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28 FEBRUARY 2019

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Ferrari edge could help Vettel get back to his best

Given the events of 2018, if Sebastian Vettel and Lewis Hamilton were in a fifty-fifty situation on track now, you'd put your money on Hamilton coming out on top. The Mercedes ace undoubtedly had the psychological advantage at the end of last season.

But such dynamics can change quite easily. If – as testing has suggested – Ferrari has an advantage, Vettel could quickly get back to his best. We all know the four-time champion knows how to nail a qualifying lap and win a race from the front (all but five of his 52 F1 victories have come after starting from the front row), so a car advantage, even a small one, should give him the boost he needs early on in 2019. He would then hopefully be in a better position to take on Hamilton if and when Mercedes comes on strong later in the campaign, as it did in both 2017 and 2018. It's already brought a revised car to the second week of testing!

An on-form Vettel against Hamilton, who drove better than ever in 2018, is what we want to see *throughout* this season. And that's before we mention the possible threats from Charles Leclerc and Max Verstappen.

This, of course, assumes that what we saw in the first test last week continues through this week and on to the Australian Grand Prix on 17 March. Testing times can be notoriously misleading, but this week our experts on the ground, including ex-F1 designer Gary Anderson, unpick all the data from the first Barcelona test to paint a picture of where all the teams stand (page 14). They'll be doing the same on test two in our bumper season preview issue next week (7 March), so be sure to pick up a copy to see if Ferrari can maintain its early lead.



Kevin Turner

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NEXT WEEK F1 PREVIEW

60 pages on who's hot
and who's not ahead of
the Australian GP
season opener



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Motorsport Images/Andre

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BMW FIELDS NEW 3 SERIES FOR

BTCC

Reigning British Touring Car champion Colin Turkington will go into battle in this year's competition with a brand-new weapon: the new-shape BMW 3 Series.

The roadgoing version of the German saloon car goes on sale on Saturday next week (9 March), and BMW BTCC squad WSR is building up three examples to replace the outgoing 125i M Sport on the grid when the season kicks off at Brands Hatch on 7 April.

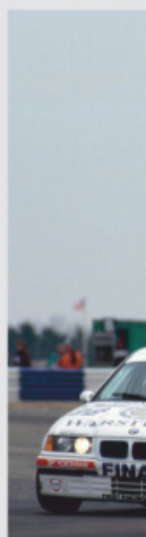
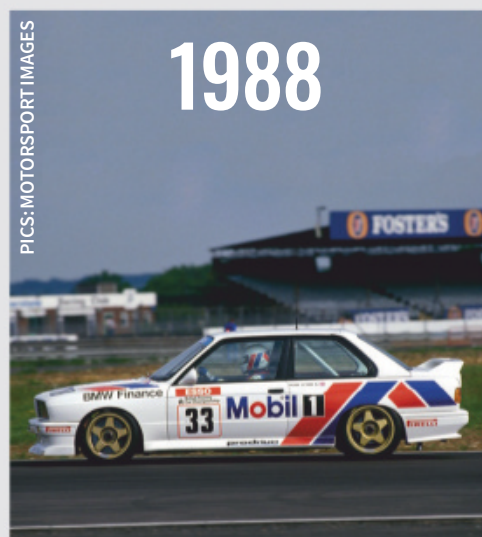
Turkington and team-mates Tom Oliphant and Andrew Jordan (who retains his Pirtek livery) will all race the rear-wheel-drive car, which has a bodyshell from a 330i M Sport. The car will be fitted with the same Neil Brown-built B48

two-litre turbocharged motor that powered Turkington to last year's crown.

Three-time champion Turkington, who won the 2009 title in a WSR-run 320si, said: "It's going to be great to get back behind the wheel of the 3 Series. It brings back some very happy memories. We know the BTCC never stands still, and you have to keep pushing forwards. We had got every last bit – and probably even more – out of the 1 Series but now we've got a new programme to get our teeth into.

"[This new programme] takes me back to 2013 when we brought the 125i M Sport in: there is work to be done, but I enjoy being in the middle of making it all gel. There is a lot of ground to cover but, if it all goes according to plan, I think we'll be at the party from the opening race."

The 3 Series has a long and successful history in





BTCC DEFENCE

the BTCC (below), stretching back to Frank Sytner's title triumph in a Prodrive-run M3 in 1988. The model was driven to three title successes on the bounce by Will Hoy, Tim Harvey and Jo Winkelhock from 1991-93, before Turkington's 2009 success.

The 125i M Sport was built as a private project by WSR, but since BMW UK joined forces with the team in 2017 the entry now runs in the manufacturers-constructors competition.

Team boss Dick Bennetts said: "A lot of work and countless hours lay ahead, but we are confident of turning this car into a winner. The 3 Series will hit the BTCC grid in 2019 and we are excited to see what the new version is capable of. We aren't sure when the car will hit the track yet but I hope we'll be able to get some mileage before the first meeting."

MATT JAMES



1993



2009



Collard joins Plato in line-up of veteran Vauxhall scrappers

BTCC

Veteran British Touring Car Championship battler Rob Collard has switched to the Power Maxed Racing Vauxhall team this season to line up alongside Jason Plato.

The 15-time race winner has inked a deal with the factory-backed squad and is relishing the chance to get back into a front-wheel-drive tin-top for the first time since 2007, after splitting with the official BMW team of WSR. The move means that the Power Maxed Astras will be raced by two drivers with a combined age of 101 years.

"It's an exciting new challenge – I've been watching Power Maxed's development over the last few years and they are a team on the move," said Collard. "It will also be interesting working with Jason Plato [leading Collard, above]: we've been rubbing door mirrors for so long but it will be a different story now we are in sister cars."

While Power Maxed has completed its line-up, Team BMR has also named its two drivers, with 2017 champion Ash Sutton staying put and former rookie title winner Senna Proctor shifting over from the Vauxhall squad to race the factory Subaru Levorg contenders.

The 25-year-old Sutton (right), a 13-time BTCC race winner, had been expected to remain with Warren Scott's BMR operation, and believes he is in contention to battle for a second crown.

