 Norris	87pts	21 Latifi	0pts
10 Stroll	74pts	22 Aitken	0pts
11 Gasly	71pts	23 Fittipaldi	0pts
12 Ocon	60pts		

motorsport STATS

FINISHING STRAIGHT

ESSENTIALS

F1 UPGRADES

Enhance the F1 experience with the latest must-have products

McLAREN F1 GTR THE DEFINITIVE HISTORY

Author Mark Cole
Price £450
porterpress.co.uk

The McLaren F1 was never conceived as a race car – as noted in this month's Now That Was A Car (p72) it was essentially a vanity project, greenlit to keep innovative engineer Gordon Murray in the McLaren fold. But a handful of early customers, including pharmaceutical entrepreneur and amateur racer Ray Bellm, saw its potential for racing in the new GT series which grew up in the early 1990s in the wake of the world sportscar championship's demise. Still McLaren and Murray held off, only to acquiesce when Bellm threatened to take his road car to an independent specialist for conversion.

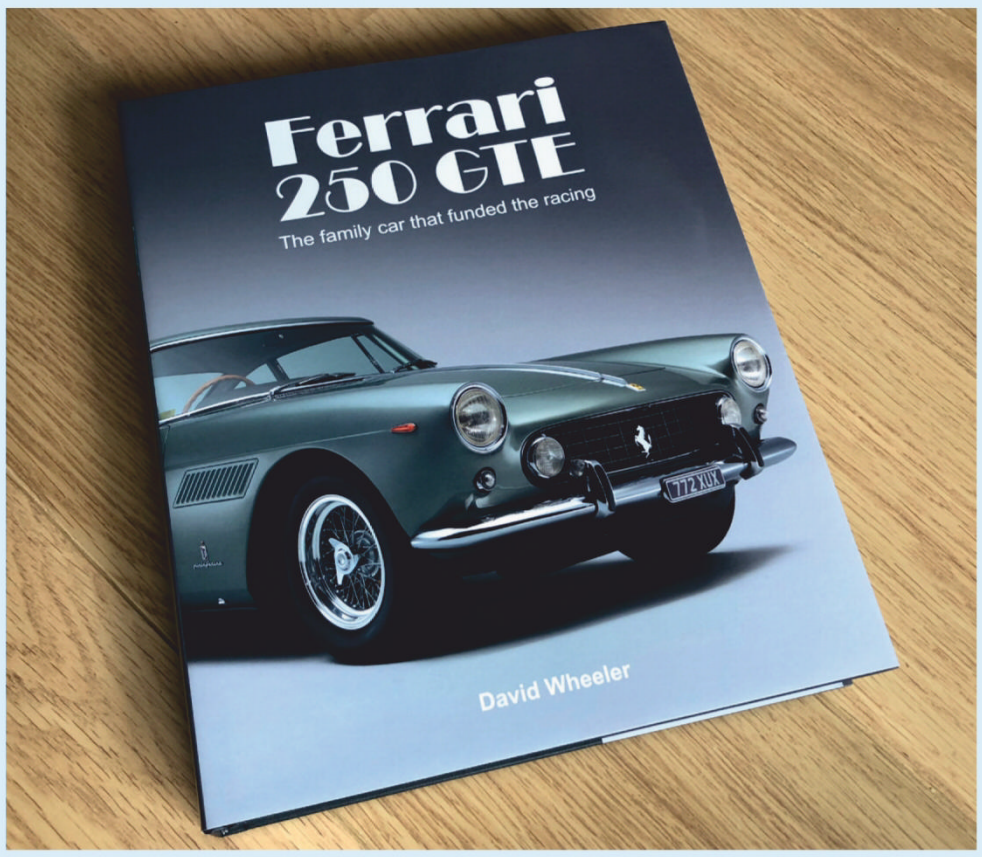
This large and lavishly illustrated work, presented in two volumes in a slip case, is an exhaustive history of the McLaren F1 and its racing derivatives, with a preface from Murray and opening chapters setting the context with histories of McLaren as well as the sportscar scene at the time. Murray expected to sell at best two or three F1 GTRs but ended up building 28 examples which competed at the highest level, won the Le Mans 24 Hours in 1995, and had a surprisingly long competitive lifespan. F1 GTRs raced in Japan until 2005.

