



GP RACING

FORMULA 1 GRIPPED
BY CORONAVIRUS
CRISIS **P16**

F1 BUT NOT AS WE KNOW IT!

HOW THE NETFLIX
TV REVOLUTION
HAS CHANGED
THE GAME

**BUSINESS
UNUSUAL**

HOW MERC
IS DODGING
F1'S BOOM
& BUST

+

WHERE HAVE WE SEEN
THAT CAR BEFORE?

**THE CURIOUS
CASE OF F1'S
'PINK MERCEDES'**

SWEET TALKING TO
F1'S HONEY BADGER
**CAN RENAULT
CONVINCE ITS
STAR TO STAY?**



UK
EDITION
£5.99
APRIL
2020

maier

Carbon Fiber Watch Bands | Hand Made In *Italy*



...How Do You Make *Swiss Perfection* More Interesting?

Ask The *British* To Promote It

Have The *Germans* Organize It

Request The *Italians* To Accessorize it

Let The *Americans* Run It



+1 510 581 7602 | California | sales@charlesmaier.com | maiercorp.com



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

CONTENTS

APRIL 2020

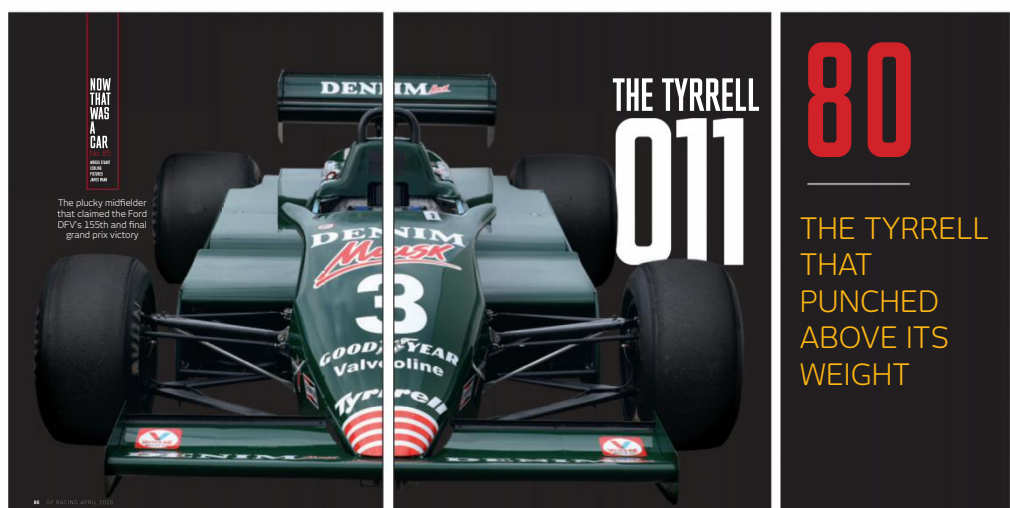


SECTOR 1

- 4 IGNITION**
Unsettling times ahead for Formula 1
- 6 PARADES**
Australia, the race that never was
- 16 F1 INSIDER**
The fallout from Oz and what happens next
- 22 F1 ANALYST**
Ben Edwards on the French influence on F1
- 24 UNDER THE HOOD**
Pat Symonds on the evolution of F1 pitwalls

SECTOR 3

- 94 SUBSCRIPTIONS**
Try three issues of GP Racing for just £3
- 96 TECH TALK**
Our new technical expert picks out the highlights from testing
- 104 PRODUCTS**
Reviews of the best F1 gear
- 106 FLAT CHAT**
Stuart Codling on hindsight and the Australian GP postponement



SECTOR 2

- 42 THE NETFLIX EFFECT**
How 'Drive to Survive' is made and how it has changed F1
 - 48 DRIVE TO SURVIVE**
A review of the second series of Netflix's F1 documentary
 - 52 DAN, DAN THE RENAULT MAN?**
Can Renault perform well enough to keep hold of Daniel Ricciardo?
 - 58 THE CLONE WAR**
How Racing Point's new car has ruffled a few F1 feathers...
 - 64 ALEX ALBON INTERVIEW**
This is where the hard work starts for the Red Bull man
 - 70 KVIAT AND GASLY**
The Red Bull rejects rebuilding their reputations at AlphaTauri
 - 78 NIGEL ROEBUCK**
On the likeable and talented François Cevert
 - 80 NOW THAT WAS A CAR**
Tyrrell's last winner, the 011
 - 86 MOTORSPORT SHOWCASE**
Remembering F1 at Brands Hatch
- ### F1 RACING PRO
- 27 STRAIGHT TALK**
Mark Gallagher on Lewis Hamilton's attention to detail
 - 28 PROFILE**
Rodi Basso, Motorsport Network's new technical expert
 - 30 ENGINEERING**
Adrian Newey's road car project, the Aston Martin Valkyrie
 - 36 BUSINESS**
How Mercedes aims to buck the trend and make a profit from F1



Ben
Anderson

@BenAndersonF1



Uncertain future for F1's 2020 season

I expected to write with some thoughts reflecting on the early races of the new season. By rights, you should be reading this with F1 having just held its first Vietnam Grand Prix.

Instead, the first eight grands prix of 2020 have been called off, 2021's new rules delayed for a year and F1 has brought forward its traditional summer shutdown as the coronavirus crisis takes hold. This F1 season potentially won't start until June's Canadian GP, at the earliest.

Of course, this is a rapidly escalating situation, so by the time you digest this dispatch from my own isolation bunker – I haven't (to my knowledge) yet contracted COVID-19 but am working from home following a company directive to stay away from the office – there might well have been even more bad news for F1 fans.

The decision to cancel the season-opening Australian Grand Prix mere hours before Friday practice was due to begin came very late in the day, but was ultimately the correct call. Once a McLaren team member contracted the virus and that team pulled out, a domino effect was inevitable as Formula 1's bubble burst.

A schism emerged among the teams over whether to race on or not (see page 16 for our special report), while F1 itself was criticised for a slow reaction to the crisis as it unfolded in Melbourne. But the right decision was reached in the end. The teams hold

the balance of power in F1, and corporate sensitivity and social responsibility eventually won the day.

The upshot is there will sadly be no F1 races for us to enjoy for the foreseeable future, so if you still want to get your fix as the world isolates you could do worse than watch (or re-watch) the first two seasons of the *Drive to Survive* docu-series on streaming service Netflix.

Luke Smith analyses in detail the impact Netflix has had on F1 over the past two years (see page 42), and we also include former F1 commentator James Allen's expert review of season two (page 48), which launched at the end of February.

Netflix had begun filming a third season before coronavirus scuppered everyone, and it will be interesting to see how tension with existing broadcasters – who pay a pretty penny for the privilege – and drivers unhappy with how they have been portrayed (Max Verstappen) affects future output.

But for now, there is no doubt Netflix deserves praise for covering Formula 1 in a fresh way and bringing it to new audiences, something F1 has been desperate to do for a while. Daniel Ricciardo, for one, is convinced Netflix has done wonders for his own profile in the US.

That's just as well, because F1 is going to need new and engaged fans more than ever when 2020's racing finally does get underway – whenever that is.

Contributors



LUKE SMITH

He's Autosport and Motorsport.com's new F1 reporter. See p42 for Luke's investigation into the effects of Netflix's presence in the paddock



MATT YOUSON

Well-connected in the Red Bull world, Matt tried to make sense of what's going on with Scuderia AlphaTauri's two drivers (see p70)



JAMES MANN

Always on the hunt for unusual cars to photograph, James found a quirky double grand prix winner for us this month (p80)



DAMIEN SMITH

Aston Martin's Valkyrie (p30) brings F1's no-compromise approach to the road. No space for our former editor-in-chief's kids, though...

Team principals	Drivers	Pit crew	Advertising	Subscriptions	Partners
Editor Ben Anderson President, Motorsport Network James Allen Vice President of editorial James Dickens	Group managing editor Stewart Williams Executive editor Stuart Codling Art editor Frank Foster	Head photographer Steven Tee Columnists Pat Symonds Mark Gallagher Nigel Roebuck Ben Edwards Rodi Basso	Photo agency Motorsport Images Director, global client success Sunita Davies Production controller Ben Webster	UK sales manager Ben Fullick Editorial tel +44 (0)20 3405 8100	Email: help@asm.secureorder.co.uk Customer hotline/back issues 0344 848 8826 Digital marketing manager Kaye Benfield

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.

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 James Allen, Tim Bampton, Harry Bull, Russell Day, Lucy Genon, Will Hings, Clarisse Hoffman, Darren Jones, Bradley Lord, Vicky Lloyd, Gemma Lusty, Vanessa Reffay, Charlotte Sefton

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



STRAT-3

CRYSTAL:

MADE OF SAPPHIRE
PREVENTS SCRATCHES
AND ANTI-REFLECTIVE
COATING TO REDUCE
REFLECTION

WATER RESISTANCE:

10 ATM ALLOWS FOR
LOW-IMPACT WATER
SPORTS, SWIMMING
AND SNORKELING

THE ART OF

S W I S S

RACING

M A D E

INSPIRATION

THE SUB-DIALS
ARE A NOD TO
F1 STEERING
WHEEL DESIGN

CALIBRE:

SWISS MADE
RONDA 5070.D
QUARTZ

WATCH DIMENSIONS:

CASE: 46MM
BAND: 26 X 22 MM
CROWN: SCREW DOWN

CASE:

BRUSHED TITANIUM

GIORGIOPIOLA.COM

A memory of happier times

Over the course of 24 hours or so in Melbourne everything changed, and the kind of cheery optimism you see in this picture fell into very short supply.

Every year fans gather on the 'Melbourne Walk' outside the Formula 1 paddock to greet the drivers, but even on the Thursday there was a slightly peculiar atmosphere because the drivers had been advised to avoid physical contact with people.

These fans just wanted to talk to someone and I thought it was interesting – and very much in the spirit of F1 fandom – that they were hanging out together even though they all supported different teams and drivers.



Photographer

Steven Tee

Where Melbourne, Australia

When 11.23am, Thursday
12 March 2020

Details Canon EOS-1DX MkII,
70mm lens, 1/640th @ F5.6







RENAULT
F1 TEAM



DP WORLD



INFINITI



RENAULT

Castrol



Ocon ensures reality hits home

As I was hanging around by the 'Melbourne Walk' it was interesting to see the drivers sticking to the footpath rather than walking down the road, keeping the maximum distance between themselves and the spectators. That's fair enough because they'd been told to keep their distance.

Then Esteban Ocon arrived sporting this enormous face mask which made him look like Darth Vader. The photographers had all been chatting and speculating about who, if any, would come in wearing a mask, given the medical advice that they weren't much use for prophylactic purposes anyway. In the event, only Ocon did so. It had a huge impact on the mood.



Photographer

Steven Tee

Where Melbourne, Australia

When 11.27am, Thursday
12 March 2020

Details Canon EOS-1DX MkII,
70-200mm lens, 1/640th @ F3.5





Formula 1 bigwigs take the rap

I've attended lots of press conferences over the years, but I'm there to take pictures rather than pay much attention to what's being said. This time I wanted to hear every word because I knew it would be the kind of moment you wanted to remember.

FIA race director Michael Masi, Australian GP Corporation CEO Andrew Westacott and chairmain Paul Little, and F1 executive chairman Chase Carey held an al fresco press conference to explain their decision to cancel the grand prix.

We had three photographers there shooting different angles of what will go down as a pivotal moment in F1 history.



Photographer

Steven Tee

Where Melbourne, Australia

When 11.50am, Friday
13 March 2020

Details Canon EOS-1DX MkII,
16-35mm lens, 1/500th @ F5.6





Lights out – and away they’ve gone

Most of my team were able to leave on Saturday, but my flight wasn’t until Sunday night so I thought I’d return to the track and record the scene at the time the race had been due to start.

You never know whether you’re going to get in or not around here, given how stringent security is. Having a pass is no guarantee. But it turned out to be fine – the public were staying away.

I wanted some shots at the time the grid and the grandstands were going to be full. In this image the crowd would have been on their feet, singing *Advance Australia Fair* while the drivers stood in front of a grid full of cars.



Photographer

Steven Tee

Where Melbourne, Australia

When 3.59pm, Sunday
15 March 2020

Details Canon EOS-1DX MkII,
16-35mm lens, 1/320th @ F5.6



Australia

MELBOURNE

SLOW
POINT

20
km/h

14
^
END
ROLEX

Australia

MELBOURNE



The start of the race that wasn't

After shooting from up in the grandstand I headed down to the track itself for what is probably the weirdest start shot I've ever done in Australia – and I've been to every Australian Grand Prix since 1985.

I'm in the middle of the track, looking towards the grid, at the moment the lights would have gone out to signal the start of the race. Instead of 20 F1 cars at maximum acceleration, the vista is one of fork-lift trucks and people in high-vis jackets.

It's quite surreal, but I suppose the consolation is that if the race had actually been taking place, I certainly wouldn't be standing there...



Photographer

Steven Tee

Where Melbourne, Australia

When 4.10pm, Sunday
15 March 2020

Details Canon EOS-1DX MkII,
70-200mm lens, 1/320th @ F5.6

HOW F1 WAS OUTFOXED BY CORONAVIRUS

01 When the World Health Organisation officially upgraded the COVID-19 novel coronavirus outbreak to pandemic status on the eve of the season-opening Australian Grand Prix, it was almost inevitable the event would have to be cancelled. It was the most responsible course of action. And yet the decision was delayed amid rancorous scenes behind closed doors – arguments which continued even after McLaren announced its withdrawal on the Thursday of grand prix week.

Three teams – Red Bull, Scuderia AlphaTauri and Racing Point – declared themselves determined to carry on while neither the commercial rights holder nor the FIA was prepared to step in and cancel the race, lest they be liable for financial damages. The Australian Grand Prix Corporation, the race promoter, is believed to pay in the region of AUS\$50m annually to host the event, and most of that sum comes from the Victorian state government.

Doubts had been cast over the wisdom of proceeding a week before the race, as Italy – the worst-affected of the European countries – began to impose travel restrictions that could have prevented Ferrari's presence had they been brought in 24-48 hours earlier. But it was the double-whammy of the WHO's declaration, followed by news that a McLaren team member had tested positive for COVID-19, which forced the stakeholders into crisis talks.

The FIA's contractual position was that without sanction



from the local health authorities, or unless the commercial rights holder was unable to put 12 or more cars on the grid (thereby breaching Article 5.7 of the Sporting Regulations), it could not cancel the event. If it did, it would be liable for damages. For obvious commercial reasons, neither Formula 1 nor the race promoter wanted to cancel.

Solidarity among the teams would have provided the FIA with the numbers it needed, but this was not initially forthcoming. Ferrari indicated it would join McLaren in withdrawing immediately, and Renault and Alfa Romeo said they were ready to follow (indeed, word circulated that Sebastian Vettel and Kimi Räikkönen were packing their bags as the meeting took place). But Mercedes, Red Bull, Scuderia AlphaTauri and Racing Point favoured F1 managing director of motorsports Ross Brawn's proposal of running on Friday, potentially behind closed doors, then reviewing the situation on Friday evening.

FOR OBVIOUS COMMERCIAL REASONS, NEITHER FORMULA 1 NOR THE RACE PROMOTER WANTED TO CANCEL

Haas and Williams initially sat on the fence, saying they would accept the majority view.

Since Brawn held the casting vote, that meant the event was set to continue – until Mercedes team principal Toto Wolff received a phone call from Daimler CEO Ola Källenius. After concluding the call, Wolff informed Brawn that Mercedes would now withdraw as well.

While the grand prix itself was untenable at this point, the three teams still determined to race continued their preparations on Friday morning. Track activities began as normal with laps by the two-seater F1 Experiences car, but the gates remained closed to spectators who had been informed that some sort of event would be going ahead, whether F1 cars ran or not. The farce was concluded by the government announcing the Australian Grand Prix could not take place, enabling the FIA and F1 to officially cancel it and leave the matter in the hands of the insurers. ►



BRAWN DEFENDS F1 CONDUCT AS RACES TOPPLE

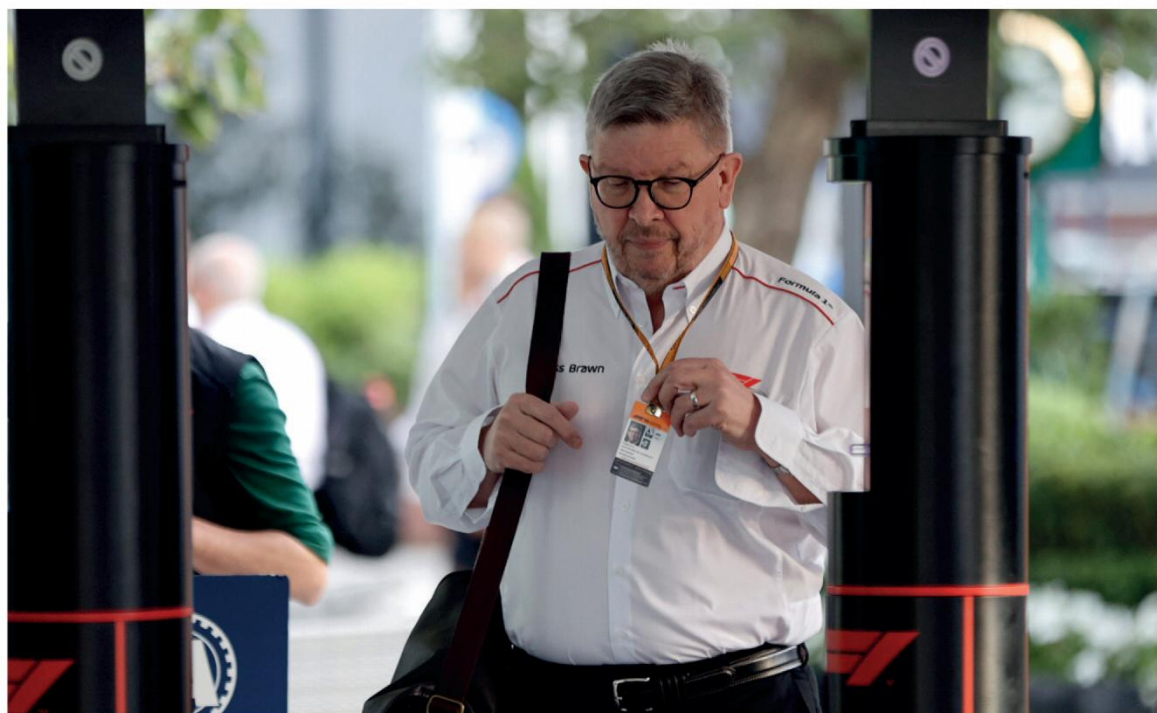
02 The unedifying scenes at Albert Park naturally led to the conduct of many of the stakeholders coming in for scrutiny – and criticism. Australian Grand Prix Corporation chairmain Paul Little and CEO Andrew Westacott, along with F1 executive chairman Chase Carey and FIA race director Michael Masi, gave a press conference in Melbourne immediately after the cancellation of the Australian GP to explain their respective positions and to mollify disgruntled fans.

But as details emerged of the tug-of-war behind the scenes, the criticism continued: F1's determination to proceed with the race appeared increasingly out of step with the approach of governments and sporting bodies worldwide.

Later that Friday, the promoters of the new Vietnam Grand Prix announced their event would be postponed (following the lead of China, as detailed in last month's *GP Racing*). Given that most F1 personnel were already in the process of heading home if they could (while many others faced lengthy quarantine periods in Melbourne), Bahrain's similar capitulation was inevitable.

F1 managing director of motorsports Ross Brawn issued his own detailed explanation of F1's position via video. In it, he emphasised how the rapidly changing global situation had taken the organisation by surprise.

"When we decided to go ahead, it looked a bit different to how it looks now," he said. "Probably what's surprised everybody is the rapid expansion of this problem. The



PROBABLY WHAT'S SURPRISED EVERYBODY IS THE RAPID EXPANSION OF THIS PROBLEM
ROSS BRAWN

escalation of cases, certainly in countries like Italy where it's gone almost vertical, no one I think could have expected or predicted that.

"We were kind of on this ship that sailed and we were optimistic that we could get through it, that we could get Formula 1 started, have a great race, and just bring a bit of relief in difficult times.

"Once we had the positive case here, and once one team couldn't race because of that, then clearly we had a problem we had to address."

Other promoters planning to host grands prix early in the season have also decided to play it safe and pre-emptively postpone their events. The Dutch, Spanish and Monaco Grands Prix were called off in the week following the abortive Australian race.

Monaco won't happen in 2020, but the others are all hoping to find an alternative date later in the year (see subsequent story). Formula 1 and the FIA have annulled the summer break, having told the teams they must shut

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*



FERRARI
Another false dawn ahead?



LECLERC
How Ferrari star stormed F1



WILLIAMS
History of Williams F1: part 1

ON SALE

MAY 14

- > No point(s): a look at F1's non-championship races
- > Products: what to watch and read during the lockdown
- > Now That Was A Car: Brabham BT24
- > Motorsport Images showcase: Monaco

F1 MASTERMIND

Your chosen specialised subject: the world's greatest motorsport

- Q1** Who was younger when claiming their first F1 GP victory: Felipe Massa or David Coulthard?
- Q2** In how many races in 1965 (excluding Monaco which he didn't compete in) did Jim Clark fail to qualify on the front row: zero, one or three?
- Q3** Who are the two drivers racing under Irish licences to have scored world championship points?
- Q4** What was the first year in which unlimited testing was banned?
- Q5** After Alfa Romeo returned to F1 in 1979, it took two pole positions across six seasons. Which drivers claimed them and in what races?
- Q6** In which two races in 2016 did Lewis Hamilton start on the back row of the grid?
- Q7** Where and when did Daniel Ricciardo first lead a world championship grand prix?
- Q8** True or false: no driver won successive Australian GPs when the race was held at Adelaide?
- Q9** Where did Pierre Gasly achieve his best result, a fourth, during his 12 races with Red Bull in 2019?
- Q10** Which was the only grand prix that Mika Häkkinen won three times during his F1 career?



1 Coulthard was 24 and Massa 25 2 Zero 3 Derek Daly, Ralph Firman Jr 4 2010 5 Bruno Giacomelli (1980 US GP) and Andrea de Cesaris (1982 US GP West) 6 China, Belgium 7 Canada 2014, which he won 8 True 9 British GP 10 Spain

down for 21 consecutive days in March and April instead, but it is surely now unrealistic to expect the roster of the remaining 21 races to go ahead.

TEAMS AGREE ON 2021 DELAY

03 The new technical regulations originally planned to come into effect next year will now be delayed until 2022 after F1's teams expressed concerns over the economic impact of the COVID-19 pandemic. In a meeting held via conference call, the ten team principals with Chase Carey and Ross Brawn, representing F1, and FIA president Jean Todt agreed to a format in which the current regulations stand, with a development freeze on key components such as chassis and gearbox.

Teams will now be free to focus on their new generation of cars during 2021 while working under the cost cap, which will still be implemented next year. The agreement comes against a background of cancelled and/or postponed races, which will entail a loss of income for all stakeholders, along with economic uncertainty that will put a squeeze on team income. The pandemic could force sponsors out of business, or prompt them to scale back their spend, as well as prompting the car manufacturers involved in F1 to reconsider their commitment.

It's understood that Ferrari was initially reluctant to agree to the delay but fell into line after high-level internal discussions. Team principal Mattia Binotto said: "It is certainly not the time for selfishness and tactics."

The teams with the deepest pockets are well advanced with their preparations for the new ruleset. But the less well-resourced competitors were facing a scenario in which they would have to switch development focus to the new-generation cars while the current ones were yet to race. Enabling 2020 cars to race through to the end of 2021, subject to controls on development, will ease the financial pressure on some teams and ameliorate the costs already sunk into the 2020 machinery.

These measures will not be set in stone until the details have been worked through and rubber-stamped by the World Motor Sport Council. ►



2020 cars will now race in two seasons, with controls over the amount of development allowed

F1 ON PAUSE AS VENUES SCRAMBLE FOR NEW DATES

04

The new F1 season will not now begin until June at the earliest as the Dutch, Spanish, Monaco and Azerbaijan Grands Prix joined Australia, Bahrain, Vietnam and China on the list of pandemic-enforced postponements. Canada is currently slated to be the first race on June 14, followed by the French GP two weeks later. But there is no guarantee those events will take place, given the continuously evolving nature of the pandemic.

Indeed, the Automobile Club de Monaco moved very quickly. On the same day F1 and the FIA announced that its round would be postponed along with the Dutch and Spanish GPs, the ACM issued a statement saying there would be no Monaco GP at all in 2020. It cited not only the uncertainty surrounding the movement of people across borders, but also the health risks posed to the hundreds of volunteers who build and maintain the course and work as marshals at the race.

Likewise, Azerbaijan's round takes place on the streets of Baku, therefore involving a longer lead time than normal circuits since trackside infrastructure has to be put in place. That process also involves large numbers of people working in close proximity to one another.

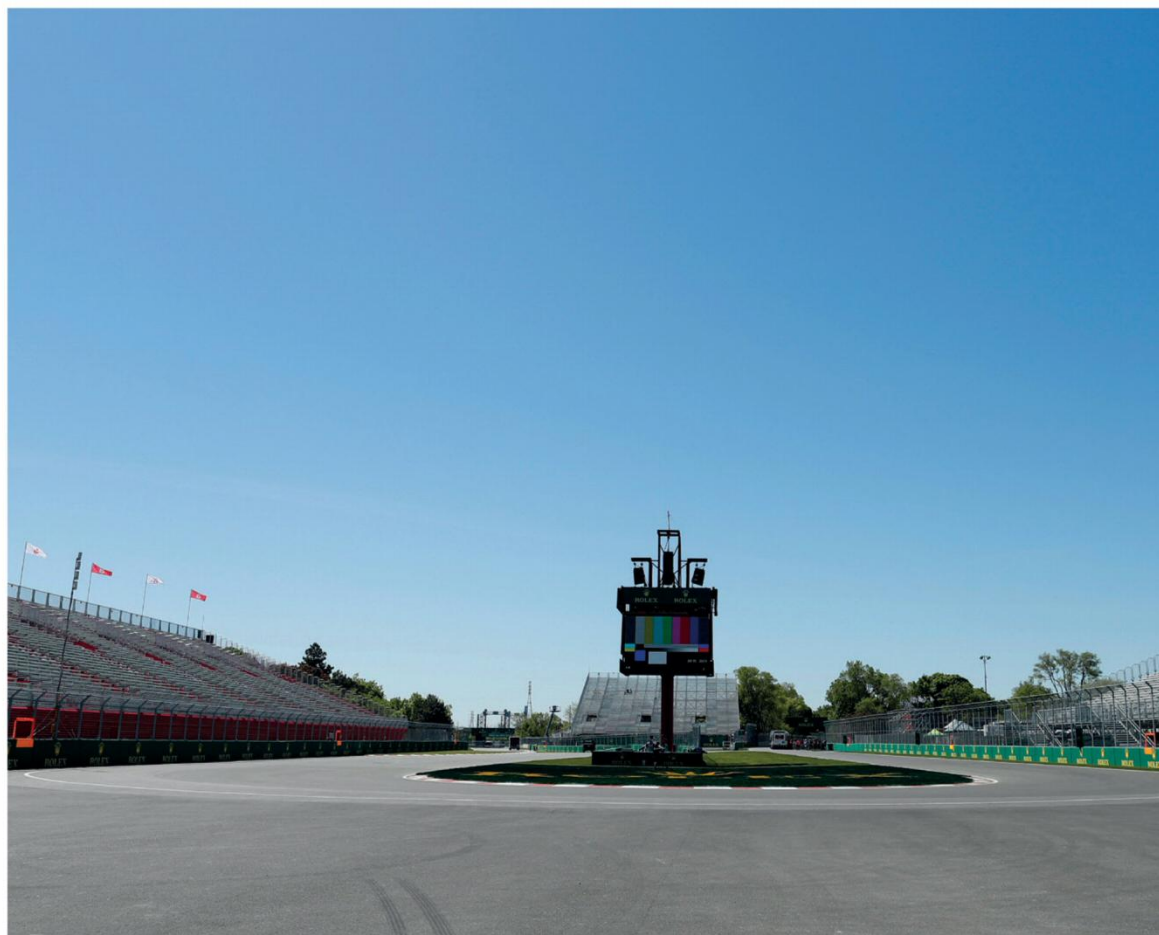
When the flyaway rounds were initially put on hold, F1's official line was that it expected racing to begin at the "end of May". However, CEO Chase Carey later backed out of that timeframe, saying in an open letter to fans that F1 "cannot provide specific answers today given the fluidity of the situation". He followed that by stating he hoped the revised calendar would feature 15-18 races although, as things stand, this is perhaps wishful thinking...