"We had a lot of bad luck last year, which cost us the chance to go out and defend the title," said

Sutton. "But, having been in touch with the hard work going on back at base throughout the winter, it's shaping up nicely."

"With our developments for the season, we're aiming for a huge uplift. To see things unfold and watch the Subaru Levorg GT start to take shape again has left me champing at the bit."

The team will begin a test programme shortly before the championship's media launch on 27 March. BMR boss Micky Sergeant said: "It's a given I'm thrilled that Ash is remaining with the team. Continuity is a word bandied about quite often in motorsport and it's key for both the team and Ash in order to build on and replicate our success."

Proctor's move represents a return to the stable of BMR – he was part of the squad's academy programme in Ginetta Juniors in 2015 and in the Renault UK Clio Cup in 2016. "When the call came in from BMR everything seemed to fit perfectly and it was an easy decision to make," said Proctor. "I have found my feet and I'm ready for the next step."

MATT JAMES



JEP/MOTORSPORT IMAGES



FIA launches high-tech bid to root out rally ‘renegades’

WRC

If you can spot yourself in the picture above these words – and you’re not the driver or co-driver – then the FIA has a few words for you: continue with your madness and they’ll find you and deal with you.

Motorsport’s governing body is determined to stamp out the social media spotlight-searching element in rallying’s spectating ranks. And the approach is higher-tech than ever.

The FIA is working closely with DFKI – the German Research Centre for Artificial Intelligence – in an effort to identify this minority.

Head of circuit and rally safety Stuart Robertson told Autosport: “The FIA has initiated a project that will help us detect the locations of spectators through image recognition, anonymously, using onboard cameras and various other tools. We’re employing new high-level technology to identify where these people are located. We know they’re waiting until the safety crews have passed through before moving into [dangerous] positions. We’re working on a system to send an alert to the clerk of the course, making them aware of an issue in a particular corner.”

The primary action could be the deployment of a slow zone, with communication sent to the following competitors, advising

them to pass that corner at severely reduced speed. “The message is simple,” Robertson continued. “You can’t be that renegade spectator anymore. We’ll know where you are and we’ll be coming to get you.”

As well as that, the FIA has launched some era-defining and potentially sport-saving Rally Safety Guidelines. Robertson has led two years of global research and delivered – with direct input from WRC safety delegate Michele Mouton – a 105-page document detailing every aspect of safe spectating. The RSG document was published on the FIA’s website last week.

Crucially, the guidelines are aimed at lifting best practice from the WRC and delivering it in affordable, consumable form to national and regional rallying.

Robertson added: “We see a lot more issues with spectators at national or regional level. We need to get the message across and one way to do this is by using the WRC as our shop window to demonstrate best practice and educate people in these vital messages of how to organise events as safely as possible for spectators.”

FIA rally director Yves Matton described the guidelines as key to rallying’s sustainable future. “They educate in the best habits of rallying,” he said. “This is the main work the FIA has done since a long time in this area.”

DAVID EVANS

‘Slower’ F1 cars will be quicker

FORMULA 1

Formula 1 technical chiefs are predicting that the 2019 cars will be faster than last year, despite previously expecting the rule changes to slow them down.

F1’s aerodynamic regulations were altered for this season with the aim of boosting overtaking by stripping back downforce levels, and teams had been initially predicting that the cars would be up to two seconds per lap slower than in 2018.

Ferrari team principal Mattia Binotto said at the launch of his team’s 2019 car that “we predicted an impact of 1.5s per lap when we [first tested] in the windtunnel [and] it’s what we got”.

But the reduction in speed did not materialise at the opening pre-season test at Barcelona last week. By the end of the running, Nico Hulkenberg’s (below) fastest time was just 0.211s slower than the winter testing record of 2018, and 1.940s quicker than Lewis Hamilton’s table-topping benchmark from the first week of 2018 testing.

Better weather conditions and a faster track surface played their part, but there is little doubt that teams have managed to recover the expected lost downforce.

Renault technical director Nick Chester said: “By the end of testing the cars are going to be a chunk quicker than they were this time last year, and I think they’re going to be probably a bit quicker than the end of 2018 already.”

Toro Rosso deputy technical director Jody Egginton added that, while initial estimates had been pessimistic, the teams’ ability to recover losses should never be underestimated. “F1 engineers are fantastically good at overcoming challenges,” he said. “The key point is that when people were talking about the lap time delta, I think it’s got a little bit lost in translation.”

“The first moment we put the car in the windtunnel configured to the new regulations, we lost a chunk of load, a chunk of aero balance, and the shape of our aero map was not what we wanted. That would have been similar for a number of teams. So then you get to work on recovering that as soon as you can. In our case, we’re learning all the time to find opportunities.”

JONATHAN NOBLE

➔ P14 F1 TESTING





New F3 racers on track in shakedown

FORMULA 3

FIA Formula 3 Championship teams got their first taste of the new car in a shakedown at Magny-Cours last week.

A combined total of 635 laps was completed last Wednesday by the 10 cars, with each of the series' teams allowed to run one of the Dallara-built machines. Teams rotated drivers, with a total of 23 getting their first taste of the car. The F3 2019 is similar to the GP3 Series car it replaces, but has more-dramatic aerodynamics and more options on suspension adjustment.

Dominant F3 European Championship team Prema reportedly completed the most number of laps in the shakedown, with its three drivers – Robert Shwartzman, Marcus Armstrong and Jehan Daruvala – each taking a turn behind the wheel.

“I am very pleased with how the shakedown went today,” said FIA F3 technical director Didier Perrin. “The feedback from the teams has been positive, and more importantly the feedback from the drivers seems to show that the car is well-balanced and that it seems to be delivering some good downforce level, and that it is pleasant to drive.”

The car's first official test will be at Paul Ricard on 20-21 March.



Meanwhile, a raft of recent driver announcements includes GP3 and F3 European race winner Jake Hughes (above), who will spearhead the line-up of former Mercedes DTM works team HWA. Hughes, who was powered by an HWA-built Mercedes engine in his F3 season in 2017 and on his return to the category to finish fourth in the 2018 Macau Grand Prix, tried out with the firm's DTM squad in the Young Driver test at Jerez last December. He joins Dutchman Bent Viscaal – a Euroformula Open frontrunner last season – and Euro F3 veteran Keyvan Andres in the team.