Author Mark Cole will be familiar as a commentator on Eurosport. Volume 1 tackles the broader history of the car and development, followed by detailed race-by-race reports, while Volume 2 tackles individual car histories and examines those who owned and raced them (this being sportscar racing, there are some interesting characters in there). The book is limited to 1000 copies, each numbered and signed by the author.



FERRARI 250 GTE

Author David Wheeler
Price £75
porterpress.co.uk





Motor racing was what made Enzo Ferrari's heart sing, but from the 1960s onwards necessity drove him to manufacture road cars in ever greater quantities to help keep his business afloat. First seen in public in 1960 at the Le Mans 24 Hours, where it acted as the course car, the elegant Pininfarina-styled 250 Grant Turismo 2+2 was Ferrari's first four-seater road car to enter volume production. It shared the 3-litre Colombo V12 engine with other 250 variants including the iconic GTO.

While the final production run over three years of 954 cars might seem like small change in contemporary terms, this represented a landmark commercial success for Ferrari, as acknowledged by the book's subtitle *The family car that funded the racing*. Famously Rome's *Squadro Mobile*, the equivalent of the 'Flying Squad' portrayed in *The Sweeney* (who sadly had to make do with Ford machinery), received a 250 GTE as a daily driver.

This book documents the history of the car itself, including its development, and the subsequent lives of 125 of the surviving examples worldwide. It's a fascinating and scholarly work, and strictly limited to 750 copies.

F1 FRAGRANCES ENGINEERED COLLECTION

Price £195 each

f1fragrances.com



Formula 1's new owners don't do anything in half measures, as evinced by this new collaboration with UK perfumier Designer Parfums (creator of fragrances for Porsche as well as celebrities including Jennifer Lopez, Ariana Grande and Naomi Campbell).

The range encompasses five very different (and potent) unisex scents: Turn 1 ("inimitable accords of burning rubber and rain on salty asphalt"); Precious Mettle ("fresh, intense, woody fragrance with a metallic twist"); Overtake 320 ("a warm and spicy composition that races with a fiery blend of cinnamon and bergamot"); Neeeum White ("a daring cocktail of spices, contrasting hot black pepper with the coolness of juniper"); and Carbon Reign ("a vibrant and energetic scent built around a champagne accord, dry amber and woods"). This is described as a "taster", and a more extensive range will follow in March.

Equally distinctive is the design of the refillable bottle, contoured to resemble the curves of an F1 car's body, within a 3D-printed exoskeleton.

JOCHEN RINDT – A CHAMPION WITH HIDDEN DEPTHS

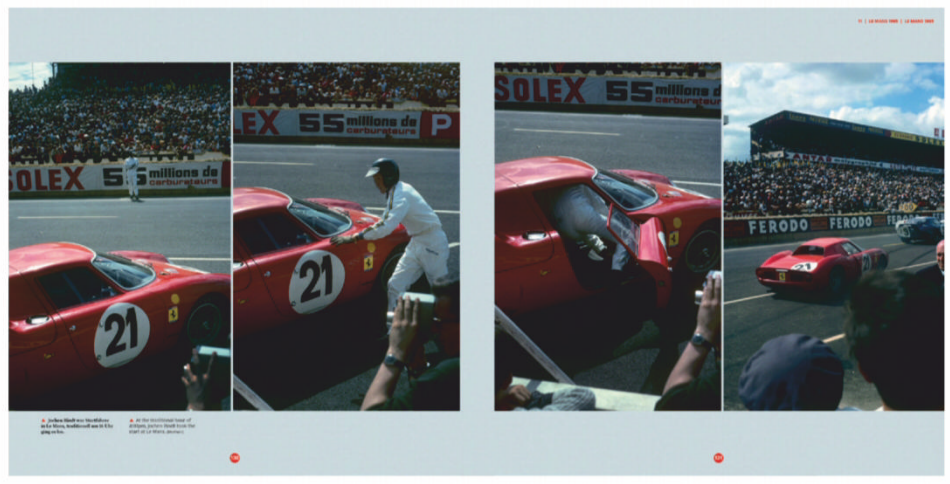
Author Dr Eric Glavitza

Price €99.90

mckleinstore.com







It's the 50th anniversary of F1's only posthumously awarded drivers' championship. Following the re-issue of David Tremayne's 2010 biography of Jochen Rindt, this is the second in-depth text published this year looking at the life of the enigmatic champion. It's a very different beast, produced in large-format hardcover in a slipcase, and extensively illustrated. Many of the pictures are drawn from the private collection of Rindt's friend Alois Rottensteiner and have never been published before.