F1 and the FIA have relocated the summer shutdown to spring, mandating that all teams observe 21 consecutive days of inactivity before the end of April. That potentially frees up several weekends in which postponed races could take place this August.

That creates logistical challenges in terms of

“THE FIA AND FORMULA 1 CONTINUE TO WORK CLOSELY WITH AFFECTED PROMOTERS AND LOCAL AUTHORITIES TO MONITOR THE SITUATION AND TAKE THE APPROPRIATE AMOUNT OF TIME TO STUDY THE VIABILITY OF POTENTIAL ALTERNATIVE DATES”

JOINT STATEMENT FROM THE FIA AND FORMULA 1



PICTURE: ZAK MAUGER

The hairpin at the Circuit Gilles Villeneuve sans cars. This is also likely to be the case on June 14, the current date for the Canadian GP, unless there is a dramatic change in the COVID-19 situation

transporting people and equipment between venues, particularly if the more far-flung ones are granted a slot. Other races in relatively close geographical proximity could be moved around to accommodate others, but the France-Austria-Britain triple-header of 2018 was widely despised and there is little appetite to repeat it.

Other options on the table include extending the season, which has become a more viable option now that F1's stakeholders have agreed to delay the introduction of the new technical rules originally slated for adoption next year. But this all depends on what happens on the global stage within the coming weeks and months.

"The FIA and Formula 1 continue to work closely with affected promoters and local authorities to monitor the situation and take the appropriate amount of time to study the viability of potential alternative dates for each grand prix later in the year should the situation improve," said a joint statement issued by F1 and the FIA. "The FIA and Formula 1 expect to begin the 2020 championship as soon as it is safe to do so after May, and will continue to regularly monitor the ongoing COVID-19 situation."

Reports from China suggest that lockdown protocols have been effective in slowing the spread of the virus, but in the absence of a vaccine COVID-19 remains an existential threat. It will be supremely challenging to begin a sporting programme involving the mass travel of participants and spectators, since that would invite the contagion to spread. The Automobile Club de Monaco's stance may ultimately prove to be the most prudent one.

All in all, it's looking as though F1's longest-ever season – planned to encompass 22 races – will probably end up being its shortest in many years.

ESTABLISHED
OVER
45
YEARS

TOM HARTLEY

THE ULTIMATE NAME DEALING IN LUXURY, PERFORMANCE & CLASSIC CARS



14 McLAREN P1 VAT QUALIFYING
Supernova Silver With Carbon Black Alcantara
5,600m
£1,100,000



14 PORSCHE 918 SPYDER WEISSACH PACKAGE
PTS Pearlescent White With Garnet Red Leather
6,000m
£1,095,000



11 FERRARI 599 GTO LHD
Grigio Silverstone With Rosso Tessuto
3,500m
£409,950



15 FERRARI 458 SPECIALE
Bianco Avus With Nero & Giallo Alcantara
3,900m
£284,950



16 LAMBORGHINI AVENTADOR LP 750-4 SUPERVELOCE
Verde Ithaca With Nero & Verde Alcantara
1,900m
£269,950



66 NOBLE M600 COUPE
Dark Red Metallic With Quilted Dark Grey Alcantara
4,900m
£179,950



17 ROLLS ROYCE WRAITH 6.6
Salmanca Blue & Jubilee Silver With Seashell Hide
4,000m
£164,950



14 FERRARI F12 BERLINETTA
Grigio Titanio Metallic With Nero Hide
12,000m
£159,950



53 FERRARI 360 CHALLENGE STRADALE F1
Bianco Avus With Blue Alcantara
12,000m
£159,950



17 DODGE VIPER ACR EXTREME
Viper White With Black Leather & Alcantara
7,000m
£134,950



18 PORSCHE 911 CARRERA 4 GTS CABRIOLET
Jet Black Metallic With Black Leather
14,000m
£89,950



62 MERCEDES-BENZ C63 AMG BLACK SERIES
Obsidian Black With Black Leather
21,000m
£85,000

OVER 60 SUPERCARS IN OUR INVENTORY

WE ALWAYS PAY MORE FOR YOUR CAR & WILL COLLECT TODAY

Telephone: +44 (0)1283 762762

Email: info@tomhartley.com

www.tomhartley.com

Follow us:  @TomHartleyCars

 [tomhartleycars](https://www.instagram.com/tomhartleycars)

SHOWROOM VIEWING BY APPOINTMENT
OPEN 7 DAYS: 9AM-8PM



THE F1 ANALYST

BEN EDWARDS

 @benedwardstv

PICTURES 

a somewhat different approach. From being in one of those top teams potentially able to win races – as he was with Red Bull at the start of 2019 – he is now fighting in the feverish midfield with the renamed AlphaTauri outfit, to which he was demoted in August last year.

Pierre is an engaging character, but one who went through the mill as Max Verstappen's team-mate, in a car not suited to his own driving style. He recovered well at Toro Rosso, and achieved a fully deserved podium finish in Brazil. Gasly's target is to re-establish himself as a frontline driver who deserves another shot at a winning outfit.

Team bosses will need to see more evidence of a steel similar to that which glints within Leclerc. An ability to step up performance as the pressure mounts rather than being waylaid under duress separates the greats from the regulars. Gasly did respond in the second half of last year but he needs a truly impressive season alongside Daniil Kvyat if he's to have any chance of being in a top team for 2021.

Steel is definitely present in Esteban Ocon. He has a friendly personality out of the car, but we have seen evidence of ruthlessness within it. Whether it's going wheel to wheel with former team-mate Sergio Pérez, or fighting back to unlap himself from Verstappen and robbing Max of a potential win in Brazil in 2018, Ocon has an edge to him.

Sitting on the sidelines for a year may have sharpened that desire further. Now Ocon is back on the grid with Renault, a team desperate to make progress, and the French connection is a sturdy link. Daniel Ricciardo will be tested rigorously by his new team-mate but the Australian will be up for it. It's a driver pairing that could drive the team forward via a powerful internal rivalry, but there are always downsides to such a level of intensity within a tight-knit squad.

Intensity is something familiar to those working with Guenther Steiner at Haas, and Romain Grosjean is now going into his fifth season of racing for the American team. The French word for conundrum escapes me, but the term springs to mind when considering Grosjean's competitiveness. On his good days, he's fast and flowing with excellent qualifying pace and good race consistency, but all too often he struggles with car balance, trips over fellow racers, and moans over the radio.

His experience is valuable, his 2013 season at Lotus had truly inspirational moments, but he carries baggage. The steel within may have turned a tad rusty. Grosjean's time in F1 could be drawing to a close unless he can spring some monumental surprises this year.

French-speaking European drivers have key parts to play in this year's campaign. Will they hit the peak, *Magnifique!* or crash through the floor, *Zut Alors?* Only time will tell.

THE FRENCH CONNECTION

French as a first language is far more abundant among current continental-born F1 drivers than it was a few years ago. Pierre Gasly, Romain Grosjean, Charles Leclerc and Esteban Ocon sit at different levels on the F1 pyramid and make up a fifth of the grid, and all are intriguing competitors with varied ambitions for 2020.

Leclerc is a proud Monégasque yet his career began on a kart track in the south of France, and the support he generates from French fans at Paul Ricard implies he is their adopted son. He carries the greatest potential of the group with his exploits at Ferrari last year setting him up to be a potential title challenger this season.

Twelve months ago, Leclerc was focused on matching and beating Sebastian Vettel, establishing a position within the team, creating an aura that encouraged the crew to support him. He ticked all the boxes, and proved he can win races when the car was right. The targets have been adjusted.

Testing is already history; Leclerc can only challenge for the title by maximising every race and making sure he's in the game from start to finish. When I spoke to him at *Autosport International* in January, he intimated that he needs to manage



The French influence on F1 has increased considerably in the past few years

the energy drain of the season differently, largely to ensure a period of genuine rest and recuperation. His objectives even then were more than a February lap record in Barcelona. Watching Leclerc deal with the expectation growing in his own head, and in those cheering him on, will be fascinating.

He's stepped up to each new level impressively; he won GP3 in 2016, graduated and won F2 the following year, had a superb debut F1 season for Sauber in 2018, then outqualified Vettel more often than not – and outscores him – last year. A blade of steel shines within Leclerc, as he showed in 2019 in Bahrain when he ignored team orders to stay behind Vettel, and in Italy where he played his own game in qualifying. If Leclerc combines that steel with experience and maturity, he could well be a major title contender – *if* the car is good enough.

Meanwhile, his friend and former karting team-mate Pierre Gasly also enters the new season with

“ NOW OCON IS BACK ON THE GRID WITH RENAULT, A TEAM DESPERATE TO MAKE PROGRESS, AND THE FRENCH CONNECTION IS A STURDY LINK ”



Esteban Ocon
(Aramis?)



Charles Leclerc
(D'Artagnan?)



Romain Grosjean
(Athos?)



Pierre Gasly
(Porthos?)





UNDER THE HOOD

PAT SYMONDS

PICTURES
motorsport
IMAGES

front of them. Ironically, the need to display such a plethora of information is the very mechanism that stops those on the pitwall from actually seeing any live track action and, with full track video coverage, there is actually no need to see the track.

So what are these people doing? The answer does vary from team to team, but typically the team principal will take centre stage. Ultimately the buck stops here, although in general the team principal will take a true strategic role more than an operational one. I use the word 'strategic' advisedly, and mean by this that the big decisions – such as whether to retire a car if the other car has suffered an unexplained mechanical failure that may endanger the

driver of the car still running.

The team principal will normally be flanked by the team manager and chief engineer. The role of the team manager now is to ensure compliance with the sporting regulations and to maintain contact, via an intercom system, with the race director. He is also generally responsible for the entire pit crew and ultimately for the human performance of the pitstop crew.

The chief engineer will generally be responsible for the operation of the cars. I would always impress upon the chief engineer, and indeed the race engineers, that they had four major items to consider and that they should always consider them in the order of safety, legality, reliability and performance. That is sometimes a shock to those who think that performance is everything, but keeping that order of ▶

DATA-DRIVEN F1 STILL NEEDS OLD METHODS

The pitwall stand is, by any standards, an anachronism in modern F1. In the last couple of teams I have been with I have campaigned to get rid of it and save a considerable amount of freight weight, but to no avail. So why is it so important and what is going on at the pitwall while the cars are running?

Strangely, although I still regard it as an anachronism, stationing people at the pitwall has not always been the norm. Indeed, time was when there was no pitwall. It appears the trend started when it became necessary to communicate with the driver and this was, of course, long before the advent of radios in motorsport.

The pit signaller would put relevant information on a pit board to inform the driver of his position, the gaps to the cars in front and behind him, and the number of laps before his fuel stop or the end of the race. Bizarrely, in these days of clear duplex voice communication and a dashboard with on-board diagnostic and information systems that probably exceed the sophistication of early

space vehicles, we still find a need to put plastic numbers in an aluminium frame and wave them in the vague direction of a driver who is passing at anything up to 200mph.

The argument is always advanced that they are necessary in case of radio failures and yes, radio failures do happen, but they are very infrequent these days, and in case of a failure a backup system could be available.

More interesting is the role of the personnel sitting on the stand with a bank of monitors in

Old-school pitwalls, such as this one in Adelaide in 1989, were basic and were TV screen free



PICTURES: DARRYL STEWART; STEVEN TEE; ILLUSTRATION: BENJAMIN WACHENIE



priorities is the only responsible way to proceed.

It was for this reason that many years ago I introduced the concept of race engineers supported by performance engineers (who will not be on the pitwall) to ensure that performance did not come a poor second. Some teams will call these second engineers 'data engineers'. I feel this belittles their roles, particularly in these days of automatic data analysis and anomaly detection.

The chief engineer also has an important role to play in coordinating the information from the two cars. F1 is a team sport and if one car finds something then the chief engineer will ensure the information is conveyed to the other side of the garage. He also keeps a 'god's eye view' on proceedings – informing, for example, the race engineers of weather predictions or events on track that may affect their programmes.

Working further from the inside to the outside we may see the technical director, although the workload and number of races

in a season means they may not attend all races. Next are the strategists. There are many different ways teams fulfil this function. Many have a pitwall strategist for each car backed up by an analyst back at base. Some have one trackside strategist with the number-crunching done remotely. During practice these guys will be gathering data, not just from their cars but also from their competitors, to judge aspects such as tyre performance and degradation as well as establishing their relative performance to others in order to build a plan for the race. During the race they will be acting more tactically

Pitboards (top) used to be the only method of communication with the driver. Today's pitwalls (above) have more people and many functions

than strategically, using the data garnered during practice and updating it in real time to feed the multiple computer models that will inform them of the statistical likelihood of various outcomes.

Finally, on the flanks of the pitwall sit the race engineers. These people are the direct communication between the team and the drivers and, other than in exceptional circumstances, will be the only voice the drivers hear. Race engineers are responsible for all operational aspects of the car and while they will assist with both performance and tactical decisions, they take their orders under advice from the specialists.

Of course all this is data driven, hence the need for all the monitors. These will be showing telemetry from the cars, timing data from the FIA feed, real-time video of both the television feed and a closed-circuit system that follows the team cars based on their GPS position, and the weather radar and tactical information. Data and decisions are coordinated via an intercom system, which has multiple 'chat rooms' for various groups and is also connected to analysts back at base.

With all this going on it's no wonder those on the pitwall are generally only aware of events surrounding the immediate environment of their own two cars.

“ SOME TEAMS WILL CALL PERFORMANCE ENGINEERS ‘DATA ENGINEERS’. I FEEL THIS BELITTLES THEIR ROLES, PARTICULARLY IN THESE DAYS OF AUTOMATIC DATA ANALYSIS ”



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



STRAIGHT TALK

MARK GALLAGHER

[@_markgallagher](#)

and how to repeat it. They're like the practised computer gamer who already knows what's coming, what it takes to be on the next level.

Ask him anything and the response is somehow instant yet studied.

How does he feel at 35?

"I'm the second oldest driver. I got to Formula 1 at 22, so I was one of them as they are now, these youngsters." The 'youngsters' are, of course, Messrs Verstappen and Leclerc.

"I feel younger than ever, fitter than ever, more prepared and more determined, which is strange because this is my 14th year in the sport."

Up close you notice how immaculately he is turned out, the attention to detail in every facet of his presentation. He happily shares his love of fashion, explains how attending fashion shows made him decide to move into this arena, and why this part of his life is so important to him.

"I have spent the last five years trying to figure out what it is that I would love to do when I stop [racing]."

Is this breaking news? Far from it. He talks about being conscious

of how many sports stars reach retirement with no plan for the future, and has decided to up-end that. He loves what he's doing, but he also cannot wait for the next phase when it comes. And 'when it comes' is three to four years away.

Meanwhile the audience has never heard the story of how ten-year-old Lewis approached Ron Dennis at the 1995 Autosport Awards.

"I went over to him and said 'Hi I am Lewis Hamilton, I just won my first championship and one day I want to be world champion in your car'. I don't really know where that came from, because I was generally quite a shy individual. Three years later he gave me a deal and ten years later I won the world championship in his car."

The auditorium erupts into applause.

The more he explains the challenge involved in winning, the more he smiles and the more animated he becomes. This is his territory.

"I love being pushed, I love the challenge. That's what excites me mostly. I am probably the most competitive person I know."

What about the competition?

"I want everyone that I am racing against this year to be the best they've ever been because if you do what you plan to do and beat them it's even more satisfying."

He says this with complete sincerity, and you believe him. Amazingly for someone who has achieved so much, there's still plenty more to come.

LEWIS KNOWS 'THE CODE' FOR SUCCESS

You wouldn't want to be up against Lewis Hamilton. Listen to him talk about the things that excite him and you start to feel for the competition. Here is one of the greats who has reached that phase of his career where he goes into each season and every race sure in the knowledge of how to

win. Confident too that he drives for a team which can keep giving him the tool to do the job.

Having had almost an hour to gently interrogate him – that is just me, him and 400 rapt executives in a Singapore conference hall – the top reaction came from a delegate who isn't even an F1 fan.

"He's a bit special, isn't he? So much calm, focused energy. Inspirational."

It's something I've noticed before with multiple world champions – the ones who have tucked a hat-trick of titles or more under their belt. They have learned 'The Code' – they know what it takes

It's not just in his Mercedes F1 car that Lewis Hamilton is seen by many as inspirational



THIS MONTH

Rodi Basso

Engineering consultant and business coach

Formula 1 technology is continuously evolving – by the end of each season only a small percentage of each car will be recognisably the same as it was when it first hit the track. Joining *GP Racing* this month to track the ongoing development war is Rodi Basso, whose eclectic career includes stints as an engineer with Ferrari and Red Bull, data acquisition and analysis systems for satellites, and the innovation business line of Magnetti Marelli...

CV

2016 – 2019

Motorsport business director, McLaren Applied Technologies

2012 – 2016

CTO/Motorsport sales and marketing director, Magnetti Marelli

2008 – 2012

Co-founder, simulator company AllInSports

2005 – 2008

Race and test engineer, Red Bull Racing

2000 – 2005

Test data engineer/ race performance engineer, Scuderia Ferrari

1999 – 2000

Engineering consultant, NASA Goddard Space Flight Centre

1992 – 1999

Aerospace engineering, University of Naples Federico II

An aerospace engineer by training, Rodi Basso says he wasn't really a motorsport fan as such – until his second interview with Ferrari. He'd been working in Washington as a consultant for NASA, designing onboard data analysis for microsatellites, and initially saw Ferrari as a means to an end.

"I was attracted by motor racing, and in particular as an Italian I was attracted by working in Ferrari," he says, "because I always saw Ferrari as being like a gym for engineers, a place you can go and really get trained and have a very good benchmark of what it means to be an engineer, how to work in a team and develop your skills. I was not such a motorsport fan before I started but it was more for the technical, the engineering side that took me into this environment.

"Then I showed up for the second interview at Ferrari. It was in Fiorano [Ferrari's test track] and I was working underneath the bridge between corners four and five – and there was Michael [Schumacher] running with a car. It was such a thrill to see it – I still remember the goosebumps. So I said, 'OK, I better get this interview right because this is what I want to work on.'"

This was August 2000, a period of intense technical change in grand prix racing. Ferrari had regained its competitive mojo, thanks to Schumacher and a maturing organisational structure in which the technical axis of Ross Brawn and Rory Byrne had team principal Jean Todt acting as a firewall between them and the political machinations of the wider Fiat group (and the negativity of the Italian media). In these days of unlimited testing, Ferrari maintained a separate full-time test team and Schumacher would beat around Fiorano day in, day out, evaluating the latest innovations and developing a greater understanding of the Bridgestone tyres. The result was a period of domination only recently surpassed by Mercedes in the hybrid era.

Basso initially joined Ferrari's test team, but received the call-up to join the race team when Rubens Barrichello's performance engineer decided to step back because he wanted to travel less. Rodi's first race was the 2002 Italian

WORDS
STUART
COOLING

Grand Prix at Monza – won by Barrichello after the potent Williams-BMWs faltered.

"I'd say my biggest piece of luck [in my career] is to start where things were working brilliantly," Basso says. "The benchmark that I had, in terms

of motorsport, but also in general, as a professional and in business, was being really at the peak, dealing with incredible people. In a race team the vertical is there, but it's very short. So in 2002 I was already in meetings with people like Jean Todt, Ross Brawn, Rory Byrne, Luca di Montezemolo, massive people, and I was only 27/28.

"It was a great opportunity to listen to these guys. And then when I moved on to Red Bull I was working with Adrian Newey and many others who may be a bit less known, but today are very important players in the Formula 1 world."

At Red Bull Basso performance-engineered David Coulthard, with a remit that included everything from performance analysis to vehicle dynamics simulations, electronic systems development, and liaising between the race engineering group and the design group led by Newey.

"I've been lucky to deal with some incredible people," says Basso. "Drivers like Michael and Rubens at Ferrari, and David Coulthard and Mark Webber at Red Bull – and Sebastian Vettel at the beginning of his journey there."

Moving on from F1, Basso worked as a co-ordinator in the A1GP championship, overseeing the race engineering of the entire grid, and co-founded AllInSports, a racing simulator company that offers virtual driver training, a growth area now that track testing across most racing categories is restricted. With a view to expanding his brief to straddle the engineering and business worlds he's also worked for the innovation wing of Magnetti Marelli – the parts company acquired last year for \$7.1 billion by Calsonic Kansei – and latterly for McLaren Applied Technologies before founding a new start-up.

"The beauty of motorsport is its many facets," he says. "There's the technology input, which is what took me into this world, but there's also the political, the strategic – and also the human endeavour. It's endlessly fascinating."

PORTRAIT: STEVEN TEE







The Aston Martin Valkyrie alongside Red Bull's 2020 F1 challenger, the RB16, at Silverstone earlier this year

IF ADRIAN NEWWEY DESIGNED A ROAD CAR...

...it would be a no-compromise work of extreme performance art. Like the Aston Martin Valkyrie, in fact – could this be the fastest road-legal car ever?

WORDS DAMIEN SMITH
PICTURES RED BULL CONTENT POOL

Adrian Newwey describes the Aston Martin Valkyrie as “an innovative piece of engineering art”. That statement says so much about his whole approach to automotive design, whether he’s sitting at his famously old-school drawing board sketching out Red Bull’s latest Formula 1 car, or something like this: an astonishing piece of design and engineering created with a suitably route-one aim of being the fastest road car ever made.

It’s no secret the Valkyrie was born from Christian Horner’s desperation to hang on to the employment of his friend, who was being courted heavily by Ferrari at the start of the hybrid era before the Valkyrie project was conceived. Red Bull’s technical director has been at the team since 2006, by far his longest stint in one place – and naturally, being the creative man he is, Newwey was getting itchy feet. Horner knew he needed something extra, to keep the architect of Red Bull’s F1 success away from Maranello.

It was over a pub lunch with, among others, Aston Martin’s own creative guru Marek Reichman that a plan was hatched: to take everything Newwey had learned from F1 and put it into something that could run legally on the road. Red Bull Advanced Technologies spun out of that pub conversation along with an Aston Martin partnership, to provide the road car production know-how that would be vital for such a project to jump from Newwey’s drawing board and into reality. Code-named AM-RB 001, the project was announced to the world at the 2016 Australian Grand Prix.

The problem with road cars is Newwey’s tendency towards ‘no compromise’. That isn’t always practical to meet stringent real-world safety and emissions regulations, and it has been said Newwey’s interest has inevitably drifted in the time it has taken to bring the car to fruition. Still, from the concept stage, he gave it his best shot to create something pure in form.

Key partners were signed to contribute specialist know-how, just as they would in a racing team. Cosworth built and developed the 6.5-litre V12 engine. Originally, it was planned to be six litres – but that left the engine short of the cool 1000bhp target (numbers matter in this game), so up went the capacity to hit that mark. Combined with an F1-style kinetic energy recovery power boost system developed by electric supercar specialist Rimac, the Valkyrie actually boasts a peak output of 1160bhp at 10,500rpm and an equally monumental 664lb ft of torque at 6000rpm – the most potent powertrain ever committed to the public road. A V12? Not very F1 in this small-capacity turbo era, but then Newwey never was a fan of that. As Cosworth managing director Bruce Wood explained: “When the sole objective is the driving experience you can’t beat a naturally aspirated V12.” Even modern turbos have a small modicum of lag – and they can never sound as wondrous as a 12-cylinder at full bark – so Newwey went large. No compromise.

The chassis is all carbonfibre and is very much the ►



After the photos, both Verstappen and Albon got to experience the Valkyrie's first-hand

Red Bull Advanced Technologies part of the car – and directly related to F1 design and manufacturer. The engine is bolted direct to the tub as a stressed member, with the rear suspension hung off the seven-speed Ricardo automated manual gearbox, a layout that has been central to the ethos of F1 since Colin Chapman came up with the Cosworth DFV-powered Lotus 49 in 1967. Newey has recalled how the 49 inspired him as a boy – and he even owns one today.

This being a Newey creation, aerodynamics are as vital as power – and even here the normally aspirated configuration played its part. Turbos would have required intercoolers and when you look at the car's otherworldly shrink-wrapped lines, you wonder where they might have been placed. Again, no compromise – and it has resulted in an incredible 1816kg (4000lbs) of downforce at top speed.

Bosch has provided the engine control unit, complete with traction control and electronic stability control (no F1 limits in this regard, of course), while Alcon and Surface Transforms supply the callipers and carbon-ceramic brakes.

“AM I EVER GOING TO EXPLOIT THAT ‘SPECIALNESS’ ON THE ROAD? OF COURSE NOT. BUT THE REASON I CAN AFFORD ONE IS THAT I DROVE MOST OF MY CAREER IN ADRIAN NEWEY CARS! SO THE LEAST I CAN DO IS HAVE ONE”
DAVID COULTHARD

Tyres come not from Pirelli, but Michelin. The French company's highly regarded performance Pilot Sport Cup 2 rubber is sized at 20in on the front, 21in on the rear.

Not enough for you? There's also an AMR track performance pack owners can add that includes an aerodynamic 'clam' for the nose and other exterior body-parts for extra circuit speed, all of which can be removed to convert the car back to 'standard' road spec at the end of a busy track day. But then there's the Valkyrie AMR Pro, too – a full track version, of which only 25 will be built.

Just 150 of the 'standard' Valkyrie (quote marks are surely always required in this context) will be sold – for around £2.4 million. Yes, each. And those with their name against one includes a certain David Marshall Coulthard, once of Red Bull's F1 team. Yes, we know, he's a Scot... Why, DC?

“I've got an order on a Valkyrie because it will be something special,” says the 13-time grand prix winner. “Am I ever going to exploit that ‘specialness’ on the road? Of course not. But the reason I can afford one is that I drove most of my career in Adrian Newey cars! So the least I can do is have one.”

Coulthard's dozen years in F1 surely means he had his fill of ultimate automotive performance. But his interest in hypercars goes beyond sheer speed.

“I also have an order on a Project One because I'm a Mercedes ambassador, too,” he reveals, referring to the AMG-developed hypercar that is similarly inspired by F1 – now officially known just as One. “Again it'll be something ▶



- › Walked out of school at 11 years old, never to return
- › A millionaire by the time he was 17
- › Lost it all age 19
- › Fought his way back
- › Now at age 58, the world's most successful supercar dealer – 'The Dealmaker' – with a business empire worth over £200 million
- › How did Tom Hartley do it?

PRE-ORDER YOUR COPY TODAY



unique, with an F1 engine. We are in an ever-changing world, so by the time it's ready you might have to donate a testicle to charity to drive it or simply be banned from driving it anywhere other than Mars. Who knows? But I've placed orders because I believe in the projects. I'm curious. I want to see what the journey is like to buy such cars, to see if it's as exciting and emotionally engaging as it is for other people."