HWA team boss Thomas Strick, who engineered Gary Paffett to the 2005 DTM title with Mercedes, said: “It's a stroke of luck for us that we were able to get Jake

Hughes on board as a driver. He has already proven his strength at this level on multiple occasions. No doubt he will help us find our feet quickly in this new series.”

Former Red Bull Junior Niko Kari becomes the first driver named by Trident for the coming season. The Finn starts his fourth season at this level, after one campaign in Euro F3 in 2016, and then GP3 in 2017-18, before moving to Formula 2 in the latter stages of last year. Pedro Piquet and Devlin DeFrancesco also took part in the shakedown at Magny-Cours with the Italian team, so don't be surprised to see them fill the remaining seats.

Russian Artem Petrov, who raced in Euro F3 last season, has become the second driver on board at Jenzer Motorsport after his race-winning start to 2019 in the Toyota Racing Series. The St Petersburg teenager joins Yuki Tsunoda at the Swiss team.

The driver with the biggest mountain to climb appears to be Roman ex-motorcycle racer Alessio Deledda, who has joined Campos Racing after a solo season in the Italian Formula 4 Championship in which he swiped a best result of 17th. He took part in last weekend's Euroformula Open Winter Series at Paul Ricard – for old-spec F3 cars – and circulated four seconds off the pace.

JACK BENYON AND MARCUS SIMMONS

Mikkelsen benched by Hyundai for Tour of Corsica



WRC

Hyundai's team principal is Northern Italian to his core. And, like any good Turinese, he was born and brought up on Lancia. In the same way that Lancia bosses Cesare Fiorio or Claudio Lombardi would have sacrificed a Markku Alen or Juha Kankkunen for the good of the team three decades ago, so Andrea Adamo has benched Andreas Mikkelsen for next month's Tour of Corsica so he can run Sebastien Loeb and Dani Sordo.

Despite what was regarded as a watertight

14-round World Rally contract alongside team leader Thierry Neuville, the Norwegian was told after Rally Sweden that his services wouldn't be needed on the French island. He will, instead, be trusted with testing latest-spec homologation parts for the gravel-trim i20 Coupe WRC.

"I am paid to take decisions and I take decisions," said Adamo. "I have to make the best for Hyundai and looking at the drivers and crews Hyundai has it's easy to see that, on paper, Loeb and Sordo and Thierry are the strongest guys on Tarmac that we have.

"I grew up in Lancia days with the focus to win the manufacturer title. That's where my focus is. Andreas is a clever and professional guy who more than understood and will be more than focused to help Hyundai win the manufacturers' championship doing the thing that I asked him to do."

Alongside Neuville, Loeb and Sordo represent the fastest and most consistent on Tarmac of the current generation of WRC drivers. As one of Adamo's rivals put it: "It's what you say, the no-brainer..."

DAVID EVANS

Yelloly selected for BMW works deal

GT

Porsche Supercup runner-up and Force India Formula 1 test and simulator pilot Nick Yelloly has been named as a BMW factory driver.

Yelloly, 28, made two race appearances for BMW last year in the Blancpain GT Endurance Cup in a Rowe Racing M6 GT3, alongside his Porsche commitments.

The Brummie was one of four drivers BMW invited to

test its M4 DTM car at Jerez last December along with Sheldon van der Linde, Mikkel Jensen and Nicky Catsburg. Van der Linde was selected to fill the seat vacated by Augusto Farfus in the manufacturer's DTM line-up for 2019.

Yelloly's first outing will be in the opening Chinese GT round in AAI Motorsports' M6 GT3 at Sepang on March 16-17, alongside Taiwanese Jun San

Chen. A BMW statement said further events for Yelloly would be announced at a later time, although he has already been named as one of eight drivers for the Nurburgring 24 Hours.

Since his single-seater career came to an end after a GP2 campaign in 2015, Yelloly has largely raced Porsches, and was runner-up in the German Carrera Cup in 2017.

JAMIE KLEIN



SRO/BOGAERTS



Lynn teams with Dennis

BLANCPAIN GT

The R-Motorsport Aston Martin squad is spreading its wings yet further. Not content with entering the DTM under the Aston banner in 2019, the Swiss entrant will expand its Blancpain GT Series campaign with a maiden assault on the GT World Challenge Europe.

R-Motorsport will enter a pair of new Aston Martin Vantage GT3s in the World Challenge, formerly known as the BGTS Sprint Cup, alongside its continued assault on the Endurance Cup segment of the championship. It will also enter a third car for the first time in the Spa 24 Hours blue-riband in July.

A roster of newcomers is joining the team for its expanded GT3 assault in partnership with the British Arden and Jota Sport squads. Aston factory driver Alex Lynn will race one of its two Endurance Cup Vantages together with team regulars Jake Dennis and Marvin Kirchhofer in the reshuffled line-up. Maxime Martin, another Aston contractee, will share with Matthieu Vaxiviere and Matt Parry, who joined the team for the Bathurst 12 Hour earlier this month.

Kirchhofer will chase overall BGTS honours with an assault on the GT World Challenge, which combines with

the Endurance Cup to make up the overall BGTS series. The German will drive in the sprint format races together with former BMW junior Ricky Collard, who was given a tryout by R-Motorsport in last December's Gulf 12 Hours at Yas Marina.

The second car will be raced by GP3 race winner Aaro Vainio and Hugo de Sadeleer, a two-time victor in the European Le Mans Series. Collard and de Sadeleer will then team up in the additional car for Spa alongside Ferdinand Habsburg, who like Dennis is also racing in R-Motorsport's HWA DTM squad.

R-Motorsport team principal Florian Kamelger said: "We're lining up with our team in the endurance and sprint cup for the first time and have a broad base of drivers to call on, made up of well-proven and successful individuals from last year as well as interesting, talented newcomers."

The Aston Martin ranks in the BGTS Endurance Cup will be bolstered by the Garage 59 squad. The team will field two new Vantage GT3s, one each in the pro and amateur classes. Drivers have yet to be announced.