Erich Glavitza also knew Rindt and explores in detail Rindt's unusual upbringing – he was born in Germany but was brought up in Austria by his grandparents. Both Rindt's parents were killed during the allied bombing of Hamburg in July 1943. He had an older half-brother, Uwe, interviews with whom form part of the tapestry of this book.

This tome runs to 400 pages with text in English and German, and the foreword was contributed by Bernie Ecclestone, who was Rindt's manager.

FINISHING STRAIGHT

ESSENTIALS

Cooped up at home during the festive period? Feast your eyes on these new Formula 1 documentaries

RACE TO PERFECTION

Sky Documentaries/Sky Sports F1

If *Race to Perfection* were a box of chocolates, it would be one of those giant tins of Quality Street which in happier times would do the rounds of the office at Christmas. There is much within to delight but also, sadly, rather a lot which would have been better left out – and, inevitably, once the tin has been passed around a few times, only the least interesting offerings are left.

A collaboration between Sky and Formula 1 to celebrate the 70th anniversary of the world championship, *Race to Perfection* charts those seven decades over the course of seven episodes, and promises exclusive interviews and never-before seen archive footage. Screened first on Sky Documentaries and Sky Sports F1, it's also available via Now TV.

As a documentary series about Formula 1, it's axiomatically of interest to fans and at its best it offers up moments or nuances you genuinely hadn't seen before.

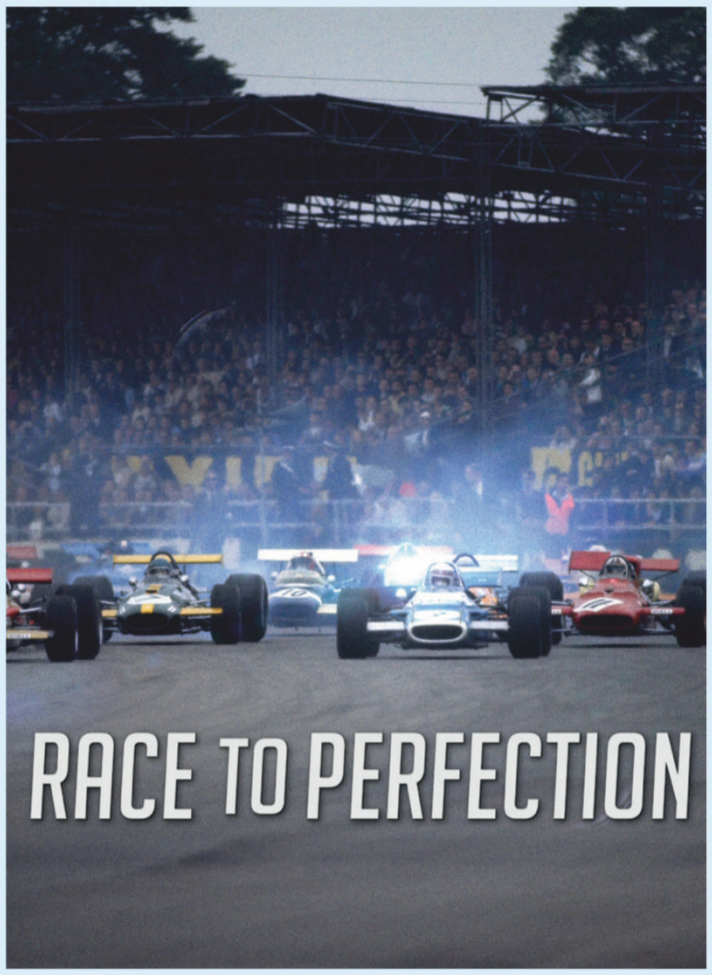
Felipe Massa's revelation that Michael Schumacher admitted to him that he'd crashed deliberately at Rascasse during qualifying for the 2006 Monaco Grand Prix is among the early gems. There are poignant moments, too, such as John Watson describing how he cradled Niki Lauda's head in the aftermath of Lauda's enormous accident at the Nürburgring in 1976.

Much of the archive material is both fascinating and emotionally resonant: there's a period interview on the farm with Jim Clark, a man whose voice has been seldom heard; and the footage of Ayrton Senna reacting with genuine horror to Roland Ratzenberger's accident at Imola in 1994 viscerally evokes the horror of that weekend.