Coulthard won't have long to wait, at least for the Valkyrie, since deliveries of the Norse god of hypercars are due to begin later this year. Sadly, racing plans for a Le Mans version have now been frozen, following a recent moving of the goal posts in endurance racing rules. But the road car that was intended to "lap Silverstone as fast as an F1 car", according to Aston CEO Andy Palmer, has at least been lapping the home of the British GP recently in the



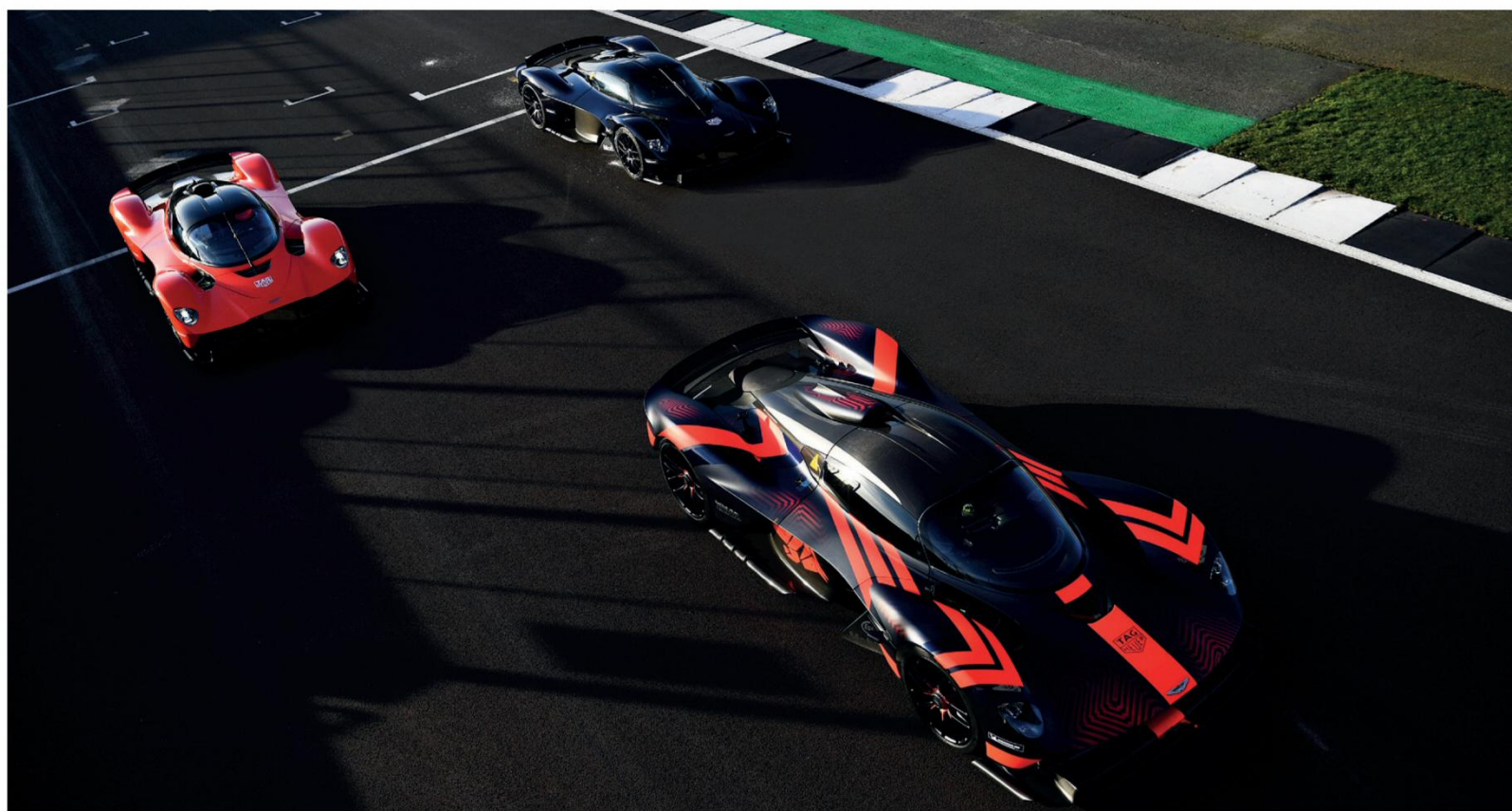
"BY THE TIME IT'S READY YOU MIGHT HAVE TO DONATE A TESTICLE TO CHARITY TO DRIVE IT OR SIMPLY BE BANNED FROM DRIVING IT ANYWHERE OTHER THAN MARS. WHO KNOWS?"

DAVID COULTHARD

hands of Max Verstappen and Alex Albon. The pair offered some assistance to chief test driver Chris Goodwin, who said: "Both Max and Alex were really positive about the direction that we're currently taking and could see the ingredients for an exceptionally high-performing car are already there, ready to be unleashed."

Lap times have not been made public, and somehow we suspect F1-matching abilities are a bit of an exaggeration. But Palmer's video taken from his phone and released on social media at least prove the V12 hits its intended aural marks. As Coulthard says, the world is changing fast – but at least for now, thank goodness, there's still a place for an engineering wonder like the Aston Martin Valkyrie. 

Albon and Verstappen chat with regular Valkyrie chief test driver Chris Goodwin



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

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



AVAILABLE IN 6 LANGUAGES



MERCEDES' F1 BUSINESS MODEL EXPLAINED

Formula 1 has a long history of boom and bust manufacturer entries, but Mercedes is showing how an entrepreneurial business approach can shield its grand prix team from automotive industry turmoil

WORDS MARK GALLAGHER
PICTURES  motorsport
IMAGES

Until recently it was received wisdom that Formula 1 teams owned by car manufacturers tend to be unsuccessful. Ask anyone who worked for Jaguar, Toyota, Honda and BMW back in the noughties.

Big company systems and structures do not sit well in F1. Agility, preparedness to take risks and the relentless pursuit of high performance don't come naturally. They also lack patience, which is why all four of the above mentioned were here today, gone tomorrow.

Interesting that two of the teams, when freed from their corporate shackles, proceeded to win world championships. It took Red Bull five years, but Brawn GP did it in one season post-Honda. Which brings us neatly to Mercedes-Benz, the company which acquired Brawn a decade ago, and is now Formula 1's dominant team.

The on-track success is there, of course – witness the six consecutive double world championship titles, the 93 wins and 103 poles. Yet invariably question arise about Mercedes' commitment to the category at a time when the teams and F1's owner Liberty Media are yet to finalise new commercial agreements.

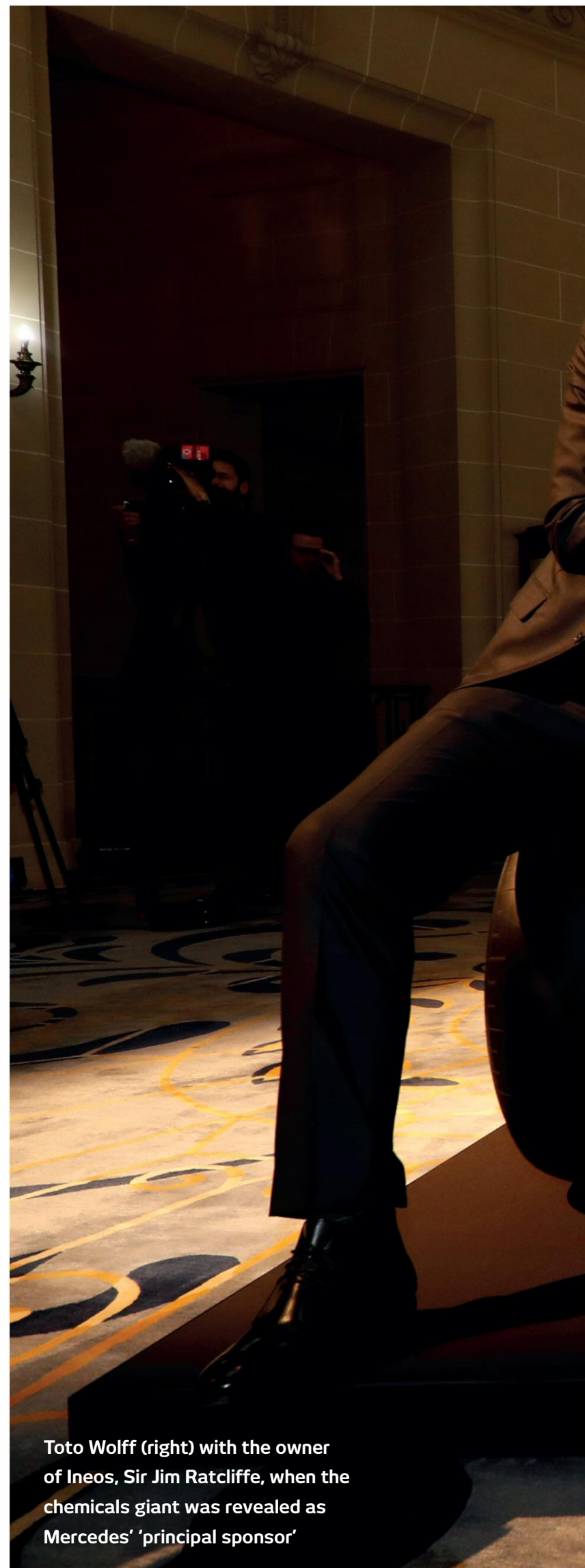
Furthermore, the global car industry is facing headwinds thanks to the combined effects of 'dieselgate' and climate change, rapidly investing in a costly but necessary clean energy future.

Every car manufacturer is pursuing strategies to cope with this intense period of change. Renault, for example, has been rethinking its entire global business. Faced with the trials and tribulations of former CEO Carlos Ghosn, who stands accused of financial misconduct and has escaped custody in Japan and fled to Lebanon, the French firm is enduring a difficult period, with interim CEO Clotilde Delbos admitting that F1 was included in its business review.

A new Renault CEO takes office in July. Fifty-two-year-old Italian Luca de Meo must like a challenge, not least in plotting the future of a Renault Nissan alliance which has been deeply wounded by the Ghosn affair. For Renault F1, the future remains hopeful but no more than that. The team operates to a more traditional manufacturer model; dependent on the parent, working hard to find third party funding, but so far lacking the success necessary to achieve top-tier prize money and sponsorship.

Honda, too, faces battles for its Formula 1 future, for having returned to the world championship as an engine supplier only, it can never share in the financial success of a championship-winning programme; you need to own a team to do that. As one former Honda executive said, "The in-out-in-out strategy seldom works in motorsport, particularly in F1 where you have high set-up costs. You lose momentum, and you lose knowledge, as we saw with the early engine debacle at McLaren."

Given Honda's track record, its commitment to Red Bull's teams until the end of 2021 seems a limited horizon.



Toto Wolff (right) with the owner of Ineos, Sir Jim Ratcliffe, when the chemicals giant was revealed as Mercedes' 'principal sponsor'





Manufacturing giants BMW, Toyota and Honda all left F1 just as Norbert Haug (below) ensured Mercedes became more involved by buying Brawn

Perhaps it is understandable, given the challenges facing every player in the automotive sector. Mercedes is no exception, and with a multi-billion pound investment in vehicle electrification under way some have pondered whether its commitment to F1 is wavering.

Except that Mercedes-Benz does Formula 1 today rather differently to the car companies of old, having long ago made the decision to let someone else drive it. Toto Wolff may be a minority shareholder but, as chief executive, he runs the team in the fashion of an entrepreneur-led privateer.

Daimler has calculated that last year F1 generated \$1.5billion worth of advertising value for Mercedes-Benz. Meanwhile global consultancy Interbrand has estimated

that the value of the Mercedes-Benz brand has doubled from \$25billion in 2010 to \$50billion today. Formula 1 has played its part in that trajectory.

Attending a corporate event at the Nürburgring earlier this year, former Mercedes motorsport boss Norbert Haug looked fit and healthy chatting to David Coulthard about their time together at McLaren. It was Haug, of course, who vaulted Mercedes from sportscar racing into Formula 1 in 1994, commencing an uninterrupted 26-year journey for Daimler's three-pointed star, including world championship successes with McLaren at the end of the 1990s and 2008, plus that unexpected triumph with Brawn in 2009.

The decision to acquire Brawn was taken under Haug's direction. That Mercedes increased its involvement in F1 at precisely the time when BMW, Toyota and Honda ran out the exit door is a credit to him, and worth remembering when discussing Mercedes' current position.

The initial structure, with Haug as CEO and Ross Brawn running the team, had all the ingredients to work – on paper. By the end of 2012, however, change



THE DECISION TO ACQUIRE BRAWN WAS TAKEN UNDER HAUG'S DIRECTION. THAT MERCEDES INCREASED ITS INVOLVEMENT IN F1 AT PRECISELY THE TIME WHEN BMW, TOYOTA, AND HONDA RAN OUT THE EXIT DOOR IS A CREDIT TO HIM

was afoot, with Haug departing, Niki Lauda arriving and Wolff reversing out of Williams to join Mercedes. Hardened entrepreneurs, Wolff and Lauda took on a 40% ownership of the team in a 30/10 split, and in their roles as executive director and non-executive chairman they set about giving Mercedes-Benz robust sporting and business outcomes.

Consider that in 2012, Haug's final year, Mercedes' Formula 1 team saw £114million come in and £145million go out. As any economics student will tell you that's not good; losses of £31.5million tend to raise eyebrows.

By the end of 2018 Wolff and Lauda had tripled income to £338million, achieving a pre-tax profit of £15.4million.

CONSIDER THAT IN 2012, HAUG'S FINAL YEAR, MERCEDES' FORMULA 1 TEAM SAW £114MILLION COME IN AND £145MILLION GO OUT. BY THE END OF 2018 WOLFF AND LAUDA HAD TRIPLED INCOME TO £338MILLION

Daimler was contributing around 15% of the team's budget, while the share of F1's prize monies stood at a chunky £130million.

The success of the team's sponsorship department under commercial director Richard Sanders is crucial. This year the cars, drivers and team will display the brands of 14 partners, with eight suppliers providing additional support.

The Petronas title sponsorship has a decade under its belt while the addition of the chemicals

giant Ineos as 'Principal Sponsor' in 2020 develops a previously announced partnership whereby the F1 team has aided Ineos's cycling and sailing teams. Owned by Sir Jim Ratcliffe, often described as Britain's richest man with a fortune estimated at £20billion, Ineos brings with it a significant tranche of funding.

This five-year deal is a significant coup, and perhaps not just for reasons of sponsorship. Ratcliffe is soon to enter the automotive world with the Grenadier, initially a BMW-powered competitor to the Land Rover Defender. Powertrain technology may well become a discussion point during the term of the F1 deal.

Which brings us to the Mercedes-AMG High Performance Powertrain division in Brixworth, the wholly owned subsidiary of Daimler responsible for the hybrid F1 engine, alongside supplying the powertrain to both the Formula E entry and the Mercedes-AMG One hypercar.

Run by Andy Cowell, HPP is pivotal in terms of the potential for technology transfer from Formula 1 and Formula E back into the mainstream Daimler business, and there can seldom have been a more opportune time to have an R&D facility of this kind. The speed of development and use of digital, connected technologies in motorsport is more relevant than ever to the car industry.

On 3 March, Mercedes-Benz made a key announcement about its sustainability strategy in motorsport, including the news that the F1 team aimed to achieve a net-zero carbon footprint this year. The Formula 1 and Formula E projects

will also support Daimler's strategy of ensuring that 50% of its car sales are from hybrid and fully electric vehicles by 2030.

That alone is an indication of Mercedes' long term commitment to F1, but page four of the press statement mentioned the other important form of sustainability – financial. The forthcoming \$175million F1 budget cap will further reduce the team's need for parental support. Meanwhile, the creation of Mercedes-Benz Applied Science promises the kind of profitable business diversification already witnessed at McLaren Applied Technologies and Williams Advanced Engineering.

Simply put, off the back of its F1 success the Mercedes team is closer than ever to achieving nirvana for its Daimler parent – an entirely self-funding, entrepreneurially successful business which adds value through its own technological, commercial and financial success.

Although separate businesses, the Brackley and Brixworth companies had, by the end of 2018, combined revenues just shy of £534million, profits before tax of £23.5million and around 1700 employees. These are truly meaty numbers from a strong business built entirely around the success that Mercedes-Benz has achieved in Formula 1.

Suddenly we have a manufacturer showing how it can be done, on and off the track. 🏁



The sponsorship tie-up with Ineos is the development of a previous partnership



A successful sponsorship department means that Mercedes' cars and drivers have 14 brands adorning them in 2020

GRAND PRIX GREATS

presented by:



motorsport
IMAGES



www.motorsportimages.com


**THE BIGGEST TEAMS,
THE BEST DRIVERS,
THE MOST MEMORABLE IMAGES,
UNFORGETTABLE STORIES**



 **YouTube**

Watch on the
Motorsport Images Channel





HOW NETFLIX CHANGED FORMULA 1

For many years grand prix racing didn't bother to market itself beyond its established fanbase. Then it allowed in a fly-on-the-wall documentary crew. Netflix's *Drive to Survive* has taken F1 to a new audience by turning it into a hybrid of action and soap opera – but that's also involved changes that haven't been universally welcomed...

WORDS LUKE SMITH

N

ot long after a
winter without

racing the coronavirus outbreak has meant that, for the time being, Formula 1 fans have been left without any action to watch. The only bright light for those anxious to get their fix is that the hugely popular Netflix series, *Drive to Survive*, returned for series two at the end of February.

As part of the shift towards greater digital output from F1 commercial rights holder Liberty Media, Netflix's cameras were allowed into the paddock for the first time in 2018, shining a spotlight on its rich tapestry of characters, rivalries and stories.

But *Drive to Survive* has achieved more than simply being additional content. It has been a catalyst for its growing fanbase, arguably of greater importance than anything else seen in recent years, and has shifted perceptions both inside and outside the paddock. Netflix has changed F1 for the better.



When it completed its acquisition of F1 in January 2017, Liberty Media was clear about its desire to change the championship's approach to digital media. Long gone were the days of Bernie Ecclestone believing the social media boom would be "very short-lived". Instead it became a key facet of F1's strategy. F1 became the fastest-growing sports series on social media which, while not an insurmountable challenge given it effectively started from zero, was impressive nevertheless.

F1 soon identified the need to think outside the realms of its regular broadcasting

agreements. The success of sports documentaries on streaming platforms such as Netflix and Amazon Video, the latter through its *All Or Nothing* series following teams in football, American football and rugby, made it a natural format for F1 to consider.

A bidding war followed. F1 weighed up impressive offers from both Amazon and Netflix. Amazon put more money on the table, but F1 opted to work with Netflix knowing that viewers would be subscribing to the service purely to watch content – and not as a bolt-on bonus for quicker delivery of online shopping.

The decision paid off handsomely. *Drive to Survive* was one of the most-featured shows on Netflix at the time of initial release in February 2019, positioned at the top of users' video feeds. While F1 fans could be counted upon to seek out the show wherever it was, the possibility now existed for all viewers to stumble across the show and, potentially, become fans of the sport.

Such a growth in awareness of F1 has been noted throughout the paddock. Daniel Ricciardo was one of the stars most closely followed through the first season, and said he could notice the difference in his own profile as a result.

"I spend a bit of time in the United States, and up until a year ago, not really anyone would say 'hi' to me – not in a bad way, but they wouldn't recognise me for being an F1 driver," Ricciardo said on *The Daily Show* with Trevor Noah, one of America's biggest chat shows.

"And now it's: 'We saw you on Netflix, it was great, *Drive to Survive*.' We wear helmets, so not really many people can see our faces a lot of the time. So putting a face to a name, that helped."

Pierre Gasly, whose turbulent 2019 season is revealed in unprecedented detail during the second series of *Drive to Survive*, noted a similar change: "Even people that didn't really know much about Formula 1 started to watch this,



and enjoyed the stories. I think the TV audience has increased partly thanks to this. I think it's great, that's what we want. If we do Formula 1, it's thanks to the people who are watching us as well, and if that number can increase, it's really good."

F1 managing director of motorsports, Ross Brawn, said at a pre-season event that he was pleased with how *Drive to Survive* had spoken to both existing fans and potential customers.

"I think it was really great to show the fans the other side of F1, because most of the fans have only seen what goes on at the track or the interviews at the track," he said.

"What we've discovered is it's been very appealing to the non-race fan – in fact it turned them into race fans. Some of the promoters in the past season have said they've definitely measured the increase in interest in F1 that has come from the Netflix series." F1 reported a 1.85% rise in average attendance through the 2019 season, and promoters in both the United States and Mexico highlighted the impact of the Netflix series on getting more fans through the gate.

The Netflix impact has also aided F1's drive to speak to a younger fanbase, once derided by F1's commercial leaders. Remember when Bernie Ecclestone airily dismissed anyone unable to afford a Rolex watch or bank with UBS? F1 reported late last year it has the greatest

“WHAT WE’VE DISCOVERED IS IT’S BEEN VERY APPEALING TO THE NON-RACE FAN - IN FACT IT TURNED THEM INTO RACE FANS. SOME OF THE PROMOTERS IN THE PAST SEASON HAVE SAID THEY’VE DEFINITELY MEASURED THE INCREASE IN INTEREST IN F1 THAT HAS COME FROM THE NETFLIX SERIES.” ROSS BRAWN



Guenther Steiner (below) was a star of season one, and Ricciardo (left) admits that recognition of drivers has increased as a result of the series

proportion of under 25s as fans of all sports leagues except the NBA, and that 62% of its new fans were under the age of 35.

“There’s no question the way you engage fans is through digital media,” says F1 CEO and chairman Chase Carey. “Realistically it’s not the way people connected in years past. Not just young people – fans who are 40 or 50 years old, who follow things they care about – a sport, team, hero, driver, they follow you on some form of digital media. It’s a foundation to growing a sport because it’s the engagement and path through which you follow your sport.”



Regardless of the accessibility, the success of *Drive to Survive* rests on the quality of the series. Netflix is not known for persisting with shows that do not capture viewers’ interest, which makes the fact the series has completed two seasons significant in itself.

A small crew from Box to Box Films, the





The series is made with a mix of footage from sit-down interviews and up-close-and-personal camera work by the Netflix crews



production company behind *Drive to Survive*, is sent to each race with a different remit each time. and it quickly becomes clear which team is the focus as cameras hover around one garage or hospitality. In some cases it results in spectacular coverage, best reflected in the season two episode ‘Dark Days’ where Mercedes’ capitulation at Hockenheim was captured in full.

While the sit-down interviews are set up for the drivers and team personnel to open up to hard questions, the majority of the footage is authentic and in real-time. There is no better example of that than Haas F1 chief Guenther Steiner’s depiction through seasons one and two, where his no-nonsense, often expletive-laden approach made him a fan-favourite overnight.

Steiner claims he never watched the first season. “And I’m not going watch the second one after they told me what it’s about,” he jokes. Probably for the best: his fulminating fury at Haas’s yo-yo-ing form, the on-track clashes between Romain Grosjean and Kevin Magnussen, and the Rich Energy sponsorship saga is all condensed into one episode that involves a hole being kicked in a door.

“I think people see that I actually didn’t play an actor,” he says, “and people try to tell me: ‘You just did this to raise your profile’ – no. I’m just here to do my job. I’m not a good actor. I don’t look good, my language is not appropriate for an actor, and I don’t want to be an actor!”

Steiner’s authenticity is aided by how seamless the Netflix cameras fit into the team’s day-to-day operations, ensuring they are not intrusive or hindering any regular activities. “They’re very good, they know what they’re doing,” Steiner said. “They’re not in the way. I cannot complain about them. I don’t even notice them anymore.”

Does Steiner notice the microphone when he launches into his rants? “Unfortunately not! I’ve got a short memory, so I forget I’m mic’d up. You know what I say... I realise but then it’s too late!”

Such was Steiner’s comfort with the Netflix crew that he even allowed them into his home to

film some family time – with permission from his wife. “Again, we didn’t behave any differently than we would if they weren’t there,” he says.

But there is one person he doesn’t want seeing the episode: “My daughter cannot watch it! I would not hear the end of it.”

The cameras were also embedded within Williams during its disastrous 2019 pre-season when delays to the car build caused the team to miss the start of testing. But at no point did deputy team boss Claire Williams feel they were getting in the way or making things harder.

“You ignore the cameras,” Williams says. “The Netflix team are fantastic. We’ve obviously worked with them for two years now, and they’ve always been very mindful and conscious of where they are and where they’ve put themselves.

“We’ve always been a team that is quite open about sharing with people this great sport that we’re involved in, and show what it takes to be an F1 team. So for us, having cameras around, it doesn’t necessarily bother us because we understand the long-term impact of what those cameras are doing.”

The producers do not shy away from asking the tough questions, either, aided by their ‘outsider’ nature to. Williams is asked at the end of the episode depicting her team’s struggles whether she believes it even has a future – something she initially declines to answer. Gasly’s ousting from Red Bull is also dealt with head-on in the sit-down interview format, during which the Frenchman asks frankly: “Is this going to be about my seat?” before sitting down in his new Toro Rosso gear for the first time.

Seeing Gasly being battered by career setbacks and by the death of his friend Anthoine Hubert makes for difficult viewing, but it reveals more of his personality than you would ever divine from rounds of sanitised press calls. It’s this element of the storytelling which has helped win over new fans to F1, and Gasly acknowledges that it’s worth the pain of having one’s darker moments captured for posterity.

“I feel who I am in the paddock is maybe five or ten percent of my personality compared with what I’m like in normal life,” he says. “I think Netflix is bringing a bit more of an inside story from all the work that is going on behind the scenes at races. I think it’s great.”

Daniel Ricciardo also highlights the “very authentic and natural” depiction of life inside the paddock. “Some of the interviews, they’re structured – they need to get you in a quiet room at times – but for the most part, it was fly-on-the-wall, which I think is the best way to capture the raw footage,” he said. “I know it was very successful, the first programme. I think it worked because it was pretty organic.”



One of the biggest changes was the addition of Mercedes and Ferrari, both whom had declined to take part in the opening series.

While both gave access to Netflix this time around, it was still limited. Mercedes only allowed cameras into its garage for the German GP, while Ferrari picked the United States GP in Austin. The producers spliced footage obtained at these races into the rest of the series, giving both teams presence beyond a single episode.

Valtteri Bottas hadn’t watched the opening series, but was aware of its impact and happy to work with the Netflix crew. “I think many people got quite excited about Formula 1 seeing that series,” Bottas says. “I think the team decided it would be positive for us to be in it - and yes, they [the camera crew] were in Hockenheim...”

Despite the presence of the cameras at the low point of Mercedes’ season, Bottas didn’t feel that being filmed had any impact on the way events



unfolded: “That didn’t really distract anything, although the result wasn’t great in Hockenheim for us. I think they did it really professionally, and they knew when they had to step away and when they could be involved and so on.

Charles Leclerc had previously worked with the Netflix crew in 2018 while at Sauber, making him the only member of the Ferrari team who had an idea of what to expect. But he didn’t feel F1’s most famous team got any special treatment.

“In the way we work, last year they only did one race with us,” Leclerc says. “But then we didn’t have Netflix with us for the rest of the year, which was the only difference [compared with Sauber] to be honest.”

Although access to Mercedes and Ferrari was limited, the upside was that neither team came to dominate the second series. Some stories that are often skipped over in mainstream media, such as those of Haas, Toro Rosso and McLaren, continued to be the big themes. It didn’t become The Mercedes and Ferrari Show.

There was, however, some negative reaction to the series, most notably from Max Verstappen. “I don’t think it was the real me,” he said in an interview with *ABtalks*. “The problem is they will always position you in a way they want.”



The huge buzz around *Drive to Survive* shows little sign of dying down. Although there has been no official announcement, filming for a third season is already underway after crews were on-site for pre-season testing in Barcelona.


The success of the series shows how important new media outside of the traditional pay TV model have become for F1’s future. “This kind of TV, like Netflix and Amazon, is now

“HAVING CAMERAS AROUND, IT DOESN’T NECESSARILY BOTHER US BECAUSE WE UNDERSTAND THE LONG-TERM IMPACT OF WHAT THOSE CAMERAS ARE DOING” CLAIRE WILLIAMS

standard,” says Steiner. “I think there are fewer people who don’t have it than have it. Netflix don’t give numbers, but apparently [the series] is successful – why would they do more?”

The challenge for F1 will be to continue to engage the fanbase it has built through Netflix. It’s noticeable that the film-makers take some liberties to amplify the on-track drama – such as suggesting Max Verstappen passed Sebastian Vettel for third place in Australia on the last lap when it happened shortly after half-distance.

Perhaps that says more about F1’s on-track product – but it’s also an element the commercial rights holder is working on for 2021 and beyond.

Accessibility is key. While many customers are happy to pay the Netflix fee for its wealth of content, racing fans have been vocal in their dislike of F1’s gradual move towards pay-TV platforms. Could the perceived success of *Drive to Survive* – even if Netflix doesn’t divulge viewing figures – be an argument for F1 to consider more free-to-air race coverage in future? 

DRIVE TO SURVIVE

Three-time BAFTA-winning broadcaster **James Allen** offers a TV industry insider's view of what makes *Drive to Survive* so powerful – and the pitfalls it needs to avoid in its third season...

SEASON
TWO

THE
REVIEW





PICTURE: JERRY ANDRE



What's the best thing that has happened in F1 since Liberty Media took over? Most casual fans and maybe even many paddock insiders would probably answer the Netflix series *Drive to Survive*.

To the uninitiated, F1 can seem hard to penetrate and it's not particularly interesting to watch if you don't know the context or have a deep understanding of the drivers or what goes into running a team. *Drive to Survive* is part of Liberty's strategy to attract new fans and it proudly claims that 52% of new F1 fans since it took over the sport are under 35, which is critical to the championship's long-term health.

The great achievement of the first season of *Drive to Survive* was to enlarge the cast of characters we're interested in, beyond the top drivers. Although the producers were unhappy Ferrari and Mercedes chose not to take part it actually worked out well because that gave a

chance for audiences to get to know characters such as Kevin Magnussen and Guenther Steiner.

The original intention of F1's then commercial boss Sean Bratches when he went for this Netflix series, over a rival bid from Amazon, was to "treat all our children the same", meaning to give equal coverage to all the teams and drivers.