GARY WATKINS

P13 R-MOTORSPORT'S DTM PLAN

IN THE HEADLINES

DI RESTA WINS ALMS TITLE

DTM star Paul di Resta clinched the 2018-19 Asian Le Mans Series LMP2 title with co-driver Phil Hanson in last weekend's Sepang finale. The pair's second place in their United Autosports Ligier – behind the Algarve Pro Racing Ligier of Andrea Pizzitola, Harrison Newey and Ate Dirk de Jong – means United gains a guaranteed entry for the Le Mans 24 Hours. Victory in the LMP3 class for the Ligier of Jakub Smiechowski and Martin Hippe gave Inter Europol Competition the title and a Le Mans slot. Ditto in the GT class for Japanese Ferrari team Car Guy, whose trio of James Calado, Kei Cozzolino and Takeshi Kimura was unbeaten over the four rounds.

YE DENIED BY DOOHAN COLLISION

Dan Ticktum may have missed the Asian F3 Winter Series finale at Sepang last weekend, but there were still Ticktum levels of drama. Yifei Ye won the first two races, giving the Absolute Racing driver a very real chance of wresting the title from Rinus van Kalmthout. Ye was running second in the final behind debutant Jack Doohan, who had just turned 16 and joined Hitech GP alongside van Kalmthout. With van Kalmthout lying fifth, Ye needed victory for the crown. He drew alongside Doohan on the straight to Turn 4, but ran out of room as the Australian moved over and the two crashed out. Sri Lankan Eshan Pieris (Absolute Racing) won the race, while third was enough for Indy Lights-bound Dutchman van Kalmthout.

MATSUSHITA, LUNDQVIST WIN

Honda protege Nobuharu Matsushita and reigning BRDC British F3 champion Linus Lundqvist won the Euroformula Open Winter Series races at Paul Ricard last weekend. Matsushita, on a circuit-learning exercise for his F2 campaign, controlled the first race in a Spiess-powered Carlin Dallara. Lundqvist won the reversed-grid stanza in a Campos Racing Dallara powered by the series' old spec Toyota engine.

CALDERON STEPS UP TO F2

Sometime Sauber F1 tester Tatiana Calderon will step up to Formula 2 this season with the HWA-affiliated Arden International team. The Colombian, who has spent seven seasons in F3/GP3 machinery, joins GP3 champion Anthoine Hubert in the line-up.

KCMG IS MONTEIRO'S TEAM

Le Mans 24 Hours LMP2 class-winning team and Super Formula squad KCMG has been named as the Honda operation that will field Tiago Monteiro in the World Touring Car Cup this season. The Portuguese will be joined by Hungarian teenager Attila Tassi, who was second in the 2017 TCR International ranks.

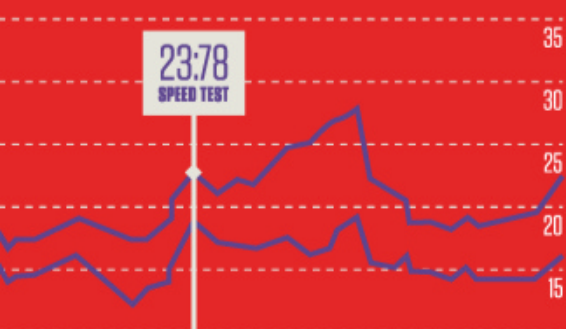


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Why Merc must catch up now

History shows that teams that are slow out of the blocks find it very hard to overcome the disadvantage over the course of a season

EDD STRAW

Pre-season testing is a time of uncertainty, extrapolation and mystery. You can find conviction in the predictable utterances from teams stressing the length of the season to come and that nothing is won or lost in testing. But even though not a single championship point is given out for it, testing is the foundation upon which a season is built.

History suggests that, if you start behind, more likely than not you will stay there. That's the big concern for Mercedes following its early struggles to match pacesetter Ferrari, and team boss Toto Wolff's admission that, should it be necessary to change the aerodynamic concept of the car, "it is a matter of months".

Logically, with the season played out over 21 race weekends, it shouldn't be such a problem if a chunk of them are a struggle. But the past three decades of F1 suggest that, if you start by playing catch-up, it's a race you are not likely to win. If Mercedes doesn't solve its problem pre-season, let's say it takes a couple of months to solve. That takes us to May's Spanish Grand Prix, the fifth race of the season. Should Mercedes be behind not just on pace but also points after four races, the history books would not be on its side.

In the past 30 seasons, stretching back to 1989, the team leading

“Mercedes will already have taken a hit if aero changes are required, as early running suggests”

the constructors' championship after four races has won the title on 25 occasions – 83% of the time. In the drivers' championship, the hit rate is slightly lower: 21 in 30 – or 70%.

The past is not necessarily a powerful predictor of the future, and every situation is different. But what makes it difficult to catch up is similar whatever year you're in, car you're working with or opposition you face. While being ahead provides its own pressure – with all the psychological challenges of having your fate in your hands and the dangers of drifting into thinking more about what you risk losing than the job in hand – chasing leaves little margin for error.

Mercedes will already have taken a hit if aerodynamic changes are required, as the early running in this week's test suggests. Development work for early-season packages will already be well advanced – it's not just a question of modifying the current car – so there will also be an impact on parts due to be introduced

down the line. There would be a clear impact on development rate.

The mere fact of trying to make gains can also have an impact on the decision-making process on track. When you have points in the bag, it's easier to allow discretion to be the better part of valour. The classic example this century was the 2005 European Grand Prix at the Nurburgring, where McLaren driver Kimi Raikkonen flat-spotted his front-right tyre while lapping Jacques Villeneuve's Sauber and the team gambled on making it to the end.

While tyre changes were banned, it was permissible to change a damaged one and, had Raikkonen been 22 points ahead of title rival Fernando Alonso rather than the same margin behind (after just six races), then the option would have been there to stop and take a safe minor points finish rather than gamble on holding onto victory and suffering a failure on the last lap. Even if you've got a fast car, as McLaren did then – albeit not the most reliable one – when you are trying to make gains you have to be more aggressive. That can mean greater reward, but in exchange for greater risk.