Where *Race to Perfection* falls short is its approach to storytelling. The very best documentaries maintain a laser focus on narrative, but here too many of the episodes lose sight of whatever their theme purports to be, descending into a procession of talking heads who disappear off at tangents or throw up superfluous details which are left unexplained.

There is a general absence of structure, a sense that it has all been assembled based on what interviews the makers had in the can and what archive footage they could get hold of. During some of the later episodes, archive footage (often repeated from earlier instalments) is splashed with no context simply to provide a different visual backdrop while the talking heads ramble on. To appeal to non-core fans it would have benefitted from more discipline in the structure, more ruthless editing, and some sort of narration to tie the various themes and threads together. As it is, it's an evocative but aimless romp through the past.

















STIRLING

Sky Documentaries/NOW TV

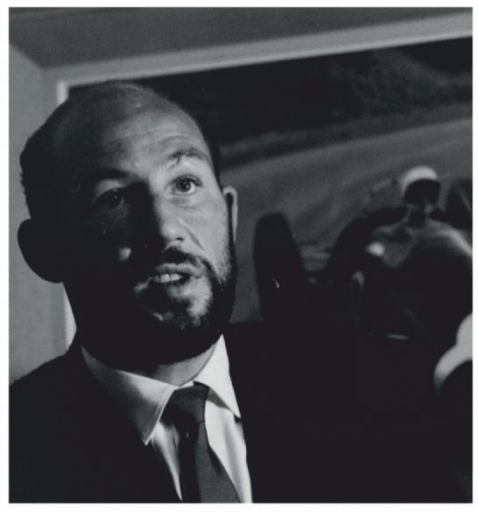
It was with great sadness that we bade farewell to Sir Stirling Moss last April, and this artfully constructed new documentary tells his life story in a way which will delight fans and appeal to the non-core motor racing audience. The opening slow-motion shots of Moss drifting a variety of racing cars through corners with delicacy and finesse, accompanied by period audio of his voice, sets the tone. This is a respectful elegy to a national treasure told predominantly in his own voice, via the many interviews and memoirs he left.

There are other voices, and well-chosen ones at that. World champions Sir Jackie Stewart, Damon Hill and Jenson Button lend weight, as do journalists including renowned racing historian Doug Nye, and former *Autosport* editor Simon Taylor – the present owner of the HWM 'Stovebolt Special' raced by Moss early in his career. Members of the Moss family, including his children, also contribute.

The documentary proceeds at a pace Stirling himself would have appreciated and there is barely an ounce of flab in the storytelling. Even so, there's plenty of room for details and angles you may not have previously heard, such as Stirling's own recollection of the pivotal weekend when he travelled to Bari to race a Ferrari, only to be turfed out of the car in favour of Piero Taruffi.

It also deals with the long aftermath of the Goodwood shunt which ended his racing career prematurely and left him having to earn a living by other means. Retirement is not a phase of life which any racing driver looks forward to with enthusiasm, but it was during this time that he came to understand that his job was to be Stirling Moss, and that suited him perfectly.







SUPERSWEDE

Sky Documentaries/DVD/Blu-Ray

Shot in 2016-17 and only available on DVD/Blu-Ray until this year, Superswede is a dual-language film (in English and Swedish with English subtitles) which ostensibly acts as a biopic of the late Ronnie Peterson but also brings to life the F1 scene of the 1970s. It's a bigger-budget production than the other documentaries featured on these pages, more cinematic in its approach. Unlike *Race to Perfection*, it sets out with a clear idea of who its audience is and what story it wants to tell.

Beginning with footage of the first-lap accident in the 1978 Italian Grand Prix which claimed Peterson's life, the film briefly moves forwards in its timeline to 2016, where Nina – Peterson's daughter, who was only three at the time of his death – visits Monza for the first time. Nina is the emotional centre of this story as it recaps the life of the father she never knew (her mother, Barbro, took her own life in 1987).

Where this documentary also scores highly is in its judicious use of the talking heads (including Peterson's brother as well as Eje Elghe, Fredrik Af Peterson, Dave Brodie, John Watson, Niki Lauda, Mario Andretti, Emerson Fittipaldi and Sir Jackie Stewart) in terms of servicing the narrative. It also uses music more imaginatively and evocatively, particularly the pop music of the 1960s and 1970s, to complement the archive stills and moving footage. It deploys silence to great effect, too, letting some archive moments speak for themselves as it builds towards an emotionally charged, but not mawkish, conclusion.