But the producers have strayed from that brief and the ten episodes this season don't cover the ten individual teams; instead they focus on specific themes and strangely ignore quite a few drivers. The producers love Daniel Ricciardo, Alex Albon, Carlos Sainz, Pierre Gasly, the Haas drivers, Lewis Hamilton and Charles Leclerc. Daniil Kvyat, Sergio Pérez, Lance Stroll, Kimi Räikkönen, Lando Norris and Antonio Giovinazzi may as well not exist.

Where the series works best is where it highlights personal rivalries or juxtaposes two connected storylines. A good example of that would be the season one episode that focused on Christian Horner and Cyril Abiteboul. Horner delights in embarrassing the Frenchman by announcing that Red Bull will be dropping the "underperforming" Renault engines for 2019, but later in the episode Abiteboul has the last laugh when he poaches Horner's driver Ricciardo.

This perfectly sets up an episode in Season Two where the producers look at the contrasting fortunes of Gasly and Albon.

The Ricciardo swoop leaves Horner needing a driver and so Red Bull promotes Gasly, who had a strong debut season with Toro Rosso. But it soon becomes clear that he isn't ready. Red Bull has always proudly been a "sink or swim" environment. But drivers aren't all the same; they need different amounts of development time before they are ready to shine and quite a few promising drivers have been lost from the Red Bull programme as a result. Gasly almost becomes another casualty as Horner describes him as the "Achilles Heel" of the team before demoting him in the summer to Toro Rosso.

The producers benefit greatly here from the fact that F1 has always thrown up plenty of real drama and naturally occurring plot twists. For decades Bernie Ecclestone's genius was to know how to exploit this.

The twist here is that Albon's step up to the Red Bull team and Gasly's demotion at Spa coincides with the death of their friend Anthoine Hubert in the F2 race on Saturday afternoon. Undaunted, both drivers climb into their cars the following day and race at the absolute limit, taking huge risks. It is stirring stuff and reminds us why we love grand prix racing.

Their explanations of why they don't have any doubt or fear about doing that, so soon after a



young colleague's life has been lost, are moving and eloquent and in step with generations of drivers before them. Motorsport has always been difficult and dangerous and a large part of its appeal for drivers and fans alike is that death is always lurking, though mercifully rare these days.

Having been given access to Ferrari and Mercedes in season two, the way the producers treat the two teams is interesting. With Ferrari they maintain a certain detachment, not seeking to explore the mystique of the Ferrari brand in any way; instead they focus on Leclerc and Vettel, with a simple master and apprentice narrative.

Mercedes, in contrast, is presented at the start of its episode as a military force. Toto Wolff notes that "F1 is like war planning". This is intercut with shots of him addressing the huge Brackley workforce stretched out as far as the eye can see, all wearing identical white shirts. "Let's crush them!" he says to applause from the massed ranks. It sets the team up as a Panzer division.

But a couple of minutes later, as the narrative shifts to Niki Lauda's death on the eve of the Monaco GP, Wolff is shown reflecting on Lauda fondly: "I find myself looking at the pictures and having tears in my eyes every half an hour."

Netflix and Mercedes selected the German GP for their 'behind the scenes' race and it was of course a complete disaster: Hamilton and Bottas both crashed, throwing away the chance to win on Mercedes' 125th anniversary event. It didn't help



the team was dressed up in retro costumes.

The standout scene of the whole series is post-race in the Mercedes debrief room. Hamilton is a broken man after crashing out of the lead and then losing a minute in the pitlane as the team fumbles over what tyre set to fit while changing the front wing. He cannot understand his mistake or come to terms with it. “I’m so fucking sorry,” Hamilton tells Wolff. “I’m distraught.” He’s suddenly vulnerable; a soon-to-be six-time world champion, the greatest driver of his generation, standing like a child, stroking his face, is a classic tell of insecurity and desire to reassure oneself.

Of course what makes this pure TV gold is the unique access Netflix gets, far superior to anything granted to Sky or the other major



broadcasters, who pay much higher rights fees. This has caused some tensions with Liberty, although the broadcasters recognise the job the Netflix series is doing for the sport.

Watching *Drive to Survive* you realise it wins hands down over the live broadcast because the producers have both the access and the time to reflect. Netflix tells a more authentic story which makes it so appealing. It can access the meaningful radio conversations between the teams and the drivers, which don’t always come across on live TV.

When you think all of this through you see that TV commentators and viewers are effectively

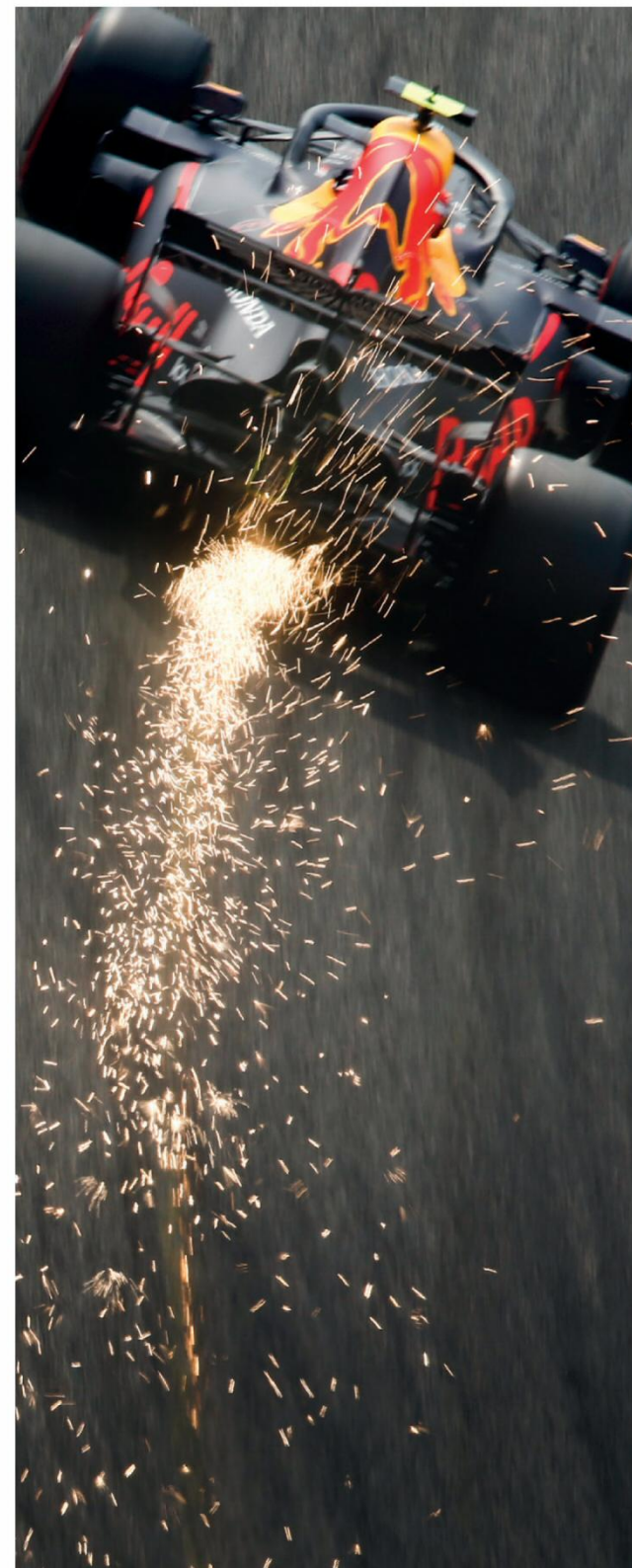
“THE RISK IS THAT AS NETFLIX HAS BECOME PART OF THE SCENE ITSELF, IT HAS LOST SOME OF THAT DETACHED PERSPECTIVE THAT MADE SEASON ONE SO UNIQUE”

JAMES ALLEN

“outsiders”, only getting a small part of the story. This is something F1 will now need to address for the live TV coverage. It can also learn from the emphasis on engagement in the camerawork; shots of the mechanics and engineers watching races are closer up and more personal than the live TV coverage, so emotions are more raw and you can really feel how committed and engaged the support teams are.

While I enjoyed season two hugely and could watch it many times, I have three criticisms.

With access to Mercedes and Ferrari this time around, season two of *Drive to Survive* has continued to attract new fans to F1



The first is that it is very male dominated. Of course this reflects the sport to some extent, but in reality it’s less so these days than comes across here. Another would be that a great opportunity is missed to run some sustainability narrative through the story and drop in references for the casual fans about how F1 is a research lab for the automotive industry, driving the amazing efficiency of the hybrid engines. It only needs the odd beat here and there to plant an important message in audiences’ minds.

Finally, the producers seem to have fallen into a classic trap, one hard to avoid for newcomers. In year two they’ve been drawn into the world of F1 as they’ve got to hang out with the people. The risk is that as Netflix has become part of the scene itself, it has lost that some of that detached perspective that made season one so unique.

And quite frankly, there is too much racing in it. I never thought I’d hear myself say that.

SWEET-TALKING THE HONEY BADGER

Daniel Ricciardo will be at the centre of the 'silly season' this year as rival teams circle for Renault's star. He's a proven race winner – but what can Renault, a team fighting to elevate itself from the midfield scrap, do to convince him to stay?

WORDS STUART COOLING

PICTURES  **motorsport**
IMAGES





Cyril Abiteboul knows the team must perform if it is to keep Ricciardo from looking elsewhere

Renault has reset its horizons this season, having capitulated to the inevitable: its stated aim to be challenging for world championships within five years of re-acquiring 'Team Enstone' was unachievable. Had its gameplan panned out, it would have been there or thereabouts right now. Instead it faces two huge and intertwined challenges: building a more competitive car by eliminating persistent flaws in the design process, and convincing its marquee driver signing to stay on as he comes to the end of his contract.

Daniel Ricciardo could still slot in at Mercedes, Red Bull or Ferrari, even though the latter two have tied Max Verstappen and Charles Leclerc to long-term deals. But all three berths would likely involve Ricciardo having to accept number-two status. Still, there are others who would be interested in having a tigerish race-winner on their books – particularly

McLaren, which held talks with Ricciardo in 2018 and is now at a more attractive point on its competitiveness trajectory than it was then.

The onus is now on Renault to come up with a competitive enough package to convince Ricciardo to stay, a fact not lost on team principal Cyril Abiteboul.

"There's an exam coming soon enough, for him and for us," Abiteboul says. "Are we able to give him a better car? Is he able to reassure himself with us? I think he's a loyal person – it was difficult for him to leave Red Bull. He's someone who wants to stay with the team long term.

"I think he feels pretty good in our team, although it's up to him to say so, because he's got a Latin side and we've got a Latin side. We allow him to be the person he wants to be, without many constraints, although there has to be professionalism on both sides. It would be positive to continue, but to do that we have to

show him we can give him the car he wants."

Achieving that *ought* to be possible, but realistically Renault can only aspire to fourth place in the constructors' championship while the present regulations are in place, given the firmly established strength of the leading trio. And, while it has largely conquered the engine issues that have held it back during the hybrid era, other more entrenched problems have resisted the additional investment Renault has poured into the Enstone factory. Recognising this prompted another reset at the end of last season when chassis technical director Nick Chester was shown the door, to be replaced by former Benetton, McLaren and Ferrari man Pat Fry. Owing to the vagaries of gardening leave, though, Fry only started his job in February. Dirk de Beer replaced chief aerodynamicist Peter Machin in November.

That means this season's car is largely the work of the previous regime. Fry himself has said

"THERE REALLY IS A CHANGE IN THE WAY WE WORK [NOW], IN THE PAST AT ENSTONE, WHEN WE SAW SOMETHING IN A [RIVAL TEAM'S] CAR, WE JUST TOOK IT AND DIDN'T TRY TO UNDERSTAND IT TOO MUCH"

CYRIL ABITEBOUL

that while in his previous role as a consultant at McLaren there was “some low-hanging fruit” in terms of improving both the design process and the product. Renault offers a bigger challenge: he wants to “get involved with the 2020 car” even though it carries inherent compromise.

“The initial concept of the car was set with a different technical director, a different head of aerodynamics,” says executive director Marcin Budkowski. “So I’d be lying to you if I said there was no difference of opinion. There are always differences of opinions. I’m sure if Pat was there at the time he might have made slightly different choices, but it’s not to say that the current choices are wrong.

“At the end of the day, there are key people who make the key decisions and their information is based on experience, based on what the tools are telling us about the level of development.”

Given the turbulent end to last season in terms of personnel changes, Renault has resisted a

complete change of car concept. But that also carries a fair amount of risk because the RS19 proved resistant to developments. The RS20 is essentially a debugged a version of last year’s concept – or, as Renault figurehead Alain Prost put it at the team launch, an “optimisation” of it.

Aerodynamic performance was a key area in which there was a shortfall, but not the only one. Renault has been struggling with chassis dynamics, particularly suspension compliance, since its innovative active ride system was outlawed in 2012, when the team was racing as Lotus. It had been a leader in such technologies – including the tuned mass dampers banned in 2006. But the clampdown on active ride coincided with the beginning of the team’s decline and financial problems during Genii Capital’s ownership last decade; rival teams have made better progress on fully passive concepts. Where once Renaults and Lotuses swept over

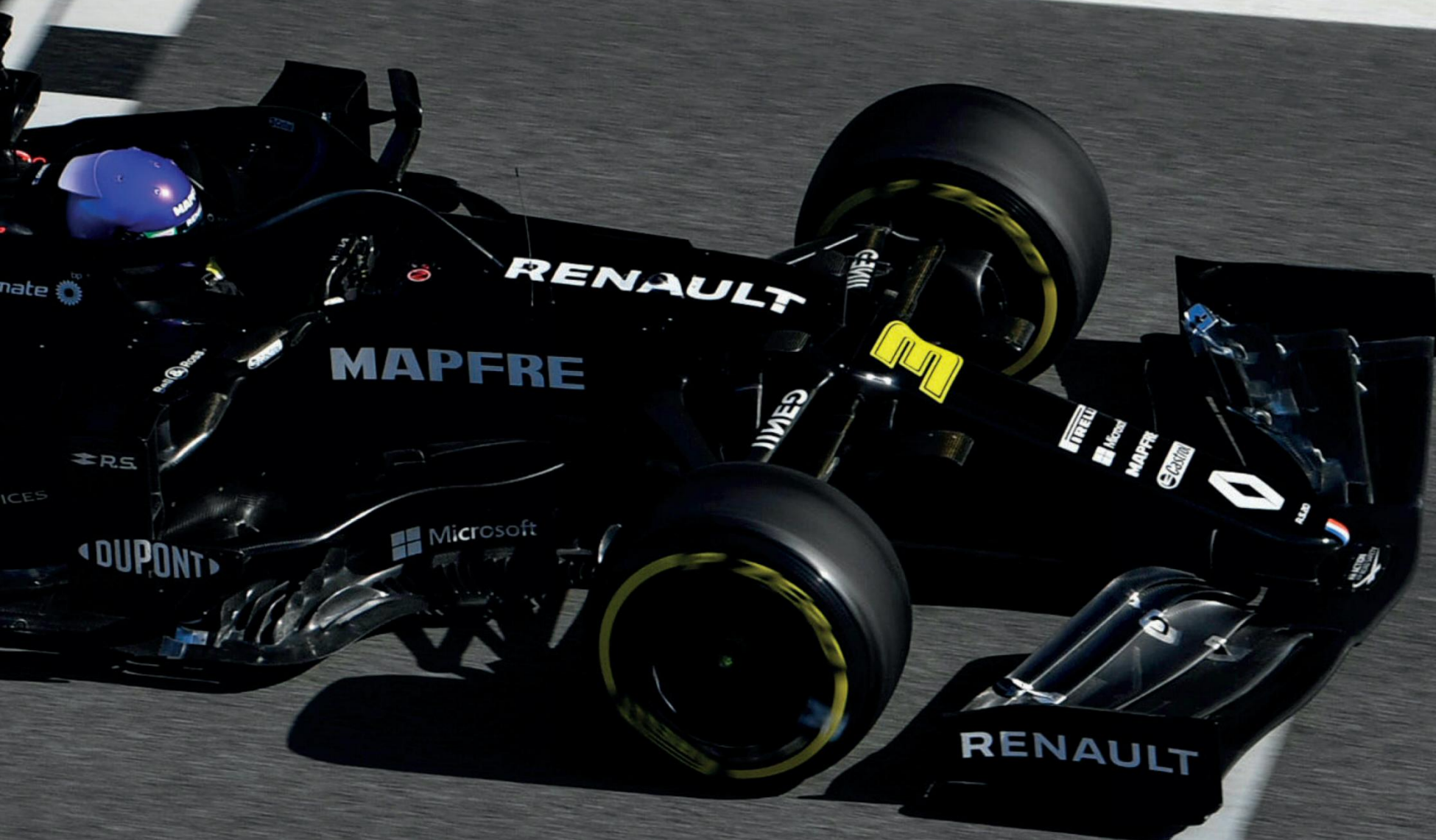
kerbs and bumps with almost disdainful hauteur, in recent years simply touching them prompted laptime-sapping discombobulation.

Successive changes to the suspension design haven’t improved matters enough. Team management also felt the aerodynamics department was a little too focused on what other teams were doing, and the issues with that methodology came to a head last season as upgrades failed to transform the RS19’s performance.

“There really is a change in the way we work [now],” explains Abiteboul. “In the past at Enstone, and that’s what frustrated me a lot, when we saw something in a [rival team’s] car, we just took it and didn’t try to understand it too much.

“We’ve also emphasized this notion of realistic objectives, of working in a slightly more calm ▶

PICTURE: MARK SUTTON



manner. And I do think that you don't measure to what extent short-term objectives and pressure, which is normal in Formula 1, can have a negative impact on morale but also on the way the team works. The team wanted to work too fast. So rather than really understanding the fundamental physics that we lacked, we were looking to speed up the process.

"We were a bit caught between the pressure put on us by the arrival of Ricciardo, the pressure put on us by McLaren's revival, which led to an amplification of Enstone's way of doing things, which was not healthy or robust enough. When all is going well, it's not too visible, it's acceptable, but when it starts to get tight, that's when it pushes you to make big mistakes.

"That's why I don't regret last year. It blew the reality right in our face, the reality that we had fundamentals that were not good when we were

in that pressure zone. We were in a situation where we had to make the changes that have been made."

It was the failure of the mid-season upgrade package that proved the tipping point. As Prost points out, the RS19 was regularly shipping three or four tenths in long corners because inconsistent downforce levels made it unstable, reducing driver confidence. Setting up the car to understeer during the first half of the season was just a sticking-plaster solution to this, since that cost time elsewhere around the lap. But the upgrade package – not just a revised nose and bargeboards, but a complete change to the cooling architecture to reduce the volume of the rear bodywork, plus diffuser changes – failed to deliver the additional downforce expected.

The issues were more fundamental: the

"WE WERE A BIT CAUGHT BETWEEN THE PRESSURE PUT ON US BY

THE ARRIVAL OF RICCIARDO, THE PRESSURE PUT ON US BY

McLAREN'S REVIVAL" CYRIL ABITEBOUL

RS19's front wing, nose, bargeboard and sidepod configuration wasn't managing the outwash from the wing properly, or the turbulent wake of the front tyres. This meant the team couldn't unlock the theoretical performance of the upgrades downstream, and it's why the entire front end of the RS20 is very different. Look around the sidepods and you'll see they start further back, allowing more volume for management of the airflow passing between the nose and front tyres.

The RS20's performance during testing gave grounds for optimism, particularly in terms of the chassis dynamics, and Ricciardo

Ricciardo will now have fewer races this season in which to decide if his future lies with Renault



PICTURES: MARK SUTTON; ZAK MAUGER

was reasonably positive. But this was just one circuit, and certainly not the bumpiest – plus subsequent events mean we have yet to see the car in action anywhere else, least of all at a venue that would genuinely challenge it.

“Within the car build this year, there’s various things we’ve done to address it,” Ricciardo said after the second test. “So without going into detail, more suspension travel or stuff like this to help with some bumpier parts of circuits. We’re going to go to Melbourne on something bumpy and harsh and we’re going to know if it’s better.”

The postponement of the Australian GP and several subsequent races means that discovery will be deferred. Renault now has to re-map its priorities once again: with the season on hiatus for the foreseeable future, how much resource can it justifiably throw at developing the RS20? The fallout from the coronavirus pandemic has

changed the way F1’s competitors would usually navigate a season. Most teams begin to switch focus to the following season in June or July, and such are the demands of the next-generation regulations that the majority were expecting to switch off the 2020 development taps early.


Originally Renault’s plan was to upgrade the RS20 for Melbourne and bring a much bigger update package to Vietnam. From there it would have taken a view, based on the pecking order, of where to allocate development resources. The agreement between the teams, the FIA and F1 to defer the 2021 technical rules until 2022, and allow limited development of the present cars through 2021 subject to the budget cap, gives Renault a breathing space it didn’t have before.

“If we’re not able to correct the aero problems of 2019 in 2020, I don’t see how we can make a tremendous car in 2021,” said Abiteboul at the launch of this year’s car. “There are still

reality checks to be done.”

Now it has more time to validate its processes and bed in the new technical leadership. But of course, if the season doesn’t get underway until summer, that leaves little time for those drivers soon to be out of contract to decide whether staying put is the best option or not. Ricciardo has said that he wants to “make it work” with Renault, but it’s likely he’ll have a much-reduced number of races in which to do so before getting stuck in to negotiations about his future.

“I don’t want it to feel like I’ve just come to Renault, got away from Red Bull and then I’m looking for the next best thing [another team],” he says. “I really want to make this happen and make it work, and obviously the step to that is getting more out of this year than we did last year.”

And that, indubitably, is a coded call for Renault to shape up, lest he ships out. 



The team is optimistic that changes to the front end and sidepods for the RS20 will improve performance







SPOT THE DIFFERENCE

Racing Point's 'pink Mercedes' has ignited a war of words among the midfield teams. But is it really possible to succeed by 'cloning' the fastest car on the grid? If so, why isn't everyone else doing it?

WORDS **STUART COOLING**



When Sergio Perez rolled out of the garage for the first time – in public at least – in his Racing Point RP20 on day one of the opening pre-season Barcelona test, many denizens of the pitlane went into convulsions. Here, at a time of convergence and consolidation with just months to go before a new set of rules was due to come into force, was an aberration: not a nuanced evolution of the team’s previous car but an entirely different one from the ground up.

And, just to compound the sheer affrontery, it was a virtual replica of last year’s championship-winning Mercedes W10. Coming just months after Racing Point shifted its aerodynamic research programme into Mercedes’ Brackley windtunnel, having used the Toyota facility in Cologne since 2015, this was too much for many of the team’s rivals to take. It appeared to prove the suspicions many had been nurturing since before Lawrence Stroll acquired the team in 2018 – suspicions that had prompted several of them to try to block the sale outright (see sidebar).

Racing Point has been forging closer ties with Mercedes since its previous incarnation as Force India, initially with a Mercedes engine and McLaren gearbox in 2009, then a complete Mercedes powertrain from 2014. Rivals began to feel the relationship was becoming too close even before the Stroll-led takeover, when Mercedes placed its junior driver Esteban Ocon at Force India in 2017 in exchange for a discount on the powertrain supply. The team also began to race in the colours of Austrian water filtration company BWT, in which Mercedes F1 boss Toto Wolff is a shareholder.

But using selected elements of another team’s parts bin isn’t illegal. Core elements such as the monocoque must be to a team’s own design but beyond that, as well as the powertrain, it’s possible to buy many other components including the suspension, brake drums and brake ducts. It’s a model Haas works to (ironically, Force India was one of several teams to object to the close ties between Haas and Ferrari), and the number of so-called

‘listed parts’ will expand as F1 embraces a budget cap. Critics of Racing Point’s approach have labelled the RP20 the ‘Tracing Point’ or the ‘pink Mercedes’ (not the first time we’ve seen one of those in motorsport – BWT sponsored a Mercedes DTM team for several seasons). But the team is

completely upfront about its thought process, denies that it’s doing anything wrong, and says the description of it as a ‘Mercedes B-team’ is unfair.

“We’re at 465 [staff] and we’re going to go to 500 in the next year and a half,” says team principal Otmar Szafnauer. “We’re growing. That’s really not like a Haas model.”

All teams employ spy photographers to keep tabs on their rivals. Indeed, *GP Racing* saw several individuals in team kit accompanying professional snappers trackside during the Barcelona tests. Anyone can produce a facsimile of another car without access to its CAD data (which would be illegal). But it’s quite another challenge to understand how each element of that car works together to achieve peak performance.

“Although everyone says, ‘Ah, you copied a Mercedes,’ it’s our own [car],” says Szafnauer. “It’s our own design. It’s our own development. It’s our own wind tunnel model. It’s our own concept. Yeah, we looked to see what’s fast and thought, ‘That’s fast, can we do the same?’ It’s no different than we did with Red Bull, when we ran a high-rake concept.”

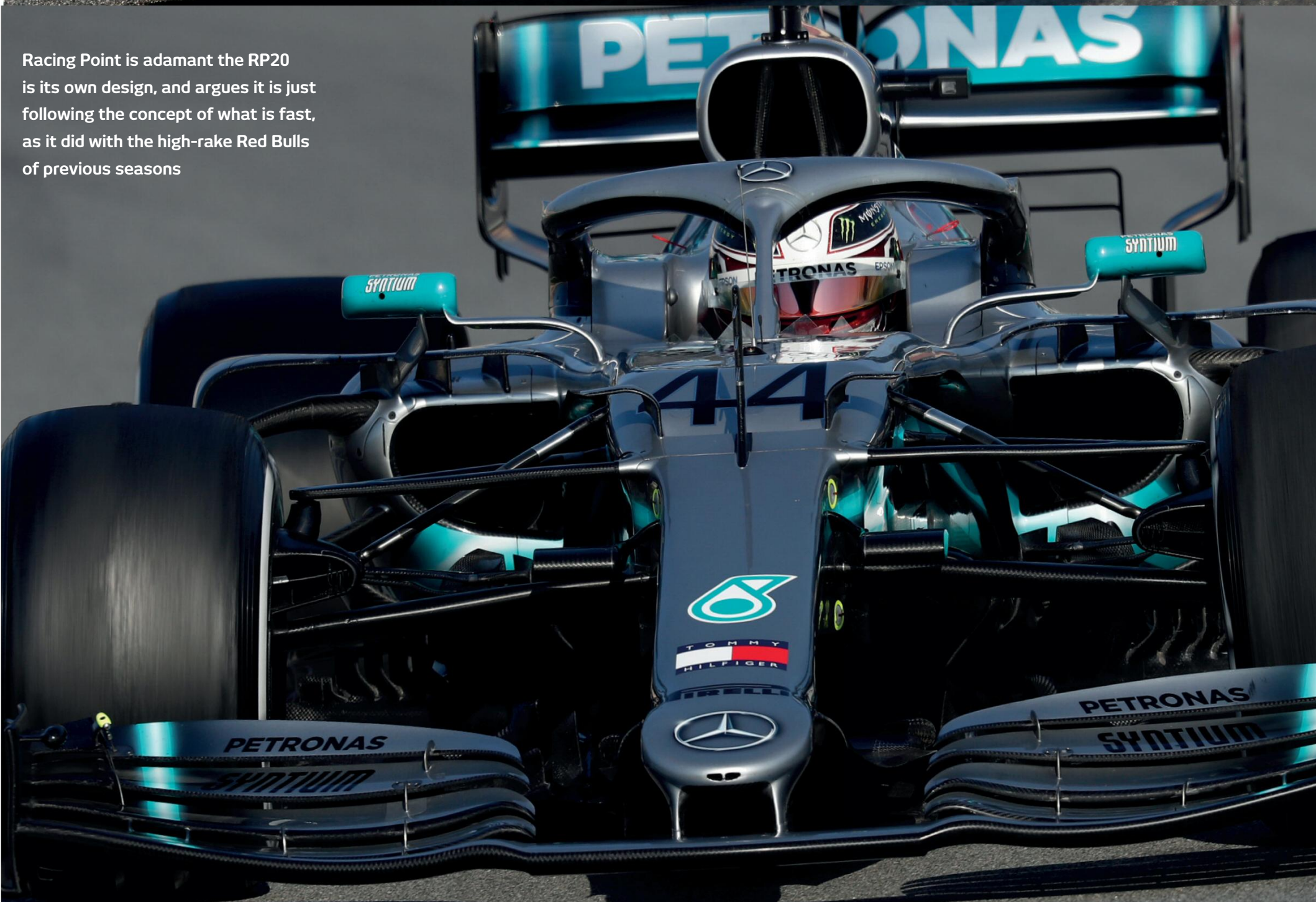
It’s this fundamental difference in concept which has discouraged others from copying Mercedes. Most other teams, including Racing Point until this season, have been building on the high-rake philosophy pioneered by Adrian Newey at McLaren, then pushed to extremes by him at Red Bull during the blown-diffuser era at the turn of the last decade. The theory behind the nose-down, tail-up concept is by raising the back ►



Spot the difference: same circuit, but a year apart



Racing Point is adamant the RP20 is its own design, and argues it is just following the concept of what is fast, as it did with the high-rake Red Bulls of previous seasons



RACING POINT V RENAULT THEY'VE GOT HISTORY

The battle for 'best of the rest' spot behind the top three teams has become spicy off the track as well as on it over the past couple of seasons...