The famous Brawn 'domination' of 2009 is another classic example. Jenson Button won six races that season, spread over the first seven of the year, on his way to the championship. Over the remaining 10, he finished on the podium just twice yet won the championship with a race to spare. The Red Bull was the faster car over the season, but Brawn's fast start gave it a decisive advantage.

The five cases where the constructors' championship has been won by a team not leading after the opening quartet of races were either unusual circumstances or very tight battles. In 1994, Williams struggled early on, sorted an aerodynamic stall problem and then overcame Benetton – but that was assisted by two disqualifications and a two-race ban for Michael Schumacher. In 1995, Ferrari was unexpectedly ahead after four races, thanks to the soon-to-be-dominant Benetton of Schumacher having not scored points for its Brazilian GP win due to fuel irregularities and Schuey's San Marino GP shunt. In 2003, Ferrari overcame McLaren after a battle of its speed versus its rival's consistency, while in 2010 Red Bull's early fragility let McLaren take an early lead.

The fifth case does at least give Mercedes some encouragement. Last year, Ferrari had the better of the early stages in terms of performance and led the constructors' table after four rounds (though Mercedes ace Lewis Hamilton led the drivers' standings). But Mercedes eventually came on strong at the end of the year, so it has a proven record of being able to thrive under pressure.

There's a reason why Mercedes has won five consecutive world championship doubles. It's a formidable team, is well-resourced, is staffed by excellent people and, crucially, has the right culture to interrogate, understand and resolve a problem without resorting to a blame culture. It's a test for Mercedes, but history also tells us this is one of F1's great teams and not to be underestimated. ❧



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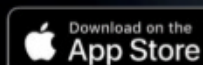
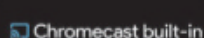
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Aston's mission impossible?

Before Aston Martin can vanquish enemies BMW and Audi in the DTM, it faces a race against time to finish its new Vantage in time for the start of the season

JACK COZENS

In some respects it's sad to see the end of the DTM's unique all-German era of Audi, BMW and Mercedes going head-to-head. But it's hard not to get excited about R-Motorsport's deal to bring Aston Martin – a brand steeped in history in the sportscar ranks – to the series for 2019.

Its arrival comes at a point when Audi and BMW had stipulated that a third manufacturer was required to ensure their commitments are more lasting, and also satisfies DTM boss Gerhard Berger's desire to fill the void left by Mercedes immediately. The fact that its replacement is an international brand is an added bonus, and one that potentially paves the way for further internationalisation at a point where a series name change is being mooted.

That all sounds great, but there are always caveats – and, in this case, there's a rather big one. First, R-Motorsport needs to get on track.

That might sound easy enough, but a launch event at the team's base in Switzerland last week proved that time will not be on the team's side as it hastily prepares for its maiden campaign.

Waiting under the covers was not a DTM-spec car, as might have been expected at the “worldwide launch of the Aston Martin Vantage DTM”, but instead an ‘art’ version loosely imagining what the car might look like. The abstract design

“There's no getting away from the fact that R-Motorsport wasn't able to actually reveal something”

caused plenty of commotion, and R-Motorsport head Florian Kamelger offered a playful nod to onlooking Audi and BMW motorsport heads Dieter Gass and Jens Marquardt about making Aston's rivals wait to see its car. But there's no getting away from the fact that this was in lieu of being able to actually reveal something.

By entering into a joint venture with long-standing Mercedes partner HWA, R-Motorsport's parent company AF Racing – which itself has earned a level of trust from Aston Martin as a road-car dealer as well as through its work on the Valkyrie hypercar and in sportscar racing – has enlisted the help of the best in the business. There's little doubt that HWA – the most successful team in the history of the DTM – will build a capable challenger, but when it will be ready is a

question that remains unanswered.

To give you an indication of just how short the lead-up time on this project has been, AF Racing didn't start speaking to Berger until spring last year. That was also when talks began with HWA about forming Vynamic – the name given to the joint venture, which just complicates the project's set-up picture further. That was started in the summer, but it wasn't until the Hockenheim season finale in October that R-Motorsport announced its planned DTM entry, which has left it short of adequate time to prepare the car.

Kamelger admits that “going to DTM for 2019 was definitely a stretch”, adding, “the main thing that is going to be challenging before the first race is definitely to bring the car alive”.

That challenge starts, more pertinently, with an attempt to have the car testing at Jerez next week. Though not an official session – that will instead be held across four days at Lausitz in April – attending a test organised by the teams would give R-Motorsport the chance to put the Vantage through its paces two months before the start of the season.

R-Motorsport hasn't announced how many of its cars (if any) will take part in the test, and has been coy on when it plans to make its debut and with how many cars. But what's certain is that it won't be four. That will also apply to the season opener at Hockenheim, should the car be ready for that.

It's easy to ask why the team felt the need to run before it walked, and whether deciding to wait another year would have been better, but it's not that clear-cut. Doing so would not have allowed R-Motorsport to keep on a number of HWA staff who worked on Mercedes' effort last year, and another part of its ambition to join for 2019 was so it wasn't caught on the hop by Audi and BMW at the start of the Class One era. The last thing it wants to do is give them even more of an advantage before the season starts, given that each has tested its 2019 car already at Jerez.

Put simply, there are still plenty of questions to be answered. But nothing has the team's four drivers – Paul di Resta, Daniel Juncadella, Jake Dennis and Ferdinand Habsburg – too concerned at this stage.

“I think the silver lining is the HWA team becoming Vynamic,” says di Resta. “The project has started late, but I think it's a challenge we all relish. It's no secret that the challenge is epic against the likes of Audi and BMW, we never underestimate that and their driving abilities, but in DTM it can change so quickly. I can't wait to drive the car for the first time.”

Aston may well be the DTM's saviour, and longer term its arrival could set the wheels in motion for the series' expansion. But it needs to turn a wheel first. 🏁

F 1
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WINNERS



AND LOSERS

*...as testing continues. Our F1 experts give their verdicts
on the first week of 2019 action at Barcelona*



F1
2019

Mercedes playing catch-up as Ferrari leads the way

Forget the headline times. Dig deeper and you'll find that Ferrari has stolen a march, leaving the world champion team with work to do

EDD STRAW

PHOTOGRAPHY  **motorsport
IMAGES**



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errari held the initiative at the halfway point of pre-season testing at Barcelona, setting the pace not only on adjusted single-lap times but also on long-run pace, while Mercedes struggled with a handling problem that left it chasing performance.