FLAT CHAT

{ FULL THROTTLE MUSINGS WITH STUART CODLING }

PICTURES motorsport IMAGES

BROADCASTING QUESTIONS OF TASTE

Good taste, said the poet Edith Sitwell, is the worst vice ever invented. And yet the question of taste, subjective and problematic as it is, is one with which the media must constantly grapple. In some circumstances it can be a delicate balancing act, in others less so.

Formula 1's global coverage has recently drawn criticism over matters of taste and even precipitated something of a diplomatic incident. Max Verstappen's use of ableist terminology during an incident with Lance Stroll in Portugal brought into focus an issue of concern: that F1, in its quest to expand its reach, is beginning to default to the lowest common denominator.

After all, there were two separate but related pieces of poor decision-making here. First there was Verstappen's choice of a word which, like Gary Glitter and the Morris Marina, belongs in the 1970s. Here you could argue, though it would involve going out on a limb, that people using English as a second language might not have a grasp of nuance and etymology, and therefore warrant being cut a little slack. But Max declined to apologise, so even that opportunity was lost.

And then there was F1's decision to broadcast Verstappen's rant on its various channels, knowing via its digital audience metrics that conflict equals viral appeal. Had it foreseen that this action would blow up quite as it eventually did (including stiffly worded correspondence to the FIA and Red Bull from the Mongolian ambassador to the UN), Formula 1 might not have permitted its devotion to metrics to over ride wisdom.

Grosjean wanted people to see that he had emerged, relatively unscathed, from his huge accident



Imagery is also a key element of F1 and in this area too the commercial rights holder's judgement has been called into question. For two minutes and 43 seconds after Romain Grosjean's crash at the beginning of the Bahrain GP, F1 wisely eschewed the opportunity to show replays or live images from the scene. Only once Grosjean was demonstrably out of the car and relatively uninjured, and all the marshals were accounted for, did the order of business resume.

WHERE DO WE DRAW THE DIVIDING LINES BETWEEN SCIENTIFIC ENQUIRY, NATURAL CURIOSITY AND RUBBERNECKING?

The long red-flag period while the barrier at Turn 3 was repaired naturally left both viewers and those at the circuit at something of a loose end, and the drivers – naturally, since they were expected shortly to get back in the cockpit and race once more – did not enjoy the seemingly endless replays of the incident from all possible angles. Daniel Ricciardo and Sebastian Vettel were particularly outspoken; Ricciardo expressed "disgust" with the broadcast, describing it as "disrespectful and inconsiderate for his [Grosjean's] family, for all our families watching".

The issue of taste here is rather less clear-cut than that of Verstappen's lexicon. It was important to establish what happened. But where do we draw the dividing lines between scientific enquiry, natural curiosity, and rubbernecking?

Grosjean gave a long group interview the Friday after the race, and his perspective was sobering. He said he declined to wait for a stretcher and made a conscious decision to walk to the ambulance "to send a strong message that I was OK".

In this case, perhaps that message trumps the subjective question of taste. Grosjean says he can understand both sides of the argument but, crucially, the sight of him emerging safely was a productive use of time during the red-flag period because it gave an opportunity to heal and take stock after a shocking event: "For people to understand and try to process it, and keep seeing that I jump out of the car – that it's not a dream, it's not fake, it's not an imagination."

In the age of the alternative fact, this might be the most powerful argument of all.

GP Racing has a podcast!
Search for 'Flat Chat with Codders' in your podcasting platform of choice.

PICTURE: ANDY HONE. ILLUSTRATION: BENJAMIN WACHENJE

AUTOSPORT PLUS

SUBSCRIBE TO AUTOSPORT PLUS AND GET CLOSER TO THE ACTION

YOUR GP WEEKEND COMPANION

Every session covered - the results, the talking points and the biggest controversies.

SMART INSIGHT, PUBLISHED DAILY

Expert opinion and technical insight from the best team of motorsport writers.

COVERAGE THAT GOES BEYOND THE TRACK

Comprehensive driver news, team announcements and the latest from the paddock.

NO ADS, MORE PERFORMANCE

A faster, premium, ad-free website experience.

SAVE 25% WITH PROMO CODE: GP25R

AUTOSPORT.COM/PLUS