July 2018

Force India goes into administration. Renault is among three teams that raise objections to potential sale to consortium led by Lawrence Stroll. Renault team boss Cyril Abiteboul denies this is an attempt to block the transfer of points and prize money as well as assets, saying Renault simply "wants reassurances" that Force India will not end up becoming a Mercedes B-team.

August 2018

In the continued absence of the unanimous approval required from other teams to transfer ownership of Force India, Lawrence Stroll's consortium starts a new company – Racing Point – and acquires Force India's assets. The 'new' team is allowed enter the championship, starting again from zero points – but only after a last-minute deal on the eve of the Belgian Grand Prix. The move slashes the team's prize money income.

October 2019

Renault is disqualified in Japan and its steering wheels impounded by the FIA after Racing Point protests over an alleged illegal brake-bias adjustment system. "They could have asked the FIA to issue a technical directive, or asked them questions outside a race weekend," rages Abiteboul. "This is the way it is always done. But Racing Point violated the agreement and prepared a 12-page dossier, waiting for the right moment to win back points from us."

February 2020

Racing Point's RP20 emerges at testing bearing a strong resemblance to the 2019 title-winning Mercedes. Renault executive director Marc Gené calls it "a slightly concerning evolution for the sport". Rumours circulate Renault and McLaren are planning to protest the RP20 at the season-opening race.

of the car it increases the working area of the diffuser section between the rear wheels, a component subject to very tightly prescribed physical dimensions. It also offers advantages in managing the aerodynamic wake of the tyres.

Aerodynamics being a holistic process, though, every other part of the car must operate in harmony to maximise its effectiveness. It took the rest of the grid several seasons to understand the high-rake concept, during which Red Bull cleaned up in the constructors' championship. The hybrid era changed that, making aero less of a performance differentiator, and Mercedes found its own path in managing tyre-related turbulence without adopting high rake.

The much wider tyres used in F1 since 2017 now make mitigating the effects of their turbulence much more important, and make it even less attractive to swap from the high-rake to the low-rake concept – it means consigning years of hard-earned knowledge to the bin. But still Racing Point decided to do it, partly because its cars have been carrying significant compromises since the location of the suspension-mounting points on the Mercedes gearbox are optimised for the low-rake concept.

"It's something that we've been wanting to do for a very long time but haven't had the budget to do," explains Racing Point technical director Andy Green. "I don't know what they [the other teams] have got to complain about. What we've done is completely legal.

"We couldn't go this route earlier. Our hands were tied financially, and had been for many years – we had to carry over a huge amount of components from one year to the next. And it wasn't possible to do a reset

like we've done. We didn't have the financial resources, we didn't have the people, and the manufacturing capability as well.

"It took from the time Lawrence and the consortium took over, for me to explain what we wanted to do and how we wanted to work, and for that to be implemented took quite a while – six to nine months. It was a long process, but one we decided we were going to do right from the very beginning. As soon as we came out of administration, this is what we were going to do."

The RP20 uses more Mercedes suspension components than the RP19, which only employed Mercedes uprights, but the design of the spring/damper units and their integration within the chassis is to Racing Point's own design. Likewise, the cooling architecture, an area pushed to extreme by the factory teams, uses less complex hardware and is therefore larger as a result, requiring bigger intakes and more space around the sidepods.


So, under the skin the RP20 is very different from the Mercedes

W10 it imitates. And there's no guarantee the team will be able to understand and maximise the potential of its new aero concept, though it now has more time to do so than it originally anticipated. Racing Point's original plan was to bring updates to the first race and then perhaps one or two more upgrade packages before committing fully to 2021 development – its aim was to do a smash-and-grab, maximising its points haul early on.

"We were unsure whether we were going to realise the full potential of what we've seen in the simulation," says Green. "Everything we see so far suggests we have transferred across from the model side to the full side.

"We couldn't do a slow start and look to upgrade through the season as we did last year. That's not going to be possible. We knew the rest of the year was going to be very challenging [in terms of allocating resources to the 2021 project]."

Given the attenuated nature of this season, Racing Point's strategy may prove to be a prudent one. And its new car will now have a longer shelf life, since the new technical rules due to come in next year have been deferred until 2022.

If the RP20 is as competitive as everybody thinks, expect the knives to be out for Racing Point again. 

Racing Point lacked the budget to follow Mercedes' rake concept sooner



Fuel Your Passion for Speed



motorsport.tv

HEROES

A FILM BY **MANISH PANDEY**

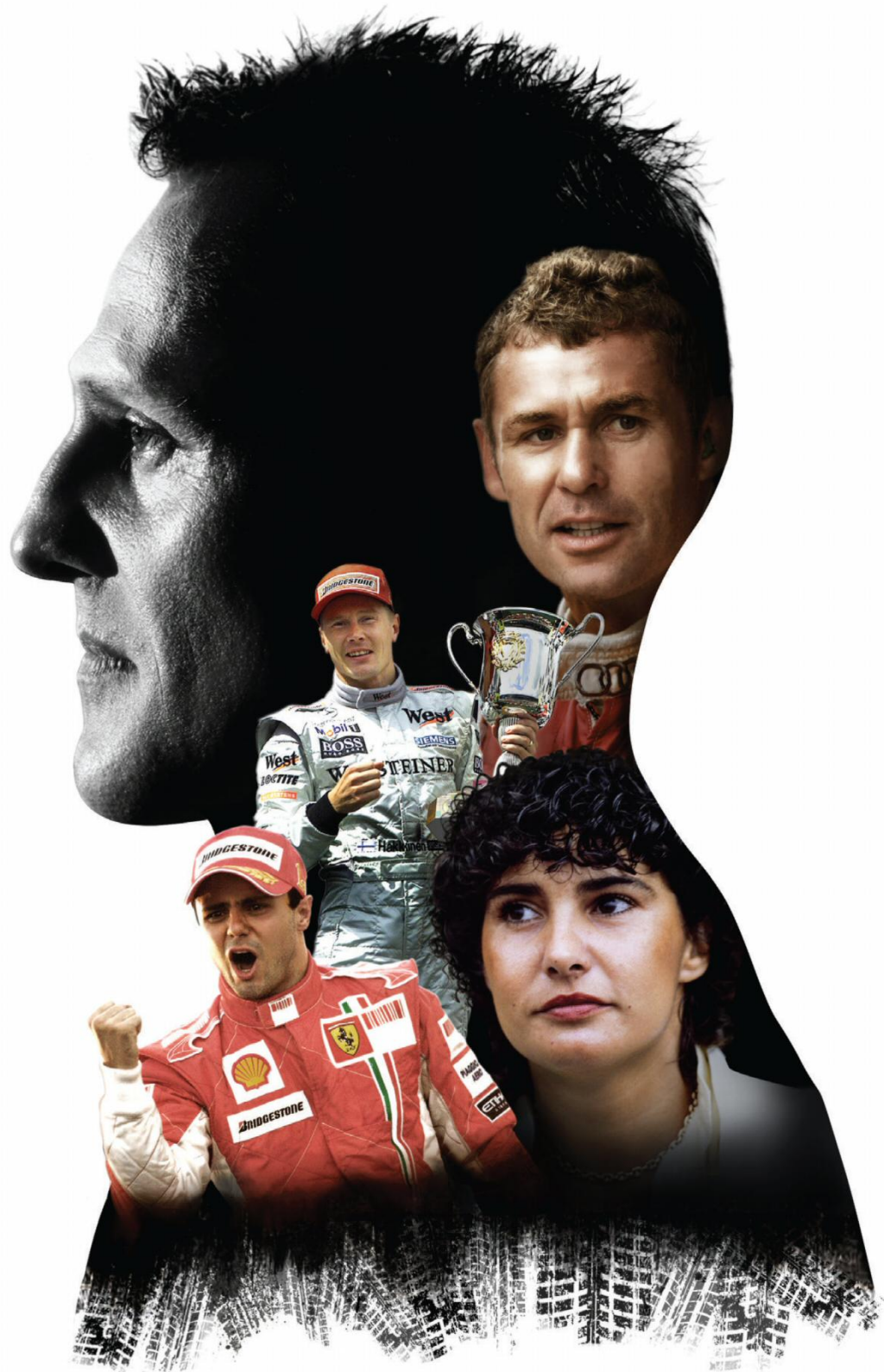
Four Voices
Five Drivers
One Journey

MOTORSPORT NETWORK PRESENTS IN ASSOCIATION WITH JIVA FILM EDITORS NICK HUTCHINS CHRISTOPHER M. ARMSTRONG
EXECUTIVE PRODUCERS CRISTIANO SOUZA JAMES ALLEN YURA V. BARABASH PRODUCED BY MARK HARVEY MANISH PANDEY WRITTEN AND DIRECTED BY MANISH PANDEY
© 2019 MOTORSPORT NETWORK. All rights reserved.

Heroes: available on Motorsport.tv



motorsport.tv/join



Plus:

5000+ hours on demand videos

1000+ livestream events per year

125+ racing series covered

WEC
FIA WORLD ENDURANCE
CHAMPIONSHIP

24h
LE MANS

LE MANS
ESPORTS SERIES

AUTOBACS
G
SUPER GT

SRO
GT
WORLD

DUKE

Download on the
App Store

GET IT ON
Google Play

Chromecast

apple tv

firetv

Roku

androidtv





ONWARDS AND UPWARDS (OR ELSE)

In his own words, **Alex Albon** is his own fiercest critic, and he needs to be since he's driving for F1's most ruthless team. After a remarkable rookie season, can he now kick on and prove to Red Bull that he's the only man for the job of being Max Verstappen's team-mate?

WORDS ALEX
KALINAUCKAS
PICTURES
RED BULL
CONTENT POOL

For one more year at least, only six drivers can expect to win races in Formula 1. The ruling class of Mercedes, Ferrari and Red Bull has shared every grand prix win since 2014.

The drivers that don't win in those cars – Kimi Räikkönen (one well-executed victory at Austin aside), Daniil Kvyat, Pierre Gasly – are ultimately shown the door. Only two have walked away: Nico Rosberg and Daniel Ricciardo, into retirement and Renault respectively.

Red Bull has undergone the most line-up churn. Kvyat and Max Verstappen swapped seats, Ricciardo departed, and then – midway through last year – Gasly was demoted back to Toro Rosso, whence Alex Albon stepped up.

Albon enters 2020 as comfortably the least experienced class A driver. It's only a little over a year since he was completing his first laps at the wheel of an F1 car.

"There were a few restless nights before I drove the car," he recalls. "But, actually, looking back at it, it was that thing of 'you have all this attention but then actually once you get in the car – once you've got your helmet on, belts are strapped – you realise that's what you do best – that's what you're meant to do'. And the nerves go away then, and off I was – driving around in a Formula 1 car for the first time.

"Testing [with Toro Rosso] felt very smooth and I felt on pace, and I *was* on pace pretty quickly. Then it was just about getting to know the basic things – pitstops, strategy, looking after the tyres, the protocol of the steering wheel. That stuff is actually where you find little bits of laptime – playing with your set-up through the steering wheel and things like that.

"It was OK. When I first drove the car, after the stint [of] the ►



first five laps I thought ‘you know what? Ok – I got this, I can do this’ and that was me really set for winter testing [in 2019].”

Albon started his rookie campaign alongside Kvyat, who was returning to the team he had been cast from in favour of the Gasly/Brendon Hartley line-up Toro Rosso took for 2018. This meant he could study a driver who had completed 72 races with the squad, and knew how to go about getting prepared for a new season.

So Albon began by watching Kvyat, even “just looking at body language – how he was communicating to the team”, to get a sense of where he needed set the tone.

But by the summer break of 2019 – after negotiating a few incidents early on, such as his crash in Australia FP1, or his massive accident in China qualifying, from which he recovered to score a point in the race – Albon could play his own kind of music. In the points Kvyat led 27-12, but Kvyat had taken a somewhat fortuitous third place in Germany, where Albon had driven arguably his best race for Toro Rosso. But then everything changed as Red Bull came beckoning.

“As I started to settle down,” he explains, “that was when I had the call! Then there was a reset.”

From Spa, he had to go back to square one – learn how his new squad worked, and pick up cues from Max that he hoped would help him get the best from the RB15 to find its “sweet spot”,

as well as gel with the senior Red Bull team.

The results came immediately – in every race of the remaining events but one, Albon finished in the points, in one of Class A’s typical top-six positions. While this was enough to keep the drive for 2020, they weren’t the headline three podiums and one win Verstappen scored over the same period. In the one event where Albon finished out of the points, Brazil, he could well have finished second to his team-mate, but for a heart-wrenching late clash with Lewis Hamilton.

“In a way, it was even a bit harder just because we didn’t get any testing – it was all done through FP1, FP2, FP3s,” Albon says of joining Red Bull.

“It wasn’t as now, when we’ve had winter testing and that break [ahead of 2020] where we can really develop the car. It was very much like ‘OK, I just need something, give me something and I’ll work with it’.

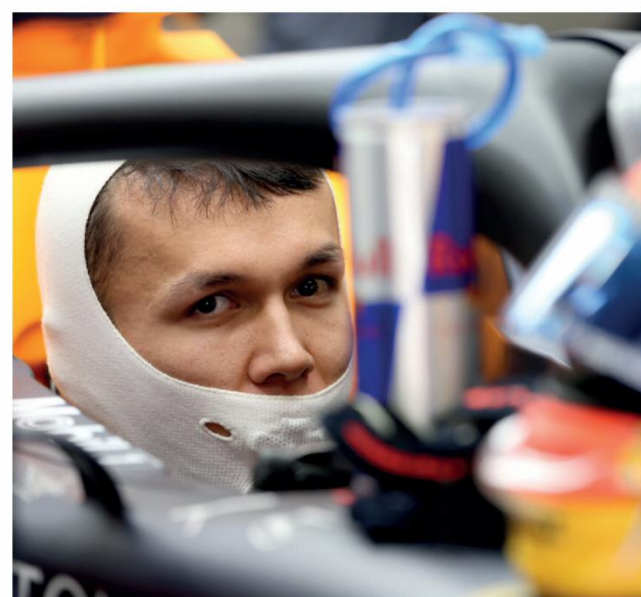
“That’s where this winter break came in handy – it was kind of the first proper sit-down with the team and the engineers, and getting some kind of plan together.”

Albon might have been able to spend more time bonding

with Red Bull over the winter, but he’s facing the same issue Gasly had in the early phases of 2019. Namely, how to cope with matching Verstappen, and the additional pressure that brings.

Gasly had come into Red Bull after an impressive debut year with Toro Rosso. But his underwhelming start to life at the senior squad ▶

“THAT’S WHERE THIS WINTER BREAK CAME IN HANDY – IT WAS KIND OF THE FIRST PROPER SIT-DOWN WITH THE TEAM AND THE ENGINEERS”



With no guarantees for his future after 2020, this season is crucial if Albon wishes to remain in a ‘Class A’ seat





Further improvement and integration into the team are Albon's initial aims for 2020

strengthened the argument that he should have been given at least another year to develop away from the glare of the Class A spotlight. When Ricciardo walked, Red Bull eschewed recalling Carlos Sainz from his Renault loan in favour of a gamble on Gasly.

The following summer Red Bull made another decisive call: to drop Gasly in favour of Albon after his absence from the fight at the front cost Verstappen victory against Hamilton in Hungary.

Albon does not have any assurances beyond 2020 – and as history shows, even completing the full year isn't guaranteed if he doesn't perform. But he insists team principal Christian Horner and Red Bull advisor Helmut Marko haven't issued a list of targets they expect him to hit before his future is confirmed.

"I'd say it's just [about] continuation," explains Albon. "I hold very high standards for myself and first of all the person who is not happy with me, is me. They know that, so it's very much that they know areas [where I know I can improve]. They want to see improvement – that's the main thing. And I am improving. That's really it. There's no set targets – and [with that] you just add pressure for no reason. It's kind of letting me do my own thing and letting me focus on myself, and it will come."

Albon has recently moved to Monaco ("Just getting out of the family house – I do miss the laundry and the food!" he jokes). This brings him

closer into Verstappen's orbit, after the pair were karting rivals before his team-mate's sudden rise to F1. But it's not enough just to get close to a driver that many feel will go on to be a multiple world champion – judging by Red Bull's ruthless recent history, at least.

This season will bring targets and expectation – even if no one within the Red Bull camp is raising them in public. So, as his own harshest critic, here's Albon's plan to hang on to his Class A seat.

Gently but firmly, he says: "For me it's not very much like 'I want to be here, by Spa I want to be blah-blah'. "It's very much 'OK, what areas do I need to work on, am I feeling like I'm improving them, and if not, why am I not?'"

It's very much 'what can we do to improve that'. Things like that – just kind of 'I know if I get these little things creased out, the results will come'.

"And that's really how I'm going into the year – short-term minded in that sense. It's about very much looking at myself."

Albon is no stranger to career pressure, since his junior career was rarely guaranteed to

go beyond the season he was embarking on. So in that respect, things must feel somewhat familiar. But to ease the burden and satisfy notoriously demanding bosses, early success is a must for Albon in 2020: perhaps more than any other organisation on the grid, this one lives by the mantra of onwards and upwards – or out. **GP**

"I HOLD VERY HIGH STANDARDS FOR MYSELF AND FIRST OF ALL THE PERSON WHO IS NOT HAPPY WITH ME, IS ME"

SPEED

IS NOTHING WITHOUT CONTROL



Whether you're steering, serving, driving, chopping, pulling, twisting, strumming, punching, climbing, grabbing, curling, pressing, lifting or hitting..

..spinning **Powerball®** will help prevent RSI and increase your grip, wrist & forearm strength like nothing else on the planet today. Proudly building and protecting millions of arms and wrists worldwide since 1998.

Take back control. Test drive Powerball® today.

Use **SPEED19** for a 20% discount



 powerballs.com

PIERRE GASLY

THE LONG ROAD

DANIIL KVYAT





TO

REDEMPTION

Scuderia AlphaTauri – a new name with some very familiar faces. Formerly an entry point for young drivers, Red Bull's junior Formula 1 team now offers career rehab...

WORDS MATT YOUSON PICTURES RED BULL CONTENT POOL

T

hese are unusual times in Faenza. Scuderia AlphaTauri, as we must now call the artist formerly known as Toro Rosso, is undergoing rather more than a cosmetic rebranding. Its role in the bigger geopolitical battles of F1 is shifting; sight of its core purpose has become obscured, and yet it remains the brave little team that can. Whatever the machinations behind the scenes, last year it managed its highest-ever points tally and equalled its best-ever finish in the constructors' championship. It takes the notion that Formula 1 thrives on stability, and throws it into the proverbial cocked hat. And in the middle of the maelstrom – calm or otherwise – are Daniil Kvyat and Pierre Gasly. Aged 25 and 24 respectively, they have more baggage than they deserve for their tender years but are also in possession of a rare opportunity to divest themselves and progress unencumbered.

When Red Bull bought Minardi at the end of 2005, the benefits of owning a second team were manifold: it gave the carbonated beverages men a heavier political hammer among F1's stakeholders at a time when the paddock was a much less consensual place than it is today; then there was the ability, via the auspices of Red Bull Technology, to get more bang for its design buck, neatly circumventing the legal niceties related to customer cars. It would also – and this was very much the front-of-house logic – provide the graduate school for the alumni of the Red Bull Junior Team. More than a third of the current field have entered F1 via this route, and while it's been decried as an expensive indulgence by rivals, it's also an indulgence discussed with more than a touch of envy. The methodology produced Sebastian Vettel and Daniel Ricciardo; and it allowed Red Bull to spirit Max Verstappen away from the influence of Mercedes by dangling a race seat in front of him when he was 16: an offer he and his advisors could not refuse and one, crucially, the Silver Arrows could not match. In the 16-season history of Red Bull, the only drivers not to join the team without first completing a stint at Toro Rosso are the ones that made their debut before Toro Rosso existed.


Which all leads us to the Curious Case of Daniil Kvyat and Pierre Gasly: drivers who, contrary to the natural order of things, are moving backwards through time, returning to Faenza for a second (and arguably, in the case of Kvyat, a third) term. In terms of grands prix contested this is,

by a considerable margin, the most experienced line-up the team has ever enjoyed. But it also begs the question: why? Neither driver is there to have the rough edges knocked off – they've already been through that process.

The most generous interpretation is strength in depth. Both in 2016 when Red Bull promoted Max Verstappen to replace Kvyat, and again last year when Alex Albon replaced Gasly, the senior team provided the thinnest of comfort blankets by using the logic of squad rotation. It holds the contracts for all of Red Bull's drivers and constantly evaluates who is best placed to drive for the senior team. It decides who – to extend the metaphor – needs a spell playing for the reserves.

While results justify Red Bull's decision-making in both instances, the drivers also have a reasonable case for feeling aggrieved. Having beaten Daniel Ricciardo in his first season with Red Bull, Kvyat was replaced just four races into his second. He gave the team its only podium of the young season





Kvyat is a more rounded driver in his third stint with the team

Gasly has recovered well after his bad spell at Red Bull

IN TERMS OF GRANDS PRIX CONTESTED THIS IS, BY A CONSIDERABLE MARGIN, THE MOST EXPERIENCED LINE-UP THE TEAM HAS EVER ENJOYED

two races before getting the chop. Gasly, on the other hand, suffered the ‘difficult car/difficult team-mate’ imbroglio: driving an RB15 in which engine integration had taken precedence over chassis dynamics and thus featured a narrow performance window that Verstappen appeared able to wiggle through but Gasly could not. The organisation is not unaware

of this and doesn’t go out of its way to be cruel, so parking him at AlphaTauri benefits everybody in the long run.

The counter argument is that Kvyat and Gasly are driving for AlphaTauri because, if not them, then who? For many years the Red Bull production line ran so smoothly that supply exceeded demand. Such was the quality of the product, it was easy to be lulled into believing that this was a normal state of

affairs. High-quality performers such as Carlos Sainz decided to look elsewhere because there wasn’t an obvious path to advancement, while further down the pecking order drivers such as GP3 champion Alex Lynn only saw a logjam ahead of them. These things, however, are cyclical, and after the feast generally there follows the famine. Sainz and Ricciardo ►

departed and the next batch of youngsters – the likes of Niko Kari, Sérgio Sette Câmara and Dan Ticktum – didn't quite hit the heights of their predecessors. It led to the unusual sight of Jake Dennis, a Red Bull simulator driver but not a member of the Red Bull Junior Team, taking on testing duties when the team was mandated to run a rookie, and also to Brendon Hartley and Alex Albon, former Red Bull Juniors, being invited in from the cold. The cupboard was bare.

This is, however, one of those occasions where the origins story doesn't really matter: Quite what shape that redemption takes is nebulous. Alex Albon seized his opportunity in the second half of 2019, accruing comfortably more points in nine races than Gasly had in 12, and doing so under less advantageous circumstances.

Perhaps more significantly, Albon's presence at the sharp end created greater strategy headaches for rival teams, providing Verstappen with a much-needed tailgunner. Doing this duly secured him the coveted seat for 2020, though before that happened, Red Bull gave every indication that the contest to be Verstappen's dancing partner was open to all three – and just those three.

"All the drivers that are under consideration are under contract, so we're in a unique position where we don't need to rush anything," said Red Bull team principal Christian Horner. "We'll take the fullness of time to look and evaluate the progress of Alex and measure it against Dany and Pierre."

Whether that process is still in effect now that Albon has completed his probationary period is a matter of conjecture. Horner has suggested that his team isn't philosophically opposed to looking outside the Red Bull family in the future, but it wouldn't be its first choice. Kvyat and Gasly's best chance of progressing their careers beyond the midfield still lies with a return to Milton Keynes. Having been cast aside, they have arguably a steeper slope to climb now – but their earlier experiences should make them better prepared for the ascent.

In that sense, the task for the AlphaTauri drivers is no different to that for the vast majority of the field. They need to beat their team-mate, deliver slightly more than is expected of them on track, contribute to the development of the car with solid feedback off it, and generally radiate positivity and enthusiasm when tasked with the thousand-and-one things racing drivers usually do with poor grace. These are tasks Kvyat coped with poorly on his first return to Toro Rosso in 2016 but looked markedly better prepared for when handed another chance last year. While not quite the Damascene conversion, there was plenty



KVYAT AND GASLY ARE ALPHATAURI'S DRIVER PAIRING FOR 2020 AND REDEMPTION IS WITHIN THEIR GRASP



The name is new but the drivers know the team intimately



of evidence that the Russian driver had experienced some personal growth during his sojourn in Ferrari's simulator – and he freely admits there's more to do.

"I'm looking to evolve personally," he says. "Every year I find something new that I can work on and improve, it's a constant evolution of myself. I feel like last year was a good one for me in terms of personal discoveries, understanding what works for me, what doesn't. I think in terms of my performance, I'm always quite happy with what I manage to squeeze out of the cars, but you always need to be ready to deliver your best and still think that you can always improve."

Kvyat may consider himself unluckily overlooked when a replacement for Gasly was required. At the summer break he was winning the qualifying battle against his rookie team-mate and was comfortably ahead in the points table. He'd recently had the bonus of a podium finish in Germany, ►

GET MORE

of the motorsport you (and we) love

UNLIMITED ACCESS

to the world's best motorsport journalism

SMART INSIGHT

published daily

BREAKING NEWS

as it happens

ALL THE TEAMS

all the drivers, all the controversies

SUBSCRIBE NOW

Autosport.com/plus

AlphaTauri and Red Bull have been encouraged by Honda's progress



embraced parenthood, and gave every impression of being a well-rounded human being at peace with his surroundings – which is a commodity rarer in the F1 paddock than many would suspect. Counterintuitively, being a known quantity (and well-liked within Red Bull's garage and engineering set-up) perhaps counted against him: the team was keen to understand all its options ahead of 2020.

If he's still bitter, it doesn't show, and his comments now reflect a very strict focus on working with the team he has, rather than dreaming about the team he might like.

"2019 was a good year for me, with ten top-10 finishes and that podium in Hockenheim – but I wouldn't say I've set myself any specific targets for this year," he says. "I want to keep doing what I was doing because I think you can

"CAN WE FINISH HIGHER THAN LAST YEAR? IN TERMS OF RESULTS, WITH A TIGHT MIDFIELD BATTLE IT'S IMPOSSIBLE TO PREDICT, BECAUSE THINGS ARE SO COMPETITIVE SO I WOULD REALLY STRUGGLE TO SAY EXACTLY WHERE WE'LL BE. BUT I'M SURE WE'LL BE FIGHTING IN A VERY TIGHT GROUP" DANIIL KVIAT

predict, because things are so competitive so I would really struggle to say exactly where we'll be. But I'm sure we'll be fighting in a very tight group."

While Kvyat has been in this position for a while, for Gasly the experience is still fresh. He bounced back better than


Kvyat managed in 2016, and looked a better, more capable driver once restored to the Italian team, even before the enormous fillip of a career-best finish on the podium in Brazil. Back in September Gasly trod a fine line, expressing his disappointment and surprise at being shown the door when he believed he had more time – but equally not throwing himself under the bus by criticising the organisation.


"I'm sensible to all the chances they've given me in my career," he wryly said at the time. "There were things I could have done better, and I take part of the responsibility for the lack of pace and points we had – but I think we are all responsible for this lack of performance as well. In the end there were some valuable lessons learned, and right now I need to move on and focus on what I can change."

Fast forward six months and it's a more sanguine Gasly stepping into the AlphaTauri. "I feel better prepared than last year, as I have a bit more experience," he says. "The way things went last year gave me a good understanding of what is needed to get the job done."

The team finished sixth last year. That will be hard to follow, but both Red Bull teams have been adamant the Honda engine has taken a significant step over the winter. A good showing in the midfield – and occasionally putting one across on the senior team's rivals, is Kvyat and Gasly's best chance to impress the Red Bull hierarchy. It is also their best hope of completing their similar journeys of redemption. 