Given that the first day of the final four-day test was under way as Autosport closed for press, it's too early to say whether Ferrari will still have the advantage come the season-opening Australian Grand Prix next month. But Mercedes' drivers have confirmed that they are playing catch-up.

"We have work to do, but it's a good feeling in the sense that it feels like there is potential," said Valtteri Bottas. "We do need to make improvements. We were struggling a bit over the week to find a good balance for all the corners. There were some corners that were good, some corners we would have balance issues, and other corners where we would have massive balance issues. We were getting to a much better state at the end of the week, but some of the handling issues can only be sorted with some upgrades. We're hoping to fix those hopefully soon."

Estimates vary regarding Mercedes' deficit. With five different tyre compounds available, and variable fuel loads and programmes distorting the picture, it's impossible to be precise. But the gap to Ferrari looks to be between 0.1 and 0.5 seconds over a single lap.

It will become clearer by the end of this week's second test where Mercedes compares to Ferrari and Red Bull. Autosport's analysis, and sources within several rival Formula 1 teams, all place Ferrari

in the box seat. After Sebastian Vettel's delighted reaction to a first day that he described as close to perfect, team-mate Charles Leclerc was at pains later in the test to play down Ferrari's position.

"The performance has no sense for now because it's testing, they are not pushing and we are not either," he said. "We don't know how much the others are sandbagging. So, we'll see at the first race. The main importance for this test is to do the programme of the day and that's what we're doing, so we're happy."

Mercedes actually set the faster outright lap time during the first test. Bottas clocked a 1m17.857s on the softest compound of Pirelli rubber (C5), which put it two tenths faster than Ferrari's best, set on the middle compound (C3). But that only put them fourth and fifth fastest. Instead, it was Renault driver Nico Hulkenberg who topped the test overall with a lap of 1m17.393s, set on the final day, though he was believed to be running lighter fuel than F1's leading teams. Renault is certainly at least at the front of the midfield, but whether it has closed on the 'big three' will become clearer this week.

Renault's test didn't run entirely smoothly. On Tuesday morning, with Daniel Ricciardo at the wheel, the new RS19 suffered a failure of the top flap of its rear wing caused by the DRS, which opens by a further 20mm as part of new aerodynamic regulations for 2019. The flap broke and flew off, leading Ricciardo to spin off at Turn 1. Fortunately he didn't hit the barrier, which could have cost Renault valuable running time given the paucity of spares for the hurriedly built machine. Renault stopped using the DRS as a precaution, but it was available once again on Wednesday afternoon.

0.5s

Ferrari's potential
advantage per lap
over Mercedes

Bottas said the
new Mercedes
needed upgrades



SUTTON



Williams arrived
late and has some
catching up to do

SUTTON

MAIN PIC: MAUGER

“We had a problem with the DRS mechanism,” said technical director Nick Chester. “It lost the link bar, and that allowed the flap to rotate. It was a fairly easy fix. We understood what the problem was and then we fixed it. Rather than it just being a fitting, it was a detail part of the design. It was a very, very small detail. But as with many of these things, it only needs a small detail to be wrong.”

Behind, Toro Rosso's Alexander Albon recovered from spinning into the gravel at the exit of Turn 4 on his first lap of the test to set the second fastest time ahead of Kimi Raikkonen's Alfa Romeo. Both were running favourable fuel loads, but do appear to be in the thick of the tight midfield battle, which also features Haas.

Red Bull-Honda kept a low profile, setting the eighth fastest time overall. It's difficult to judge exactly where the team stands, but there are hints that it is at a similar level to where it finished last season. Having proved the reliability of the Honda engine in the first test – it completed the second highest number of laps overall – the team is confident that it has a strong foundation from which to build towards the first race. The only downside was Pierre Gasly's crash at Turn 11 on Tuesday, which was a result of him being slow to catch the rear end stepping out.

McLaren flattered to deceive on the first two days of running, setting second-fastest times with Carlos Sainz Jr and Lando Norris respectively. But long-run times weren't as eye-catching, and by the time the test had finished McLaren was looking to be towards the back of the midfield pack. From trackside, there were signs of the rear-end instability that dogged it last year, albeit not as pronounced as at this stage of last season.

The only team to have a truly bad test was Williams. The new FW42 didn't arrive at the circuit until the early hours of Wednesday, and George Russell finally hit the track at the start of the afternoon. He and Robert Kubica logged 88 laps over the car's day and a half of running following a delayed build programme, with Russell setting the team's best lap – 4.149s off the pace.

Williams completed a filming day at the Barcelona circuit on Friday, allowing it to run another 100km ahead of what will be a crucial final test. It shared the day with Racing Point and McLaren, both of which did not complete a shakedown ahead of the first test. Pre-season testing finishes tomorrow (Friday). *W*

P18 F1 TESTING IN DEPTH

The REAL order in F1 testing

Renault set the fastest time last week, but how does our technical analyst, a grand prix-winning designer, rate the pecking order of the teams?

GARY ANDERSON

ILLUSTRATIONS CAMILLE DEBASTIANI

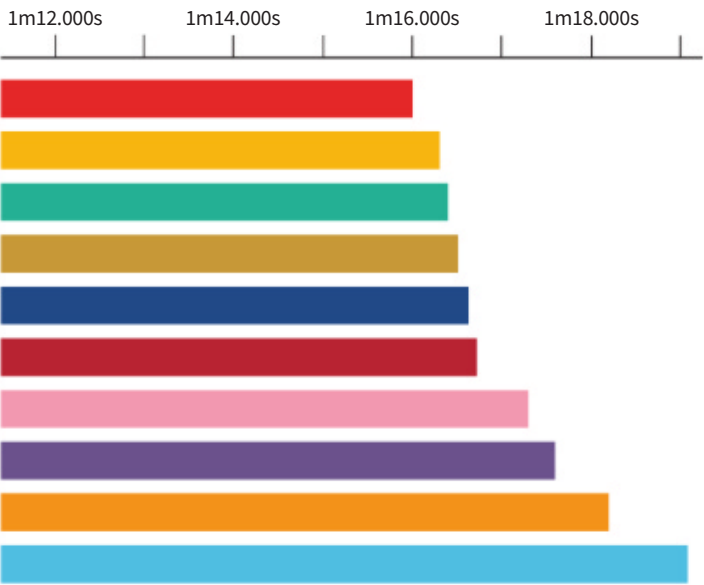


CORRECTED TIMES FROM FIRST WEEK OF F1 TESTING

Adjusting performance based on tyres and fuel

Pos	Team	Actual time	Tyres	Adjusted to C4	Adjusted for fuel/tyres
1	Ferrari	1m18.046s	C3	1m17.546s	1m16.048s
2	Renault	1m17.393s	C5	1m17.693s	1m16.361s
3	Mercedes	1m17.857s	C5	1m18.157s	1m16.492s
4	Haas	1m18.563s	C3	1m18.063s	1m16.565s
5	Red Bull	1m18.780s	C3	1m18.280s	1m16.615s
6	Alfa Romeo	1m17.762s	C5	1m18.062s	1m16.730s
7	Racing Point	1m19.664s	C2	1m18.660s	1m17.332s
8	Toro Rosso	1m17.637s	C5	1m17.973s	1m17.604s
9	McLaren	1m18.431s	C4	1m18.431s	1m18.265s
10	Williams	1m20.997s	C3	1m20.497s	1m19.165s

Theoretical lap times



Right from the start of testing, all of the cars have looked much better balanced than you'd expect straight out of the box, and none of them is battling any obvious vices or showing the kinds of balance problems you'd normally see at this stage.

But as testing progresses, we've started to build a picture of the competitive order. As drivers have started pushing harder, we've seen some signs of which cars really are handling as well as they looked initially, and which may have some problems.

Lap times in isolation don't mean anything in testing. Having five different tyre compounds available, varying track conditions and a range of fuel loads clouds the picture. But by following the lap times through testing, analysing the runs and normalising for the various conditions, you can get an idea of how things are shaping up. Things will become clearer at this week's second test.

By taking the fastest lap set by each team, adjusting it for what we know was the minimum fuel load (based on laps completed in a run and what teams historically tend to run), and using a delta to set the difference in pace between the five compounds of tyres, we can come up with a theoretical fastest lap. This isn't perfect, and things will change over the course of a test with set-up changes, new components and track evolution, but it gives us a good idea of who is in good shape and who has work to do.

As always, I disagree with the tyre deltas suggested by Pirelli based on what I've seen at the circuit, so I've created my own. These are as listed below, showing the lap time gain for each step from hardest (C1) to softest (C5).

TYRE COMPOUND	LAP TIME GAIN
C1 to C2	0.6s
C2 to C3	0.5s
C3 to C4	0.5s
C4 to C5	0.3s

As the tyre compound gets softer, it improves rear grip and creates some understeer. So to get the best out of a soft compound you need a car that, let's say, when on the C3 tyre has a hint of oversteer, and on the C4 will be balanced so the driver can get the best from the softer tyre compound. Couple this with the long, fast Turn 3 at Barcelona, and it's also very difficult to keep the softer tyres alive for more than one balls-out lap.

Our table shows the actual fastest times set in the first column, then that time adjusted to what it would have been on the C4 tyres, and then finally, in the third column, is my theoretical time factoring in the possible fuel load as well.



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1. FERRARI – THE EARLY FAVOURITE

From the start of testing the Ferrari has been fast and looks strong on track. It's doing what the drivers want it to do, rides the kerbs well, and there's been no sign of any balance problems from trackside.

If the car does anything untoward, it's usually down to a small driver error. When I was watching at Campsa, the fast right-hander, Charles Leclerc was able to get half of his inside tyres on the kerbs and the car remained stable enough. Others were having to give the kerbs a wide berth, so this is a car that is quick, stable and consistent, as we've seen from Ferraris over the past couple of years.

The traction also looks good, with the drivers able to feed the power in with confidence. Based on what we've seen so far, Ferrari is leading the pack, but the question is by how much. On current evidence, it has a clear edge on Mercedes, and if that continues through the second test it means Sebastian Vettel and Leclerc could go into the season as favourites.



2. RENAULT – MAKING THE STEP IT WANTED

We didn't see too much from Renault early on in testing, and Daniel Ricciardo's dramatic rear-wing failure – caused by a problem with the DRS mechanism over-extending – was a concern. But in the second half of the first week we began to see more evidence of pace, and it looks like Renault could achieve its aim of closing on F1's big three teams.

It's been quite hand-to-mouth for the team in terms of parts at this test, so clearly it was marginal on car build time. We can expect some new bits and pieces to crop up perhaps this week, or certainly in Melbourne for the opening race.

On track the car is looking well balanced and the drivers can carry good speed, although it was interesting to see Ricciardo using a bit more track than he wanted to exiting Turn 2. He was then not quite able to drag the car back to the left for the ideal entry into Turn 3. That's what you get if you jump out of a Red Bull into a Renault, but the signs are he will at least be in the fight at the front of the midfield.



3. MERCEDES – NOT THE PACESETTER

Mercedes spent much of the first three days of testing keeping a low profile, but picked up the pace on day four. Even though there was more focus on performance, based on what we've seen it does appear to be a little way behind Ferrari.

This could change, but there is a possible reason that Mercedes may have a bit of work to do. It's got a more conventional front wing, which doesn't drop away in front of the tyre. So downforce is being created in that area. Mercedes runs less rake than the rest, but the more rake you run, the closer to the ground you get your front wing, which allows you to generate the downforce without having to have the maximum allowed flap area. But with the front-wing performance compromised when you have steering lock on, it's possible that Mercedes is losing some of that downforce in the corners – which could create a problem.



4. HAAS – FAST BUT PROBLEMATIC

Haas didn't have the smoothest first week, but based on how it performs on track you'd say it has every chance of being at the front of the upper midfield pack come Melbourne. The car is well balanced, does what the drivers want it to do, and looks similar to the very good car we saw last year.