VIRAGE-F1.COM 

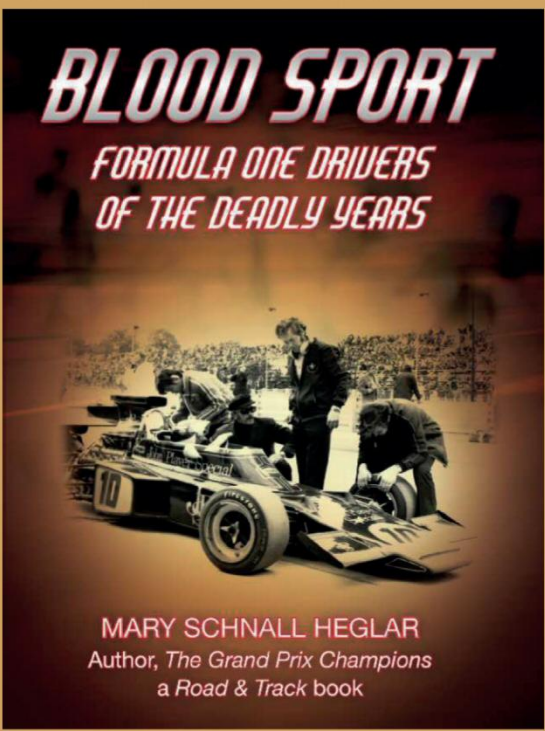


VIRAGE F1 is the place to find very rare motorsport memorabilia items.
Offering original race helmets, official replicas, race suits, gloves, shoes, Nomex and more.
From the golden age to the modern era, every item has been selected with passion and carefully authenticated.

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

BLOOD SPORT
FORMULA ONE DRIVERS OF THE DEADLY YEARS



MARY SCHNALL HEGLAR
Author, *The Grand Prix Champions*
a Road & Track book

They Risked Everything — Every Time

49 F1 Drivers | 5 F1 Constructors | 120 Rare Photos

Late 1960s, early 1970s

"... a fond reflection on the 1970s era of Formula 1 ... [with] candid pictures of the stars." *F1 Racing* magazine

By "an extremely talented and perceptive writer"* who was there.

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

Available: Amazon, Barnes & Noble, and bookstores

FORMULA ART  LIMITED EDITION
DAVID JOHNSON GICLÉE PRINTS

Lando Norris - 2019 McLaren MCL34



Each beautiful giclée print captures the colours and detail created by the artist and his palette knife to an archival standard.
Measuring 23"x31" in size and comes with a certificate of authenticity.

Prints are strictly limited to a run of 150 that have each been signed and numbered by the artist David Johnson.

Artist signed edition £124.99 All orders can be made through the website plus P&P

 formulaart  formulaart.co.uk  formula_art

WWW.FORMULAART.CO.UK

Automodello™

1967 EAGLE GURNEY-WESLAKE V12

1:12 Scale • Available in 3 Editions

*Signature Edition Certificate Hand-signed by Dan Gurney



ONE12™ starting at..... \$1399⁹⁵

877.343.2276

AUTOMODELLO.COM

AAR trade dress used with permission to Diecastm, LLC d/b/a Automodello™

NIGEL ROEBUCK'S FORMULA ONE HEROES

FRANÇOIS CEVERT

PICTURES  **motorsport
IMAGES**

WHEN HE
SPEAKS OF
FRANÇOIS
CEVERT,

inevitably **Jackie Stewart** becomes emotional, for this was not only his team-mate, but also the closest friend he ever had in motor racing.

The final race of the 1973 season, at Watkins Glen, was to be Stewart's 100th grand prix, and he had decided months earlier that it would be his last. As it was, he never went to the grid, the perfect symmetry of his career ravaged by a practice accident in which Cevert died.

They had driven together since mid-1970, when François replaced Johnny Servoz-Gavin in the Tyrrell team. Cevert's debut, at Zandvoort, came in one of the March 701s Tyrrell was then running. "Not ideal for your first experience of a grand prix car," said Stewart. "The 701 was sometimes fast, but it wasn't nice to drive. François was in at the deep end – as it turned out, he made his debut the weekend Piers [Courage] was killed..."

Initially Cevert's results were unremarkable, but at Monza he scored his first point. In another way, too, the weekend left its mark. "It was there," he said, "that I realised it could happen to me. On the Friday I spun at maximum speed, but somehow didn't hit anything – and I laughed about it. Next day, 200 yards ahead of me, Jochen Rindt crashed, and was killed. That night I took pills, but still I couldn't sleep – I knew I could have been killed too."

Swiftly Cevert had established himself in the F1 fraternity, not least because of his natural glamour. With his startling blue eyes, he was good-looking in a way that had girls gnawing at the back of their hands, yet carried it off with such grace that none could dislike him for it.

"Certainly," smiled Stewart, "you could say that François never lacked for company, but he was absolutely unpretentious and genuine – not at all infatuated with himself, which so many people like that are. In the same way, he was from a very rich Parisian family, but you'd never have known about the wealth."

When it came to his job, there was nothing of the playboy about Cevert, who revered Stewart, only too aware that he was working with the best: any time



Despite his looks there was nothing playboy about Cevert, who was unpretentious and easily integrated himself into the paddock

Jackie had words of counsel for him, he was going to listen.

In 1971 Stewart took his second world championship, and Cevert, maturing by the race, finished third in the standings, with a couple of second places (to JYS) and, at Watkins Glen, a victory. I never saw a more joyful winner.

The following season his best results were a pair of seconds, but drivers did not confine themselves to F1, and François had successes elsewhere, including a CanAm victory in a McLaren.

In 1973 he won the F2 race at Pau, and crewed the winning Matra in the Valldung Six Hours, but although he would six times finish second in GPs (three of them shadowing Stewart), there would be no more wins.

"Through that summer," said Stewart, "only Ken [Tyrrell] knew I was going to retire. I told him that I felt confident François was the right man to be number one in 1974 – I think he could have won the championship."

As was the custom back in the day, the season finished with a couple of races in North America, and on a chaotically wet day at Mosport for the Canadian GP Cevert was injured in an accident with Jody Scheckter.

"We went to the hospital feeling anxious," said Stewart. "Are you a member of the family?" they said – never a good sign. When we got to his room, it had been



“

cleared, and I thought, ‘Oh, Christ...’ I said to the nurse, ‘Is everything all right with Mr Cevert?’ ‘Yes,’ she said, ‘he’s on the balcony, smoking...’ The relief we felt!”

The Stewarts had planned a break between the races, and invited a limping Cevert to join them. “At first he said, ‘No, no, it’s your holiday’, but we persuaded him, and I’ll always be glad we did.

“In Bermuda I’d booked a place called the Ocean Reef Club. In the dining room there was a piano, and François got up to play – he was a superb pianist, and had been classically trained. He started off with ragtime stuff, and no one took much notice, but then he played his favourite piece, which was Beethoven’s ‘Pathétique’ Sonata, and the whole place was mesmerised. They applauded like mad – after that he had to do it every night!

“François told me he’d had an offer from Ferrari, and I said, ‘Well, that’s good, but you don’t have to decide until the season’s over – I think you should stay with Ken’.”

By the time they got to the Glen Cevert was feeling fit again. He adored this circuit on which he had won, and was right on the pace, vying with Ronnie Peterson for fastest time on Saturday morning. Towards the end of the session he went out one last time.

Although successful, that year’s Tyrrell – with an ultra-short wheelbase – was not easy to drive. “I was fighting for the title with Emerson [Fittipaldi],” said Stewart, “and I remember him saying, ‘I don’t know how you drive that car.’ He was right: it was a handful.”

HE WAS ABSOLUTELY
UNPRETENTIOUS
AND GENUINE –
NOT AT ALL
INFATUATED WITH
HIMSELF, WHICH
SO MANY PEOPLE
LIKE THAT ARE

JACKIE STEWART

”




Driving a third Tyrrell was Chris Amon, who indeed found it twitchy, particularly through the quick uphill esses. “You had to be very much on the right line there, and, like Jackie, I found it better to use fourth [gear], rather than third, because the car was more settled. I was flat through there about three times in five, but judging by his times, François was flat every lap – and I subsequently learned that he was using third...”

Six minutes remained when Cevert’s car glanced the barrier at the top of the esses, then speared across the track into the guardrail on the left, which split apart on impact. Several drivers stopped at the scene. “Chris was there when I arrived,” said Stewart. “I knew from all the blue it was a Tyrrell, and thought it was he who’d had the accident. I said, ‘Are you OK?’, but he just shook his head – and then I knew it was François. It was a shocking sight, and I’ve always regretted that I didn’t stay longer with him. That might sound an odd thing to say – I knew he was dead – but it was something I felt.”

Eye-witnesses said that Cevert had run wide at the right-hander at the bottom of the esses, which put him off-line into the left: apparently he never lifted, and at the exit skimmed the barrier, then pitched across the road.

“Of course we withdrew,” said Stewart, “but the mechanics were concerned that something had broken on the car. I was sure I knew what had happened, but they were so distressed I felt, even knowing I was never going to race again, I had to go out in the afternoon, to show that I had confidence in the car.

“Helen had gone back to the Glen Motor Inn with Norah Tyrrell. I went there after my run in the car, and it was then that I said to her, ‘I’m no longer a racing driver’. How she coped with that much emotion in one day I’ll never know – she’d had to clear up François’s room, just as she’d done for Piers and for Jochen. In those days the girls went through more than the men, I think.” 

Cevert was always willing to listen to Stewart (above) and took his first F1 podium behind JYS in the 1971 French GP (below)



NOW THAT WAS A CAR

No. 85

WORDS STUART
CODLING
PICTURES
JAMES MANN

The plucky midfielder
that claimed the Ford
DFV's 155th and final
grand prix victory





THE TYRRELL 011

For a decade and a half the Ford-Cosworth DFV engine was the common denominator of some of the most successful grand prix cars, powering 12 world champion drivers from Graham Hill in 1968 to Keke Rosberg in 1982. Tyrrell was one of the teams that came to epitomise success in this era: small, agile and innovative in its own way, it built solidly engineered cars that handled sweetly and ran reliably. Given the level playing field the Cosworth engine created, Tyrrell was a pacesetter in the early 1970s and generally there or thereabouts for the remainder of the decade.

By the 1980s, though, this approach had hit diminishing returns as a new generation of turbocharged engines made power a differentiator again, and 'ground-effect' aerodynamics demanded additional investment in research and development. This was all a little too much for the relatively humble Tyrrell organisation, still based in the former timber yard that had been the home of team boss Ken Tyrrell's family business; famously, the team's early F1 cars had been drawn by former designer Derek Gardner in his spare bedroom and assembled in his garage. Times had changed.

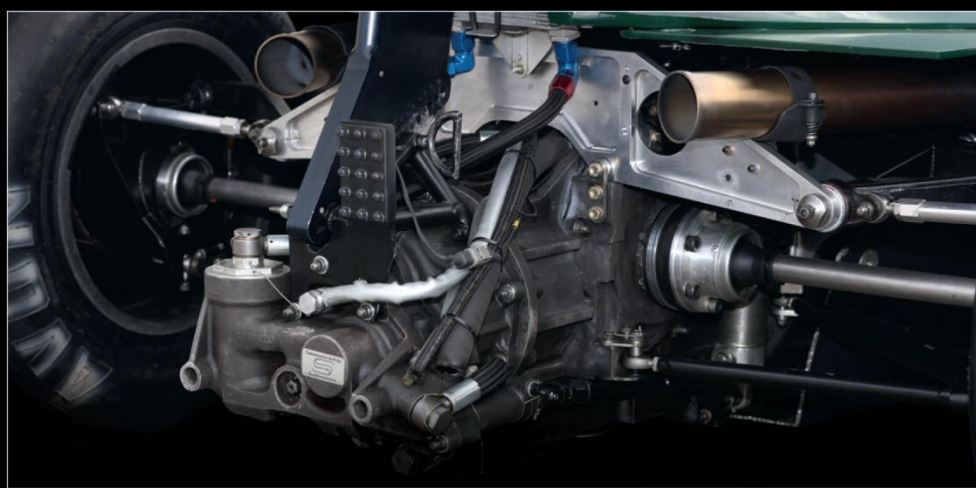
When former Lotus and Parnelli engineer Maurice Phillippe took over from Gardner in the summer of 1977 the revolution was underway: Lotus had introduced its 78, the first of the ground-effect cars, at the beginning of the season and Renault had launched its new 1.5-litre turbocharged car at the British Grand Prix. Like the other Cosworth customers – including Lotus – Tyrrell had been striving to innovate elsewhere on the car to gain an advantage on its competitors but its solution, a six-wheeled chassis, proved to be a dead end. While we now

**NOW
THAT
WAS
A
CAR**
No.85

THE TYRRELL 011

view ground-effect aero as a competitive game-changer, in period it was not well understood – even by Lotus. Several other teams remained convinced that the pace of the Lotus 78 and 79 could be attributed to some trickery Colin Chapman's team was performing with its differential. And when Chapman demanded his engineers generate even greater levels of peak downforce loadings in Lotus's successor cars, the anticipated gains didn't materialise. Phillippe was initially tasked with re-engineering Tyrrell's P34 six-wheeler to accommodate the new Renault powertrain but, when that engine supply deal fell through, he set about designing a new car for 1978 with an active camber-control system he'd been experimenting with on his road car, a Ford Cortina.

Active camber theoretically offered a host of benefits including lower rolling resistance (and potentially greater speed) in a straight line, and more control over the slip angle of the tyres for better grip and stability in corners. But as a mechanical system rather than an electronic one it was difficult to perfect, and Phillippe was forced to shelve it in favour of conventional suspension. Meanwhile Tyrrell's



“PHILLIPPE TOOK A BELT-AND-BRACES APPROACH FOR THE 011, SET AGAINST A BACKGROUND OF ALMOST CONTINUOUS RULE CHANGES”

results continued to slide; 1977 was its first win-less season in a decade, sponsors began to desert, and Ken Tyrrell had to subsidise the team from his own pocket.

Lack of funds meant Phillippe had to fall back on cloning rivals' more successful designs – the Lotus 79 for the Tyrrell 009 in 1979, and the Williams FW07 (itself influenced by the 79, but better sorted thanks to greater understanding of ground-effect) for the 010 in 1980. Here Phillippe ran into the same problems Lotus encountered when it tried to follow up the 79. Ground effect relied on inverted wing shapes within fully enclosed sidepods, sealed to the ground by sliding skirts, to create downforce – but these structures added weight to the car and put huge additional loads on the chassis. Engineers were naturally reticent to beef up the core structure of the car because this would incur an even greater weight penalty.

The 010 showed potential, but the chassis' lack of rigidity manifested itself in unpredictable handling and poor reliability. Jean-Pierre Jarier, Derek Daly and Eddie Cheever notched up eight points finishes between them in its 22-race service life, but there were plenty more retirements and



failures to qualify. Now operating on a shoestring again after a brief injection of Candy sponsorship for 1980, Phillippe took a belt-and-braces approach for the 011, set against a background of almost continuous rule changes as the FIA unsuccessfully tried to legislate ground-effect aero out of existence.

If the 011 appears bulky in comparison with some of its rivals of the era, that's because Phillippe set out to draw the entire structure of the aluminium honeycomb chassis with no more than one fold on each side. That gave it a rather bluff frontal aspect, but to mitigate this and the potential weight gain Phillippe minimised the presence of cosmetic bodywork. The entire side of the car between the cockpit and the sidepods is the central 'tub'. To minimise disruption of the airflow into

the sidepods, the front suspension wishbones were neatly laid out above and below the opening; pullrod-actuated dampers here also kept the mass low.

The 1981 season unfolded rancorously as the FIA banned sliding skirts in a doomed attempt to eliminate ground-effect. While the better-resourced teams immediately tried to circumvent the ban with innovations such as Brabham's hydropneumatic bodywork (which enabled its cars to pass the ride-height test when entering or leaving the pitlane), the 011's minimal-bodywork concept militated against Tyrrell adopting such ideas. Even so, when it entered service in the hands of Cheever at in round ten at Hockenheim, it was an immediate step up over the old car: team-mate Michele Alboreto failed to qualify his 010 while Cheever raced to fifth.

There would be no more points finishes that year but, in 1982, with sponsorship from Denim, there were funds for development – and, crucially, the FIA revoked the ban on sliding skirts. With the aero now working as intended, the 011 was now disadvantaged only by its naturally aspirated powertrain. That the team was still operating hand-to-mouth was evinced by Slim Borgudd, Cheever's replacement, being shown the door when his budget ran out after three races.

Alboreto finished 11 of the 16 races in 1982, of which seven were points finishes – including a podium in the San Marino Grand Prix in which Tyrrell raced despite its alignment to FOCA (Bernie Ecclestone's Formula One Constructors' Association), which was boycotting the event.

Eleven different drivers won races in 1982 and no one claimed more than two victories, for this was a turbulent season in which violent accidents killed Gilles Villeneuve and seriously injured Didier Pironi, both of whom would have

NOW THAT WAS A CAR No.85

been contenders for more wins and the championship. At the final round, on the unloved temporary circuit in the car park of Caesar's Palace casino in Las Vegas, Alboreto contrived to qualify his 011 in third place behind the Renaults of Alain Prost and René Arnoux. When engine failure prompted Arnoux to park his car on lap 20, Alboreto chased down and passed Prost – who was struggling with vibrations caused by his tyres picking up clods of spent rubber – and pulled clear to win by nearly half a minute. It would be the last grand prix victory for the venerable DFV engine in its original form.

Tyrrell secured Benetton sponsorship for 1983 but there was no competitive turbocharged powertrain available. Cosworth had long resisted turbocharging and its belated response to the obsolescence of the DFV was to sanction a much-revised naturally aspirated V8 designed by Mario Illien, who would later co-found Ilmor. The DFV had the same swept volume but with a larger bore and shorter stroke, new Nikasil cylinder linings, a new cylinder head and an extremely narrow valve-opposed angle of 16 degrees. But its claimed improvement of 30bhp over the DFV was not enough.

Besides the new DFV engine, the 011 lost its sidepods for 1983 as the FIA rushed in a last-minute rule change mandating all cars to have flat bottoms. This had the unintended consequence of making F1 a power formula above all, and consigning those still running naturally aspirated engines to the tail of the field – for the most part.

Tyrrell laboured through the first six rounds with just one points finish, but in Detroit rain washed out Friday's running and the grid was decided by a one-hour session in drying conditions on Saturday. Alboreto qualified sixth with just one other unblown car – Marc Surer's Arrows-Ford – ahead of

THE TYRRELL 011

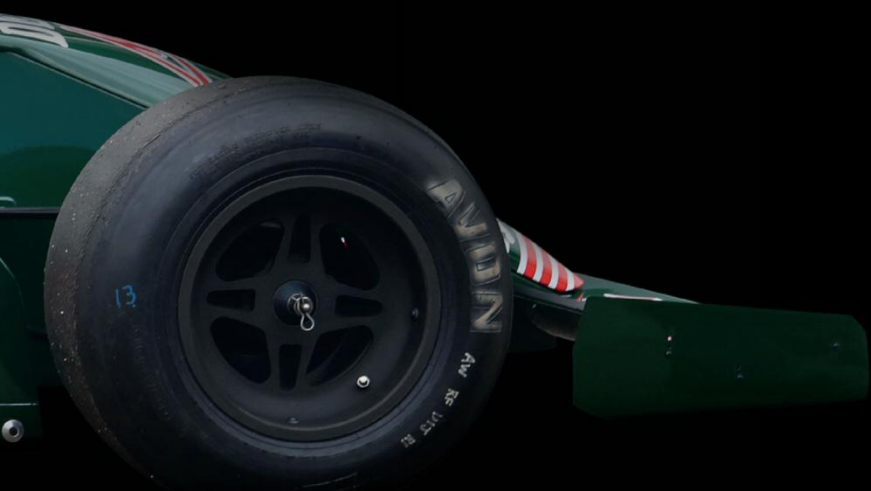
“BY STARTING WITH A FULL TANK OF FUEL AND NOT MAKING ANY PITSTOPS, ALBORETO WAS IN PRIME POSITION TO TAKE ADVANTAGE WHEN RACE LEADER NELSON PIQUET SUFFERED A PUNCTURE”





him. By starting with a full tank of fuel and not making any pitstops, Alboreto was in prime position to take advantage when race leader Nelson Piquet suffered a puncture, and he took the chequered flag over seven seconds ahead of second-placed Keke Rosberg.

This would be the final win for the DFV family – and, indeed the last for a naturally aspirated engine until 1989. It was the last, too, for Tyrrell, though the team would soldier on as a diminished backmarker until 1998.



RACE RECORD

Starts 64
Wins 2
Poles 0
Fastest laps 2
Other podiums 1
Points 38

SPECIFICATION

Chassis Aluminium honeycomb monocoque
Suspension Double wishbones, pullrod-actuated coil-over shock absorbers
Engine Ford Cosworth DFV/DFY
Engine capacity 2491cc
Power 495bhp@11,000rpm (DFV) 520bhp@11,000rpm (DFY)
Gearbox Five-speed manual
Tyres Avon, Goodyear
Weight 590kg
Notable drivers Eddie Cheever, Michele Alboreto, Slim Borgudd, Brian Henton, Danny Sullivan

BRANDS HATCH

It held 14 world championship GPs, but it's five years since the iconic Kent circuit last hosted a contemporary F1 car...

It was April and the 2015 season already four races old, but Lotus opted to use Brands for a filming day for its 2015 car, the E23. Here Romain Grosjean exits Paddock Hill Bend and starts the run up to Druids, followed by a camera car





▼ He'd already won a GP at Brands Hatch – the European race the previous season – but Nigel Mansell's victory in 1986 means he will always be remembered as the last winner of an F1 race at the circuit. But were the tears of joy or of pain? With Nigel you can never be sure...

► Two of Scotland's finest do battle in 1966, as Jim Clark (Lotus 33) is hot on the tail of Jackie Stewart (BRM P261). Stewart started eighth, three places shy of Clark, but by lap ten was up to fifth, with Clark just behind. Unsurprisingly though, the BRM's engine blew up on lap 18...



▼ This fantastic shot of Derek Warwick in a Brabham BT55 at the 1986 British GP illustrates perfectly just how steeply the circuit rises up from the exit of Paddock Hill Bend to the top of Druids. Warwick qualified ninth and finished eighth, one of his better results with the team



Brands was a popular venue in its F1 heyday and not just for world championship races. Here, at the 1981 Lotus day, the organisation's founder and Team Lotus supremo Colin Chapman stands at the head of a grid of his F1 cars, with a few road cars thrown in for good measure

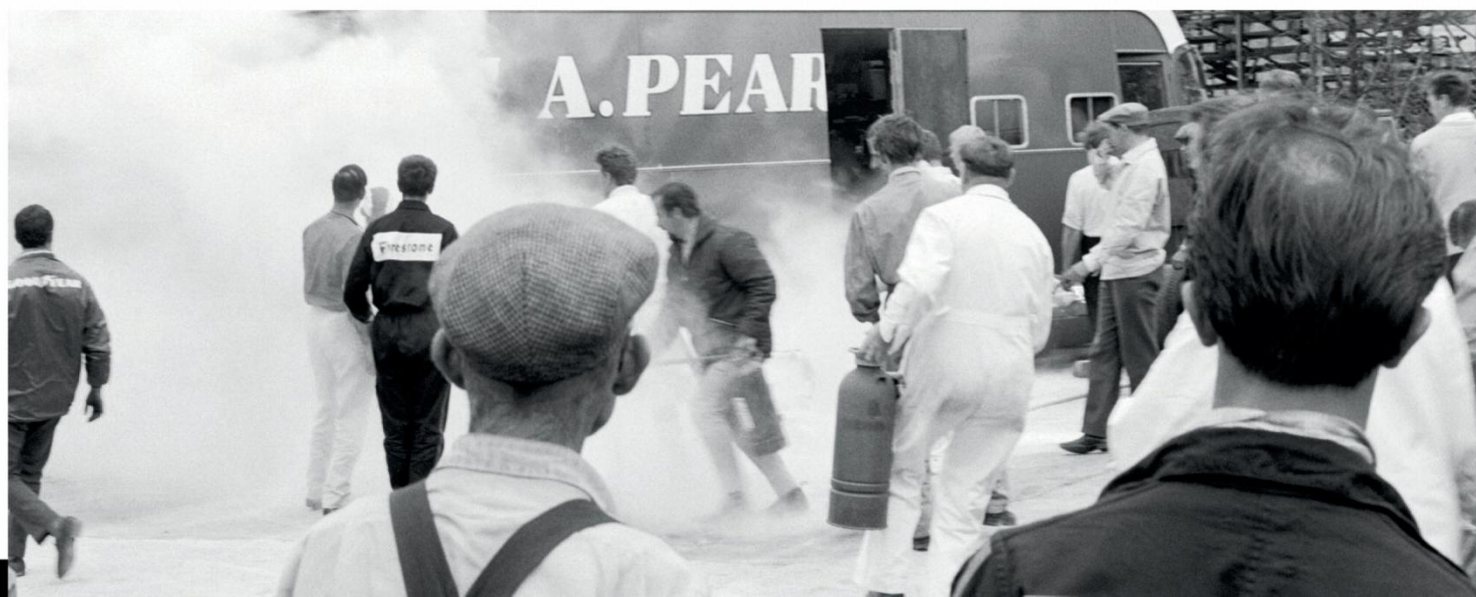


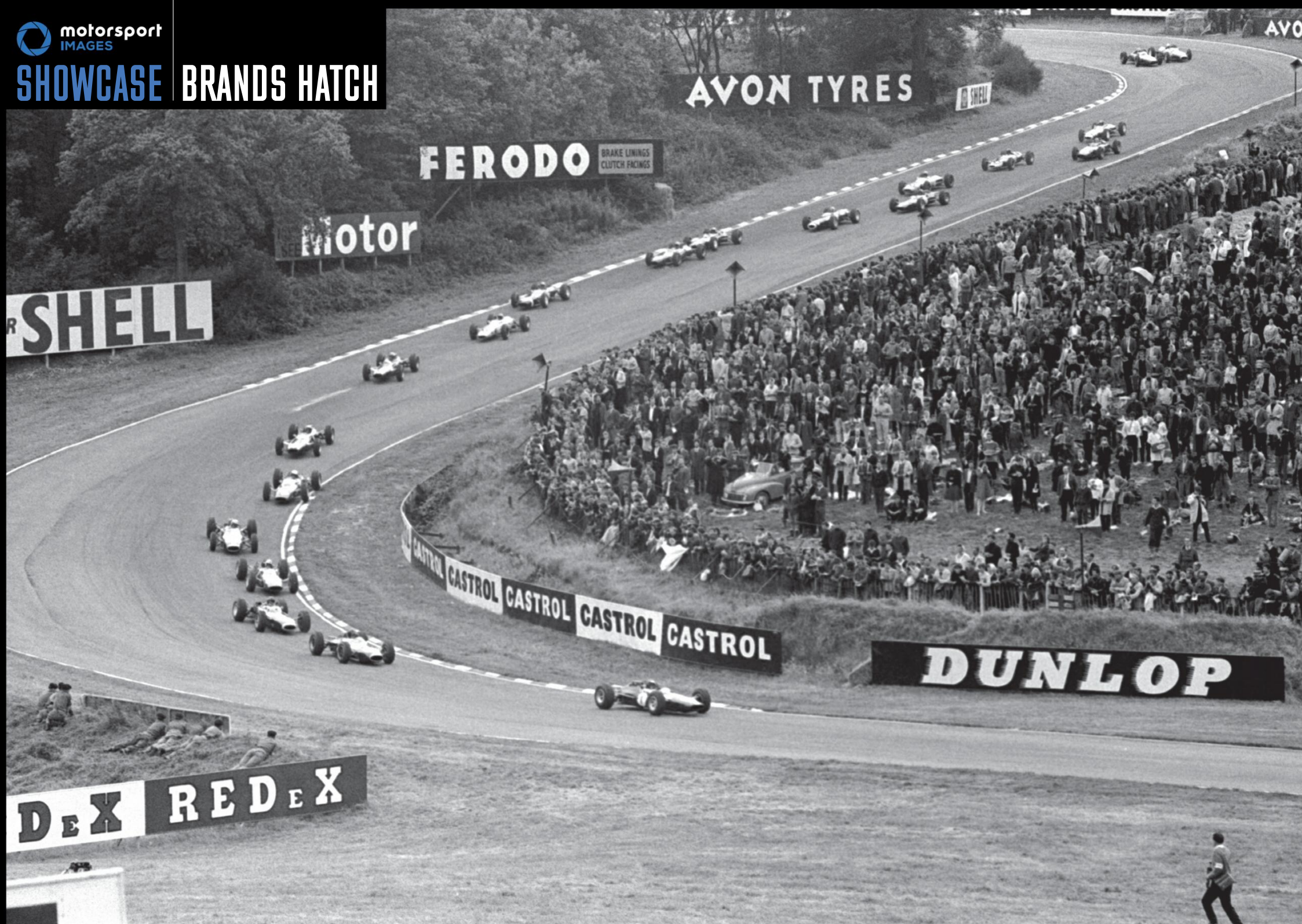
Emotions ran high when it was announced that the British GP would no longer alternate between Silverstone and Brands. Sadly, for supporters of Brands at the 1986 race, this banner had no effect and it was to be the last F1 race held there



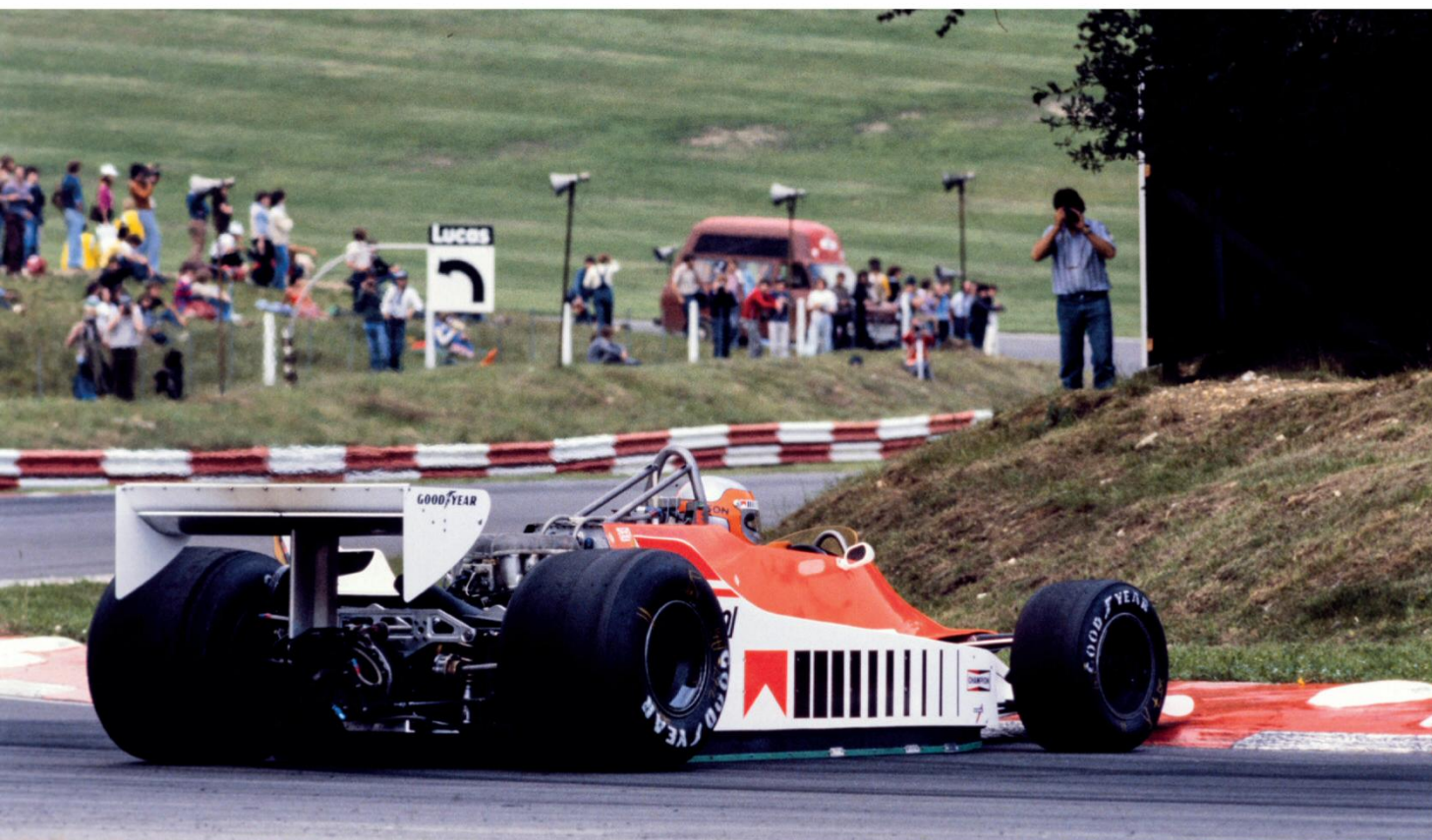
Mayhem at the start of the last GP at Brands in 1986. Thierry Boutsen lost control of his USF&G-sponsored Arrows and Stefan Johansson (Ferrari), in trying to avoid him, collected the Ligier of Jacques Laffite. Laffite was trapped in his car for over half an hour, where he was aided by recently qualified doctor Jonathan Palmer, driver of the damaged Zakspeed (14) behind Boutsen's car. The shunt sadly ended Laffite's career, but meant Williams could set up the spare car for Nigel Mansell, after the differential had blown in his FW11. 'Our Nige' went on to win

In the paddock for the 1966 race the J.A. Pearce Engineering Cooper T73-Ferrari, to be driven by Chris Lawrence, caught fire. Luckily, with enough extinguishers on hand the car wasn't damaged beyond repair. Lawrence took the start and went on to finish 11th, three laps down





▼ With Nigel Mansell a firm favourite to repeat his victory of a year earlier the crowds were huge in 1986, no doubt helped by the weather and track's proximity to London. These grandstands covered part of the rallycross circuit, just above the packed South Bank



◀ Jim Clark leads the field through the eloquently named Bottom Bend on the opening lap of the 1964 British GP. The hill leading down to the corner, and the corner itself, were both renamed in 1976 after the driver who finished second to Clark in this race, Graham Hill

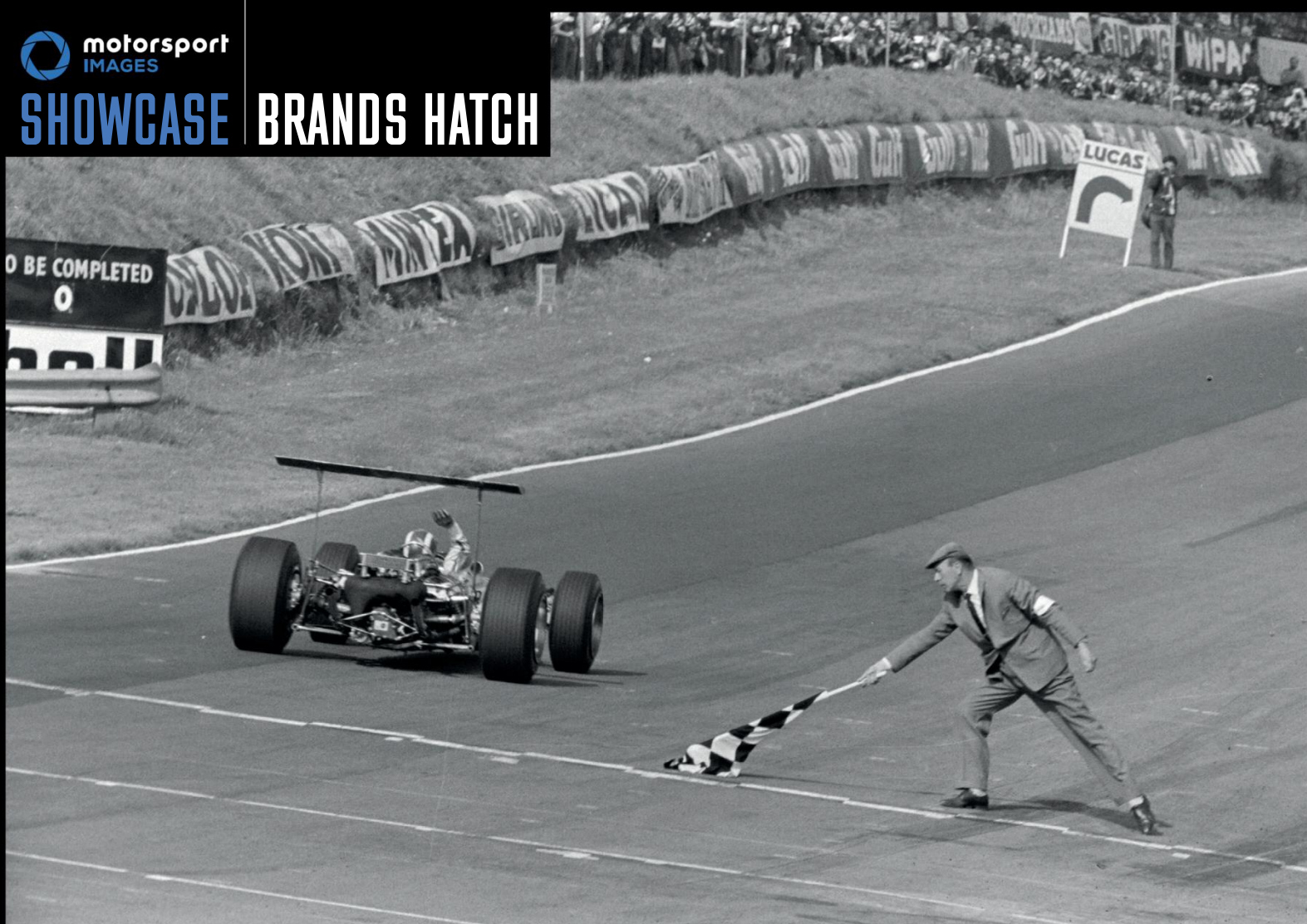
▲ Druids... “the hairpin”, as it was always referred to by commentators, was negotiated after an uphill braking zone. It was a slow corner in an F1 car, but a difficult one nonetheless and caught out many drivers, including John Watson in 1980

▲ He’d probably waited years for a GP at Brands Hatch, but when the track finally hosted a world championship F1 race in 1964, it was all a bit too much for this spectator and he decided to have a sleep instead. Quite how he managed it, with the cars so close, remains a mystery



▲ For a number of years at the British GP the tradition was that the driver who claimed pole position was rewarded with 100 bottles of champagne, and in 1966 the prize went to Jack Brabham. The Aussie then proceeded to win the race comfortably

▶ It wouldn’t be a British Grand Prix without a performance by the Red Arrows, weather permitting of course. It’s the one thing that is guaranteed to stop proceedings, as it did in 1982 when everyone’s gaze switched from track to sky

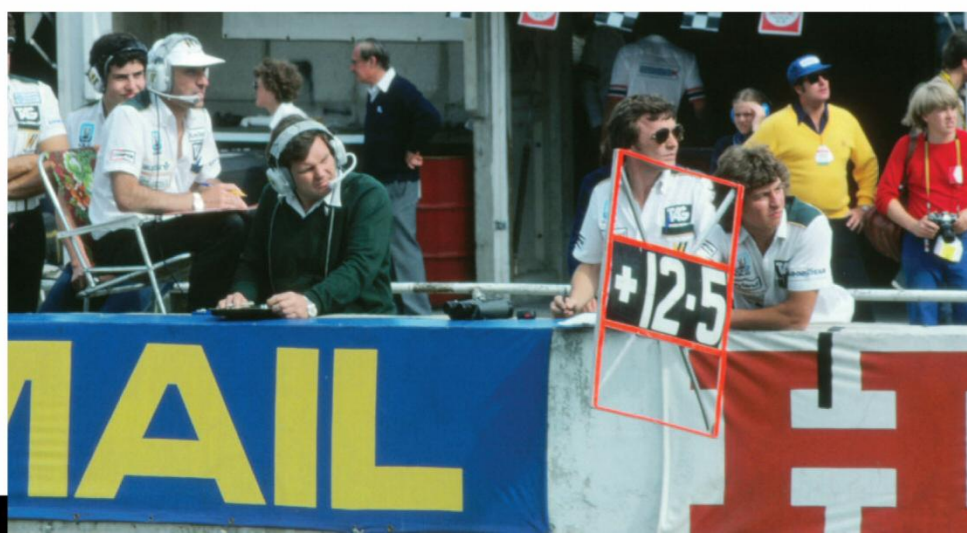


◀ With 30 of the 80 laps of the 1968 British GP remaining it was obvious, barring mishaps, that there would be a new race winner. Jo Siffert (Lotus 49B) and Chris Amon (Ferrari 312) were a minute clear of Jacky Ickx. Siffert saw the chequered flag first



▲ Probably the most controversial GP held at Brands was in 1976. British hero James Hunt (11) collided with title rival Niki Lauda at Paddock on the first lap. When Hunt was initially prevented from taking the restart of his home race the crowd were not best pleased...

▶ Frank Williams sits on a garish garden chair as Patrick Head leans on the pitwall, both waiting to see leader Alan Jones come past in the team's Fw07B in the 1980 British GP. And in the red shirt on the right is Steven Tee, who is now GP Racing's principal photographer...



▲ Yes, it's a Formula 1 circuit, although you wouldn't know it from the surroundings. The difference between the crowds around the bowl of the 'Indy' circuit and the almost park-like quality of parts of the GP circuit, as seen in this shot from 1985, are striking



Patrick Tambay (left) and Nigel Mansell chill out before the start of the 1986 British GP. It's hard to imagine two drivers sitting like that before the start of a race today, and if they did they would be surrounded by media before their backsides hit the grass...



For over 35 years Brian Jones simply was 'the voice of Brands Hatch' – for a grand prix or the humble club race. Here Brian interviews Ayrton Senna after the Brazilian had followed Nigel Mansell home in the 1985 European Grand Prix

The circuit, in all its glory, in the build-up to the 1985 European Grand Prix. This aerial shot highlights the main problem that Brands Hatch had as a GP venue, compared with Silverstone, the inability to expand because of the houses in the top right of the picture





SUBSCRIPTION OFFER

TRY 3 ISSUES FOR JUST £3

SUBSCRIBE TO GP RACING MAGAZINE TODAY

DELIVERED TO YOUR DOOR SO YOU
NEVER MISS AN ISSUE





SUBSCRIPTION OFFER



SUBSCRIBE TO ENSURE YOU DON'T MISS OUT ON:

- DETAILED INSIGHT
- STUNNING IMAGERY
- EXCLUSIVE INTERVIEWS
- NEVER MISS AN ISSUE
- FREE HOME DELIVERY
- SAVE UP TO 83%



ACCESS EVEN MORE ONLINE

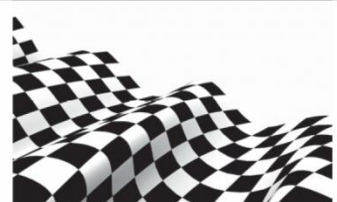
We've made it even easier for you to read about Formula 1. Choose our print + digital bundle option and you'll get access to **Autosport Plus**, unlocking unlimited stories of your favourite motorsport on [autosport.com](https://www.autosport.com).

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

SUBSCRIBE ONLINE:

[WWW.AUTOSPORTMEDIA.COM/OFFER/GPAPR20](https://www.autosportmedia.com/offer/GPAPR20)

Terms and conditions: Offer valid for UK subscriptions by Direct Debit only. For the print only package, your subscription will continue at £22.49 every six months. Direct debit rates are valid for one year after which they are subject to change. Should you wish to cancel your subscription, it will be cancelled on expiry of the current term. 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 14 May 2020.



FINISHING STRAIGHT

TECH TALK

WITH **RODI BASSO**

ILLUSTRATIONS



GIORGIO PIOLA

DELAYS, DEVELOPMENT AND DUAL-AXIS STEERING

This season's racing didn't get underway as expected in Melbourne, but the development war has already begun – and although Mercedes fired the first shots by deploying its innovative dual-axis steering system, its rivals demonstrated that they're not short of ammunition either.

MERCEDES' DUAL-AXIS STEERING SYSTEM

Last year Mercedes was believed to be suffering with the front end towards the end of a stint. And with the DAS system, maybe it has found a way to preserve the tyres better – and even if this means doing one lap more than last season in a stint, when you're talking about 15-20 laps, even one lap is relevant.

You generally set the car up with what we call "toe out", in which the front wheels don't quite point directly ahead, but instead are angled fractionally outwards. This confers better

stability in the turn-in phase of a corner. Within the ride dynamics of the race car, camber, toe and kingpin angle do vary while the car is on the track – depending on the speed, the ride height, and the ride dynamics in general. What Mercedes has done is to introduce a discontinuity, so it's not a gradual change of those three parameters, it's a step change – caused by a mechanical system actuated by the driver pulling and pushing the steering wheel.

My belief is that it provides a benefit across several aspects of car performance, one of which is to reduce the rolling resistance on the straight. You also have an improvement in the temperature spread over the surface of the tyre – you don't get the big peak on the inner side, which is scrubbing when you're running toe-out on the straight – and potentially you see better wear characteristics too, because you're reducing that tendency of the inner face to scrub. There's also likely to be an aerodynamic effect: an improvement in drag reduction and in preparing ►



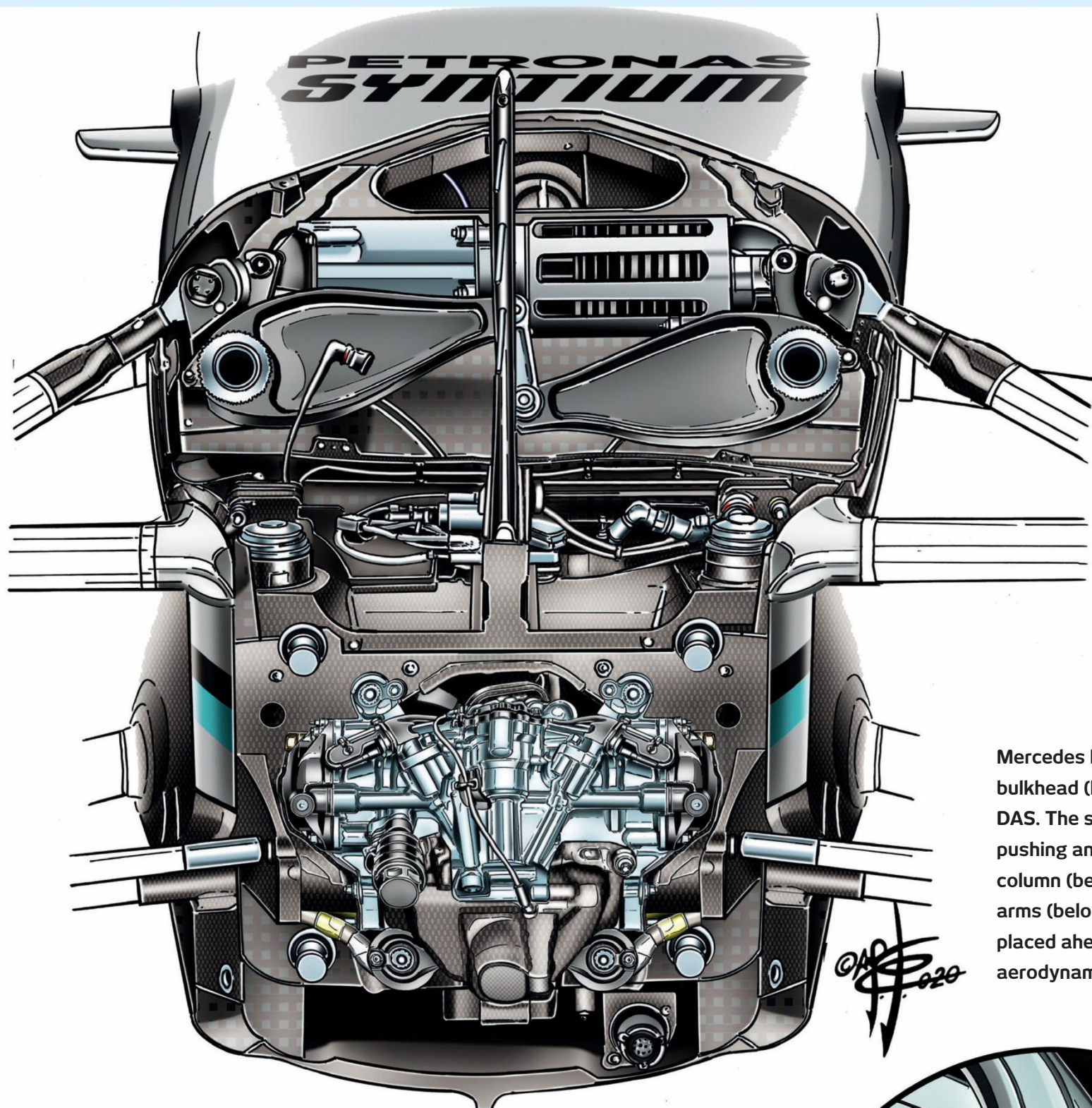
The battle is already on between the top three teams: Red Bull succeeded where Ferrari failed last year, querying a design that will force Mercedes to redesign a component



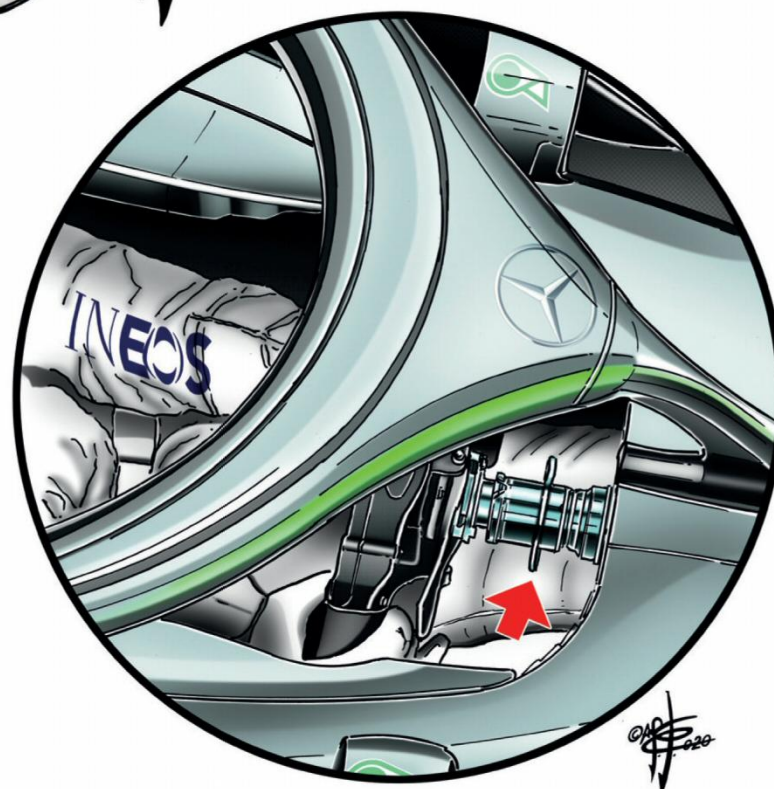
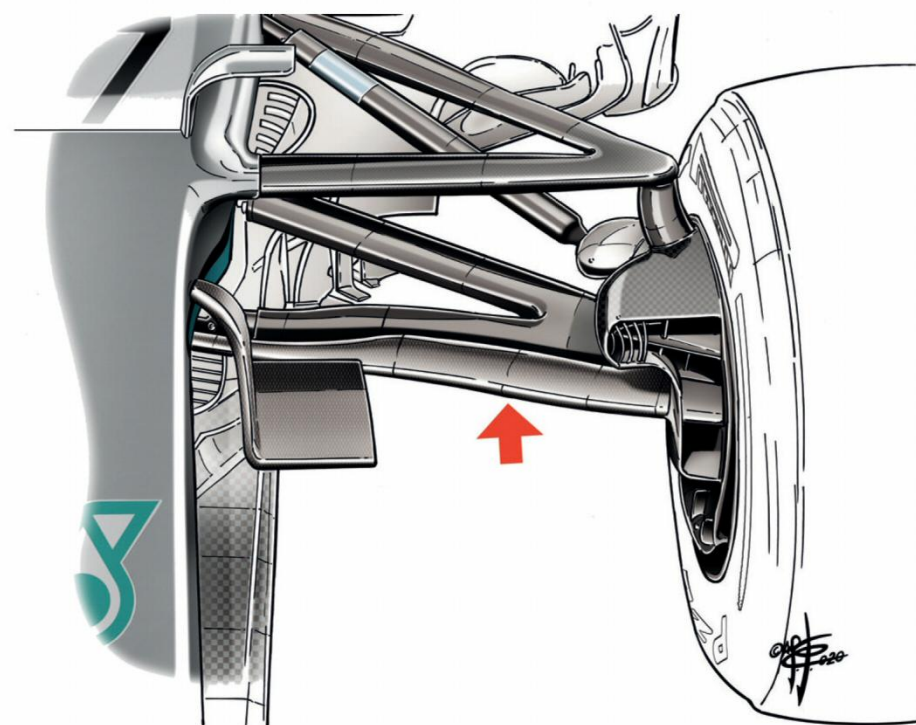


TECH TALK

FINISHING STRAIGHT



Mercedes has repackaged the front bulkhead (left) to accommodate DAS. The system is controlled by pushing and pulling the steering column (below). The steering arms (below left) have also been placed ahead of the wishbones for aerodynamic benefit



“IT WOULD HAVE BEEN VERY DIFFICULT – PERHAPS EVEN IMPOSSIBLE – FOR OTHER TEAMS TO HAVE COPIED IT [DAS], EVEN IF THIS SEASON HAD RUN TO THE FULL 22 RACES ORIGINALLY PLANNED”

the flow towards the rear of the car.

When you're in the corner you go back to the standard setup, basically, where you open the front toe to give stability while the car is turning, and because you've heated the tyres more evenly you improve that stability. On the straight you will be heating them up a bit less overall, but maybe just by a couple of degrees. So, really, we're talking about a few percentage points – a percentage you may not even be able to quantify, because the margin for error in the tyre-temperature sensors is plus or minus one or two degrees. But I still love what Mercedes has done, because it's so F1: 1% is 1%, it's still an advantage. And you go for it. This is the racing spirit.

Obviously, its legality has been questioned. The FIA didn't say it would be banned this season, but that the wording of the regulations would be adjusted so it would be illegal from next year. Several other teams suggested they would protest it at the first race of the season, and Mercedes itself hasn't confirmed whether it would race with DAS.

As you can see from Giorgio Piola's drawings, packaging the DAS system has required Mercedes to redesign the mounting points for the wishbones. This means it would have been very difficult – perhaps even impossible – for other teams to have copied it, even if this season had run to the full 22 races originally planned.

There's also the possibility that Mercedes was being incredibly strategic, and that this has been introduced to distract its competitors from other new aspects of the car that are more relevant and effective in terms of adding performance.

WHY MERCEDES HAD TO CHANGE BRAKE DUCT DESIGN

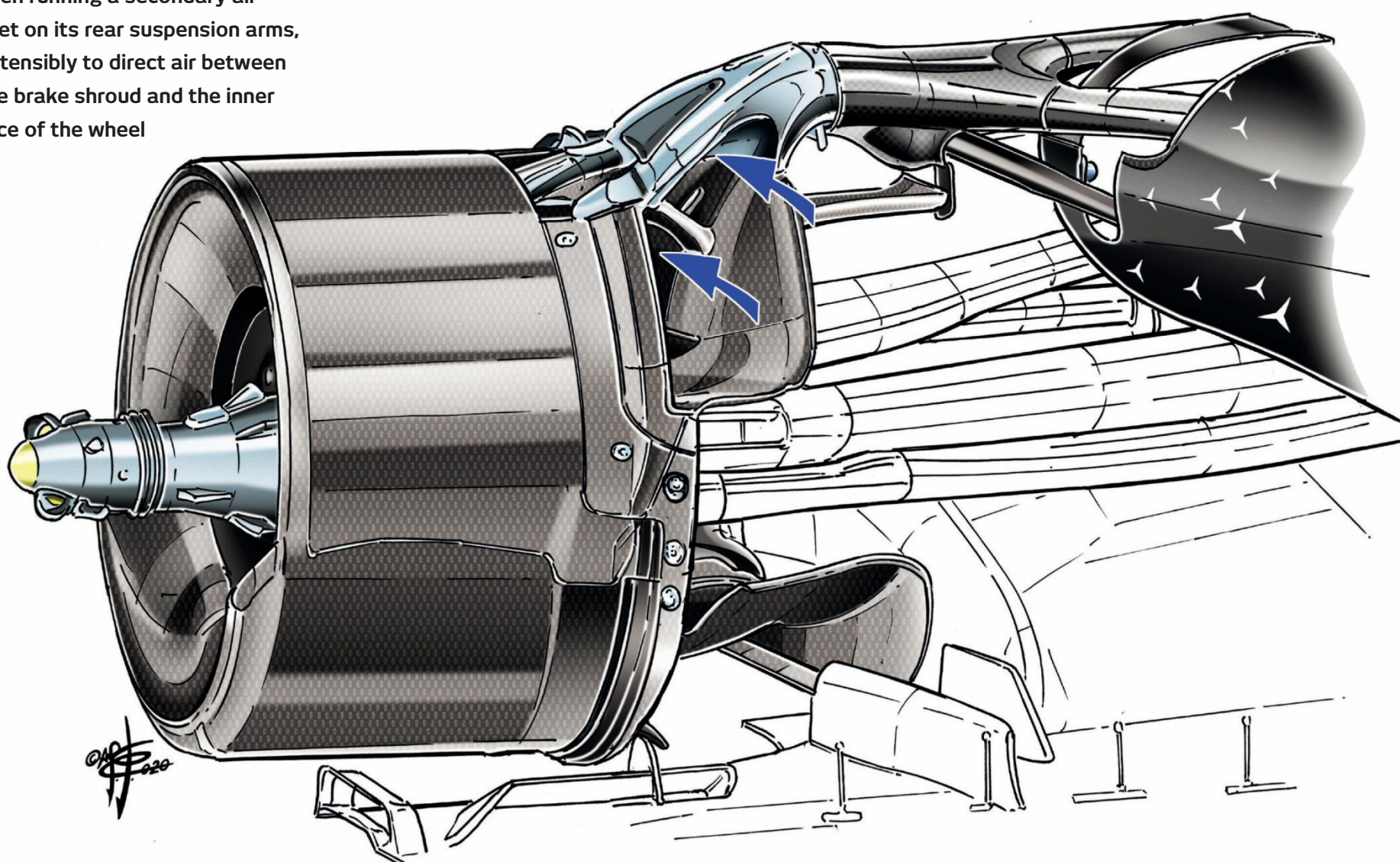
While the future of DAS is open to question, one part of the Mercedes W11 that has been outlawed is an additional element of the rear brake duct. The rules are quite clear that you're not allowed to use these ducts to improve the air flow to the rear wing or blow the diffuser. Prompted by a

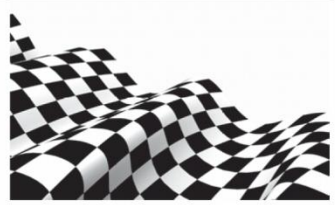
challenge from Red Bull, the FIA has now added further clarity in this area.

Last season Ferrari protested the rear ducts of the Mercedes W10. There is a prescribed area of 160mm above the wheel's centreline in which the duct must sit. But on the Mercedes there was an additional inlet packaged as part of the suspension upright. Mercedes argued, successfully, that this didn't feed air to the brakes, rather it channeled airflow (illustrated by blue arrows) into the void between the brake shroud and the inner face of the rear wheel. This, it claimed, enabled cooling of the wheel rim, thereby helping to manage the temperature of the rear tyres.

But it's also believed this design conferred an aerodynamic advantage, creating an accelerated flow between the lower part of the rear wing and the diffuser. Red Bull phrased its query to the FIA in such a way that the governing body circulated a new technical directive outlawing the presence of air shafts for any purpose outside the 160mm reference area. ▶

Since last year Mercedes has been running a secondary air inlet on its rear suspension arms, ostensibly to direct air between the brake shroud and the inner face of the wheel





TECH TALK

FINISHING STRAIGHT

F1'S ENGINES ARE CLOSER THAN EVER

While we've yet to see all the cars run in race conditions, providing us with the definitive guide to performance, we emerged from testing with a clear message: the gaps between the different power units in terms of performance have come down across the field by at least 50%. And that's great news for the racing when it finally begins.

In terms of the dynamics, for sure you see Ferrari had to take a step back from the 'magic engine' it had from Spa onwards last season. Obviously there were a number of FIA measures imposed in the later races, including an additional fuel-flow sensor on each car, and then on the final day of this year's testing there was the peculiar announcement of an "agreement" between the FIA and Ferrari.

Whatever the details of this – and the FIA undertook that they remained confidential – it's

clear that whatever gains Ferrari has since made with the engine, it has recovered only a fraction of the performance step it lost late last year.

I believe Renault has made a big step forward because it seemed much-improved during pre-season. While some of that can be put down to gains on the chassis, I would be surprised if it had made huge aerodynamic progress, even though it featured a different front-end treatment.

The Red Bull was incredibly competitive and some of that must come from the engine. Honda's people like to make linear improvements, to go step by step, and that was reflected in the pre-season running. This engine programme is coming from a long way back but it's definitely there now.

For me, the top speeds registered by Mercedes were interesting: the peak was 330kmh, but in the last couple of days we saw that drop to around 310, 308kmh.

That's a clear indication that Valtteri Bottas

and Lewis Hamilton were running the power unit in a lower mode, most likely to conserve it after Mercedes and Williams had some issues with the oil system over the course of the two tests.

Granted Mercedes was working on race simulations at this point, but to not use full power was interesting. This is generally a team that likes to qualify P1 and P2 and then manage the race from the front, so if deploying the full power is an issue, that makes it more attackable.

One caveat here is that the unexpected break in racing could give Mercedes an opportunity to correct any reliability issues. Dynos are incredibly sophisticated, and you can push these power units to the same operating temperatures and even greater levels of vibration than they would experience in the car during race conditions. In terms of social distancing, you can run a dyno with only two people and then check the data from home (that is, providing your systems are secure).

It only takes two personnel to run a dyno, so Mercedes might have more time to cure its oil system issues



PICTURES: GLENN DUNBAR; STEVEN TEE



The RP20's nose and front wing are very similar to last year's Mercedes W10

RACING POINT HAS MUCH TO LEARN ABOUT ITS 'PINK MERCEDES'

There's always a learning curve in terms of setting up a new car, especially if you've made a big change to the concept. So, the similarities between Racing Point's new RP20 and last season's Mercedes W10 are no guarantee of instant success.

Consider that in Barcelona testing we saw the RP20 was capable of doing a very strong lap during qualifying simulations, even though the drivers were clearly holding something back. But in terms of race pace on the long runs it wasn't as strong as the Mercedes was last year.

Tyre management seemed to be an issue.

That's not surprising because when you take a design like this – fundamentally copying another car – what you don't get is the experience of the engineers who were running that car in the mothership. And the Mercedes engineers won't be taking the Racing Point engineers aside to say, 'Listen, by the way, this is how we set up the car, and how we manage the tyres.' Plus, the different styles of the drivers has an effect.

In terms of pure performance, engines, tyres and aerodynamics are the significant factors. These are the things that are worth seconds. When the differences between cars comes down to factors such as tyre wear and consistency, suspension is a major influence. This is where the big teams have an advantage at the moment, because they've been able to develop very

sophisticated systems which optimise the ride dynamics and ride height value for the best point of the aero map in any given area of the track.

You can copy the aerodynamics and even carry over some of the suspension design, but you need experience and understanding too, which is why the Racing Point is unlikely to be at the same level as last year's Mercedes.


RENAULT'S NEW APPROACH

Over the winter there was another technical restructure at Renault, with Dirk de Beer returning as head of aerodynamics and Pat Fry joining as chassis technical director. Although Fry didn't take up his post until February, having served gardening leave after working with McLaren as a consultant, these two hirings were announced together in early November last year. Apparently, Fry valued de Beer's work highly when they worked together at Ferrari.

While these new personnel arrived too late to have a major influence on the RS20 concept, the new front end carries a lot of the hallmarks Fry brought to McLaren. While there, he massively simplified the design, going back to basics in many areas, and favouring a lean car that was easy to design and assemble.

Last year's Renault carried fundamental flaws in its aero concept which stemmed from the front end. The centre section of the car – bargeboards and sidepods – and the rear wing and diffuser all have to work with the air flow which is displaced and conditioned by the nose and front wing. In this way, we saw that upgrades to the bargeboards, floor and rear bodywork didn't generate the right results because the front end wasn't 'speaking' to them properly.

Renault has therefore focused on the front end, adopting a Mercedes-style narrow nose with a greater degree of curvature across the top, together with a more coherent front wing in terms of directing airflow around the car rather than outside the tyres. Clean, fast flow through the front suspension gives more potential to develop the aero devices downstream.

The next challenge is to review and understand the performance of this new front end to check that the complete system is now working, because there's always the possibility that a change in philosophy such as this introduces other problems. 

“THE MERCEDES ENGINEERS WON'T BE TAKING THE RACING POINT ENGINEERS ASIDE TO SAY 'LISTEN, BY THE WAY, THIS IS HOW WE SET UP THE CAR, AND HOW WE MANAGE THE TYRES'”

These are unprecedented times

The health of our family, friends and our community has to be our no. 1 priority right now. Working remotely, not being able to see friends and with no live sport on the TV can make it really tough to stay positive though!

Motorsport Tickets has five features to show you that there will be light at the end of the tunnel...



Ronnie Bucknum in his Honda RA272 | 1965 Monaco Formula 1 Grand Prix
Image used under license from Motorsport Images

WHEN YOU BOOK WITH MOTORSPORT TICKETS YOU ALWAYS RECEIVE

**PRICE
PROMISE
GUARANTEE¹**

**100%
GENUINE
TICKETS**

**SECURE
SIGNED FOR
SHIPMENTS**

**EARN RACE
REWARD
POINTS**

**OPTIONAL
BOOKING
PROTECTION**

**★★★★★
CUSTOMER
SERVICE**

¹ See motorsporttickets.com/pricepromise for full details of offer and all terms & conditions

² Money back guarantee applies only to orders made between the 23 March and 31 May 2020

Stay in control

Sign up at motorsporttickets.com/JOIN and be notified the moment the amended 2020 motorsport calendar goes live

Great content on our social channels

Throughout the shutdown period and beyond we will be handpicking the best content from across Motorsport Network properties including the live streaming of all esports racing courtesy of



Worry free cancellation

Book any race and be confident you are getting the best price with our Motorsport Tickets price promise guarantee¹ with the added safety that if the event is cancelled or postponed you can get 100% of your money back²

Access our exclusive content pack

Book for the future and get access to world-class content on Autosport Plus, Motorsport.com Prime and thousands of hours of on-demand video at motorsport.tv



P R I M E



motorsport.tv

Purchase a gift voucher & retain flexibility

Purchase one of our gift vouchers today, lock in all the benefits of the Exclusive content pack, then just redeem your voucher for the race of your choice as soon as the calendar is finalised



**motorsport
TICKETS**

F1 | MotoGP | WEC | Le Mans | Isle of Man TT | Goodwood Revival | Experiences | Factory Tours & More

Visit motorsporttickets.com or call 0208 970 7988



ESSENTIALS

F1 UPGRADES

Enhance the F1 experience with the latest must-have products

TO HELL AND BACK: AN AUTOBIOGRAPHY

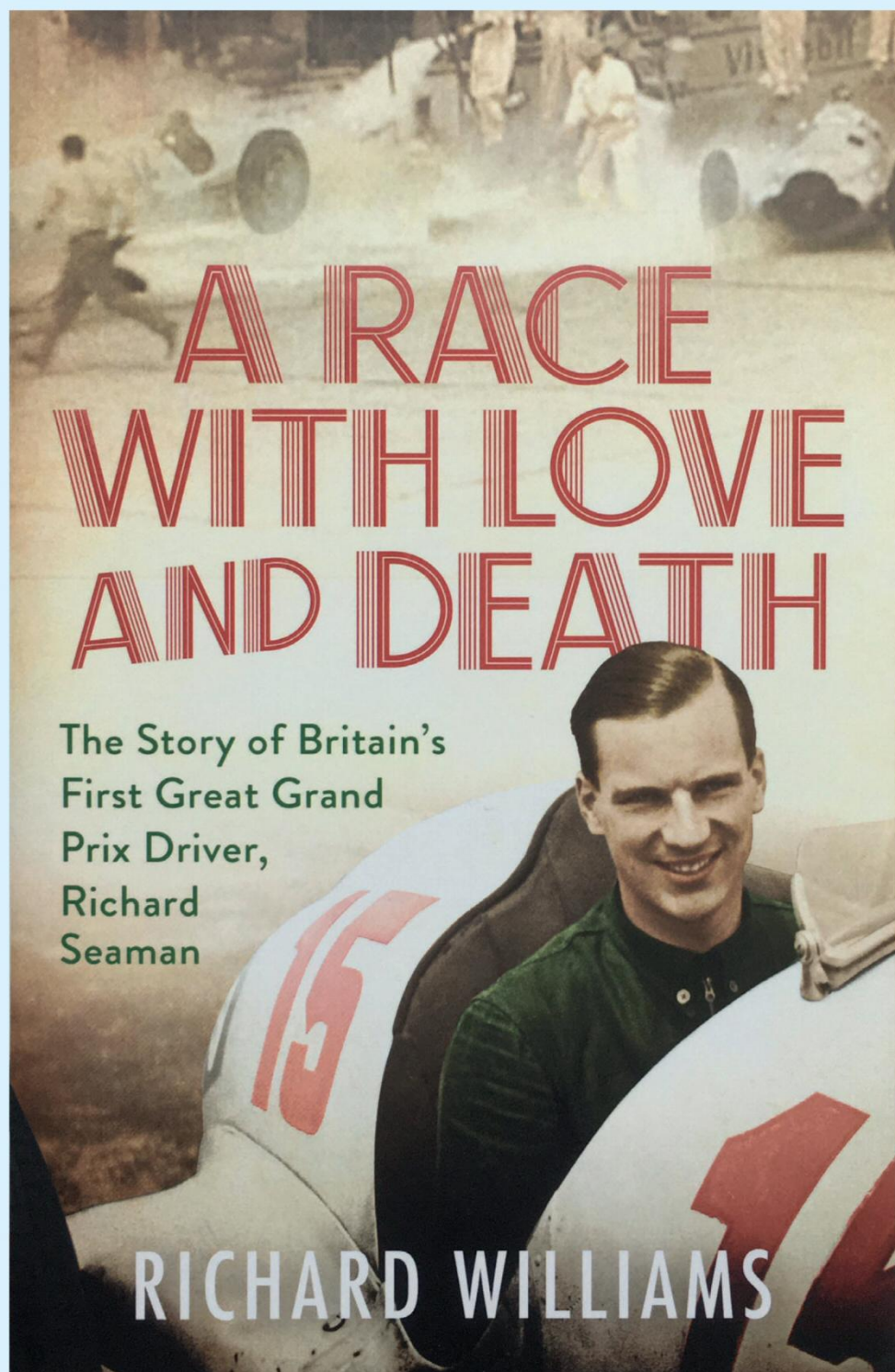
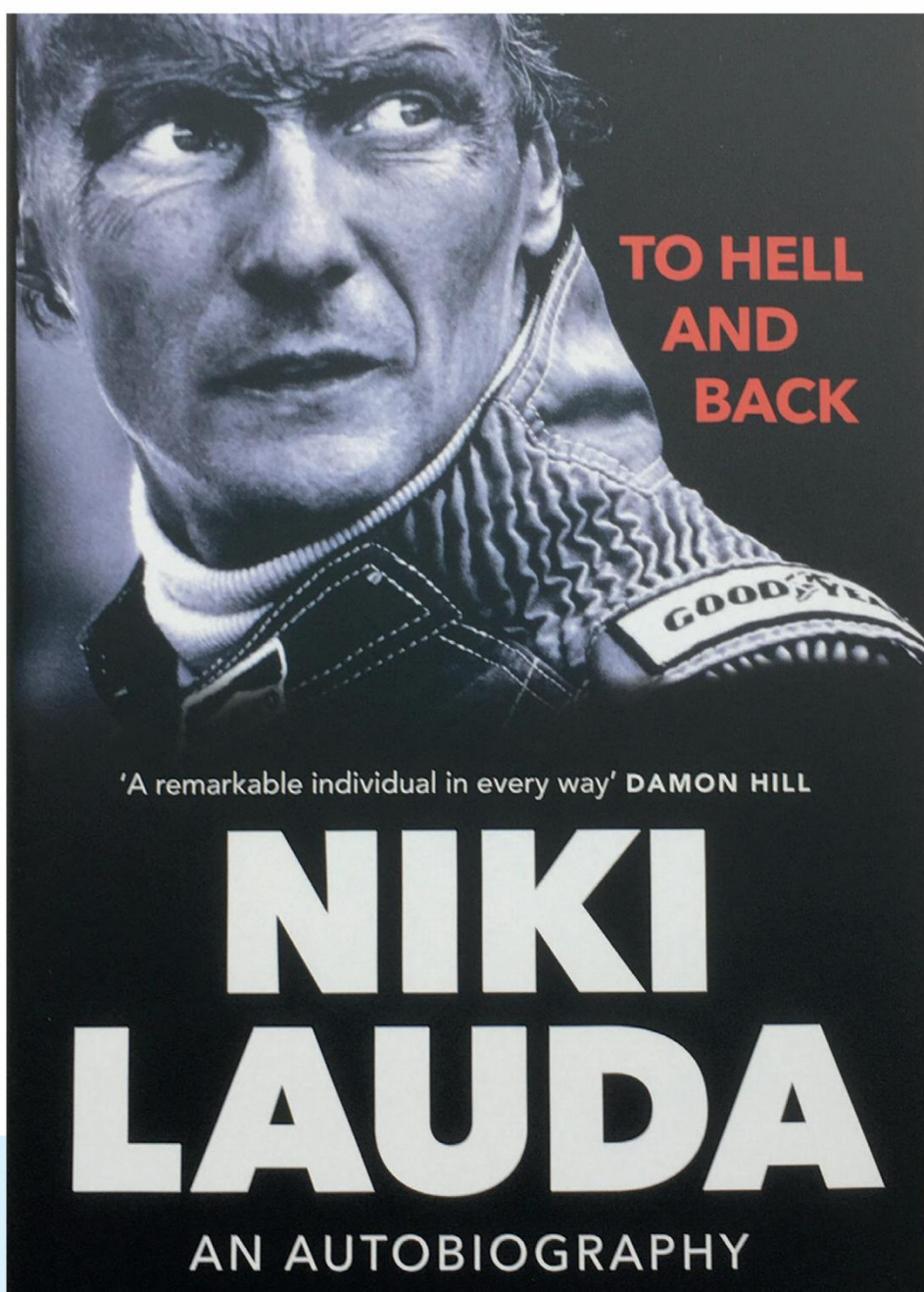
Author Niki Lauda

Price £16.99 (hardback)
penguin.co.uk

Long out of print, Niki Lauda's remarkable autobiography *To Hell And Back* has been given a timely re-release following his death last year. Within its pages Lauda describes his career with typical pithiness, pulling no punches when it comes to his horrific accident at the Nürburgring in 1976 and its aftermath. In life he was famous for the direct connection between his brain and his mouth, and this blend of

honesty and scabrous plain-speaking is in evidence on every page of this intimate memoir. The McLaren chapters must make particularly difficult reading for former boss Ron Dennis, who doesn't come out well.

Since the book ends with Niki's racing career, the publishers have commissioned a rather superfluous introduction and postscript by former *Times* correspondent Kevin Eason. While these do feature a great deal of interesting details, the narrative unfurls in a scattershot, non-linear direction, leaving the reader wondering what point the author is trying to make and when they might get on with it – unlike the original text.



A RACE WITH LOVE AND DEATH

Author Richard Williams

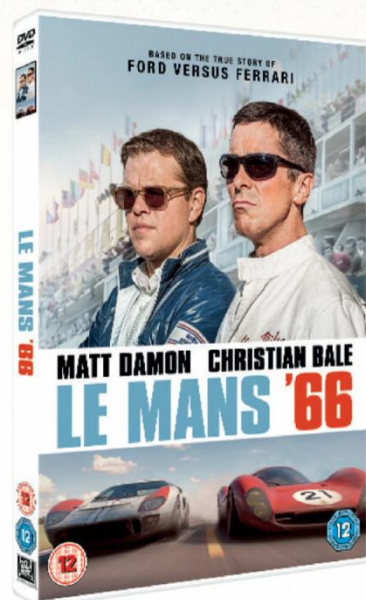
Price £20.00 (hardback)
simonandschuster.co.uk

The life of the prodigiously talented pre-war grand prix driver Richard Seaman should be far better known. His mistake, so far as posterity is concerned, was to accept a contract with the Nazi-government-backed Mercedes team in 1937, just as tensions between Britain and Germany were building towards war. The British public therefore struggled to engage with his exploits; when he succumbed to injuries sustained in an accident at the 1939 Belgian Grand Prix, no one from the RAC or

BRDC was present when Seaman's body was repatriated, and the *Daily Telegraph* announced his death with a four-paragraph story headlined "Famous driver killed".

Seaman was born into privilege, educated at Rugby and Cambridge, but developed an obsession with motor racing and dropped out of university to pursue a career in it. Repeatedly 'touching' his family for money created tensions that would rise to the surface years later, when he married the daughter of the founder of BMW.

The gifted sports writer – and sometime *GP Racing* contributor – Richard Williams recounts Seaman's story vividly and with aplomb, ably capturing the spirit of the age.



LE MANS '66

Price £9.99 (DVD)

£14.99 (Blu-Ray)

£24.99 (4K);

Streaming prices vary

fox.co.uk

Slickly mounted by Academy Award-nominated director James Mangold, *Le Mans '66* – known as *Ford vs Ferrari* in overseas markets – offers a lightly fictionalised take on the real-life 1960s grudge match between Ford and Ferrari. Humiliated after a proposed acquisition of Ferrari fell through, Blue Oval executives went all-in on a race programme to cut the Prancing Horse down to size. When the initial project came up short, gritty sportscar driver and tuner Carroll Shelby (played here with relish by Matt Damon) was brought in to turn it around,

aided by prickly British ace Ken Miles (Christian Bale, on typically excellent form).

Le Mans '66 picked up four Oscar nominations including Best Picture. In that category it lost out to the all-conquering *Parasite* but it did pick up Best Film Editing and Best Sound Editing, making it the first film based on motor racing to win at this level since John Frankeheimer's seminal *Grand Prix* in 1967.

As ever with such films, purists and rivet-counters will bridle at the liberties taken with history and the laws of physics (ie the well-worn Hollywood trope of changing down a gear to overtake while, er, running at top speed). Everyone else will enjoy a well-crafted sports/buddy movie that zips along with vim and vigour while a fine cast makes the most of the sparkling dialogue.

SPARCO MARTINI HERITAGE COLLECTION

Prices TBC

sparco-official.com

Unleash your inner Carlos Reutemann, Gerard Larrousse, Vic Elford – or, for younger readers, perhaps your inner Valtteri Bottas or Felipe Massa – with this new product range, the result of a collaboration between kit manufacturer Sparco and Martini Racing. Based on established Sparco products (the Replica Racing suit, the Air Pro RJ-5i and RF-5W helmets, the Pro 2000 QRT and R100 seats, and the Icon office chair) these items that could bring one of motor racing's most evocative liveries to your cockpit – or, indeed, your living room.





FINISHING STRAIGHT

THE FINAL LAP

@CoddersF1



FLAT CHAT

{ FULL THROTTLE
MUSINGS WITH
STUART CODDLING }

PICTURES  **motorsport
IMAGES**

AUSTRALIA: WAS IT SUCH A DIFFICULT CALL?

Hindsight is indubitably the most precise of all the forensic sciences, and certainly in the wake of the Australian GP's cancellation there were those who heaped scorn on Formula 1 for persisting until the very last minute. Was it wrong? Or are the wise-after-the-fact brigade simply barking their opinions from atop a wobbly ivory tower constructed from panic-bought economy-grade toilet roll?

Questions were already being asked during pre-season testing in Barcelona about the wisdom of carrying on regardless. Not a single media 'scrum' went by without the victim being duly interrogated about COVID-19. And the response was uniformly to bat responsibility on to the FIA and F1 itself: "They will look after us," said Haas team principal Guenther Steiner when asked if he was confident about even getting his personnel and equipment to Melbourne. "The problem is if we get stuck there..." It would soon become apparent that this latter point was one not many

in authority had dwelled on.

The problem was that fundamentally the FIA and F1's hands were tied by the same intertwined issues: responsibility and money. Until the Australian health authorities were prepared to step in and insist events such as the Grand Prix not go ahead, whoever cancelled it would end up bearing the loss of the substantial sanctioning fee. Regardless of the various stakeholders' insistence that they put the health and safety of participants first, this large sum of money was at the very least neck-and-neck in that particular list of priorities.

**The containers were
unloaded in Melbourne but
no cars ran on the track**



Intercontinental GPs have long lead times. The tyres and much of the track infrastructure are transported by sea. It's an intense logistical exercise. And as the wheels began to turn ahead of the 2020 season, the prevailing belief among governments worldwide, let alone sporting authorities and promoters, was COVID-19 could be contained.

Colleagues attending the Ferrari launch in Italy in mid-February were temperature-scanned on arrival in Bologna airport. No such precautions were in place in many other European airports at that time. It was the virulence with which COVID-19 spread around Italy in early March that changed the worldwide consensus at government level: the virus couldn't be contained, only delayed.

But as the clock ticked by towards the start of the season, the strategy of F1 as a whole remained predicated upon a form of containment – that if the virus could be kept outside the 'bubble',

the show could and would go on. The flaw in that strategy was exposed when a McLaren team member tested positive for COVID-19 on the Wednesday of race week. It was already inside.

In hindsight, yes, it's easy to highlight the foolishness of believing that 1500-odd people could travel across the world, the majority of them in cramped economy-class cabins, without being exposed to the virus if they hadn't already. But at the time there were still those who thought it was a giant fuss over nothing. Popular opinion was polarised between those engaging in fist fights with each other over 48-packs of Andrex and those who insisted that going through a coronavirus infection was no worse than a dose of 'man flu'.

F1 still thinks the season can begin, though it doesn't know when. But what happens then? People – even if only essential staff – will still need to attend such races as appear on what will be a truncated calendar. COVID-19 isn't going to obligingly vanish from the scene in the coming months and years. COVID-19 will change the way we work, how we interact, how we travel. Pretending it isn't going to be a problem is how we got into this mess in the first place.

GP Racing now has a podcast!

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

Who Works Sports Guides

1990 **31** 2020
YEARS

Who Works Sports Guides

The Motorsport bibles

Hard copy books, ebooks & mobile accesses

Your shortcut to the right people !

Book covers not contractual

The image shows two hardcover books standing upright. The left book is 'Who Works in Formula One' (2020 edition) with a black cover and red text. The right book is 'Who Works in Motorsports' (16th Edition, 2020) with a black cover and white text, featuring a silver racing helmet. To the right of the books is a laptop displaying the 'SPONSORS & SUPPLIERS' section of the digital book, showing logos for CITRIX, CLARO, and CNN. In front of the laptop is a smartphone displaying the 'KEY PEOPLE' section, listing names and photos of key figures in the motorsport industry.

Who Works in Formula One
+828 pages

Who Works in Motorsports
+960 pages

Each new edition 100% researched & updated

All you need to know about the 2020 racing season !

Information on teams, drivers, cars, key people, engineers, sponsors, suppliers, marketing, PR & press officers, photographers, journalists, tracks and officials.

10.000 names with positions, 3600 detailed contacts, 430 companies, 190 teams, etc.

Everything in the books is available via the ebook & mobile access just a click away.

Contact details with direct links to emails, websites, phone numbers, Facebook, Instagram and Twitter accounts.

Available from our website

Tel: +44 (0) 20 71930 686 - Email: orders@whoworksin.com

Order on www.whoworksin.com

CUPRA ATECA



WE BELIEVE IN DESTINATION,
NOT DESTINY.

CUPRA ATECA. CREATE YOUR OWN PATH.

When we created a sport SUV with 300PS, DSG Automatic Gearbox and 4Drive, we were not following the crowd. When we crafted each detail, inside and out, we were not taking an easy road. When we chose to have 19-inch alloy wheels in aluminium and carbon fibre details, we didn't settle for the standards. We only knew. Not what we would find along the way, but exactly where we wanted to go. And here we are. Made for those who create their own path.

[CUPRAOFFICIAL.CO.UK](https://www.cupraofficial.co.uk)



Official fuel consumption for the CUPRA Ateca mpg (litres/100km): 31.7 (8.9) – 32.5 (8.7). CO₂ emissions 197-199 (g/km).

*Figures shown are for comparability purposes; only compare fuel consumption and CO₂ figures with other vehicles tested to the same technical procedures. These 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, driving styles and vehicle load. Data correct at April 2020.