The unreliability is a concern, as team principal Gunther Steiner has said. We saw a Haas stopped on track more than any other team, and that will have impacted on how much was learned in the first test. But if that can be conquered, it's looking like it could be a good season. >>



F1 TESTING TEAM RANKING



5. RED BULL – HOLDING STATION

The new Honda engine sounds a little less raspy than it used to as the company continues to make progress towards matching the performance of the Ferrari and Mercedes power units.

Based on what we saw in the first test, Red Bull certainly isn't going into the season any worse off than last year, although it still has work to do to get onto the level of Ferrari. The car looks good on track – it handles the kerbs well and in the chicane could bounce over them and settle more quickly than most. Other than Pierre Gasly's crash on the second day, when he failed to catch a rear-end snap at the uphill Turn 12 right-hander, it did what the drivers wanted.

We haven't got a clear idea of exactly how much the Honda engine is behind on power, and we still need to see if the fuel economy concerns it had last year are still there – and they may well be – but if Red Bull's aim is to start the season where it was with Renault and then hope to work forward, then it's very much on target.

But it doesn't look like a championship-challenging package – yet.



6. ALFA ROMEO – A VERY STRONG START

The Alfa Romeo started the first test looking very strong on track, but as the week progressed we did start to see some signs of a little instability and the drivers weren't able to attack quite as much as they wanted to.

It also struggled a little over the kerbs at the chicane, with a double-bounce on the front axle when it landed after hitting them. This usually comes from running the front of the car a little too stiff, meaning that the tyres take a large amount of the deflection. But it seems to be a good package.

The main question is whether it has the downforce and grip it needs to claim a position right at the front of the midfield pack, rather than just being thereabouts. But this is a team that is heading into the season in far better shape than it looked 12 months ago and it should build on its strong finish to last year.



7. RACING POINT – GETTING THE JOB DONE

The former Force India team usually comes to the first test aiming to get a handle on reliability and understand the car, and rarely catches the attention with its pace. It seemed like business as usual here.

On track the car looks decent, but it just needs some more grip to carry the speed. The team should have achieved a good understanding and, because it's using the same gearbox and rear suspension as last year, it won't be too big a change from before. So we can expect Racing Point to be thereabouts come Melbourne.



8. TORO ROSSO – GROUND TO MAKE UP

Assuming that Williams is just off the back, if you had to pick the weakest car in the midfield pack based on visual evidence it would be the Toro Rosso.

It's well-balanced, but perhaps lacks a little downforce and ultimate grip. The team is aiming for a good development rate through the season and could perhaps do what Sauber did last year. But because there are often opportunities for big results early in the season thanks to unreliability from bigger teams, the time lost over the winter in getting the car to this stage could cost it a little.

There's nothing fundamentally wrong with the car, and I think we saw what it was capable of in Alexander Albon's hands on the final day of the first test. So a solid start for Toro Rosso, but there has to be a bit more to come.



9. McLAREN – PROBLEMS HAVEN'T GONE AWAY

As the test went on, we started to get a bit of a hint of the same rear instability that caused McLaren problems in 2018, although it wasn't as dramatic as it was in testing this time last year.

This was a solid start, and the team is certainly in the midfield pack, but not at the front of it at this stage. On the first two days we saw some quick laps, with Carlos Sainz Jr and Lando Norris second on Monday and Tuesday.

We also saw Norris driving quite aggressively at first before toning down his approach. At Campsa on Tuesday he was changing down an extra gear to help rotate the rear and then shifting back up 20 metres later. But by Thursday he was matching what Sainz was doing.



10. WILLIAMS – TOO SOON TO TELL

Williams had a very late start, only arriving at the first test overnight ahead of the third day, then hitting the track for the first time in the afternoon to perform a shakedown.

We didn't see many signs of pace, but this was a car missing a few bits and pieces. On track it looked solid enough and responded to what the driver asked it to do.

It's always difficult when the car build is running behind, but hopefully Williams has done enough to understand how the FW42 works and can hit the ground running and find some performance this week. If not it could be a long, hard season and, based on what we have seen so far, there's a lot of work to do. But we have to reserve judgement for now as there's still a lot of catching up required.



TESTING DATA, BARCELONA, 18 FEBRUARY-21 FEBRUARY

BARCELONA TEST TIMES (TEST ONE)


POS	DRIVER	CAR	DAYONE	DAYTWO	DAYTHREE	DAYFOUR	TYRES FOR FASTEST LAP
1	Nico Hulkenberg	Renault RS19	1m20.980s	1m19.837s	1m18.800s	1m17.393s	C5
2	Alexander Albon	Toro Rosso-Honda STR14	-	1m19.301s	-	1m17.637s	C5
3	Daniil Kvyat	Toro Rosso-Honda STR14	1m19.464s	-	1m17.704s	-	C5
4	Kimi Raikkonen	Alfa Romeo-Ferrari C38	1m19.462s	-	1m17.762s	-	C5
5	Daniel Ricciardo	Renault RS19	1m20.983s	1m19.886s	1m18.164s	1m17.785s	C5
6	Valtteri Bottas	Mercedes W10	1m20.127s	1m19.535s	1m20.693s	1m17.857s	C5
7	Lewis Hamilton	Mercedes W10	1m20.135s	1m19.928s	1m20.818s	1m17.977s	C4
8	Charles Leclerc	Ferrari SF90	-	1m18.247s	-	1m18.046s	C3
9	Sebastian Vettel	Ferrari SF90	1m18.161s	-	1m18.350s	-	C3
10	Lando Norris	McLaren-Renault MCL34	-	1m18.553s	-	1m18.431s	C4
11	Antonio Giovinazzi	Alfa Romeo-Ferrari C38	-	1m19.312s	-	1m18.511s	C4
12	Carlos Sainz	McLaren-Renault MCL34	1m18.558s	-	1m19.354s	-	C4
13	Romain Grosjean	Haas-Ferrari VF-19	1m19.159s	-	1m19.060s	1m18.563s	C3
14	Kevin Magnussen	Haas-Ferrari VF-19	-	1m19.206s	-	1m18.720s	C3
15	Pierre Gasly	Red Bull-Honda RB15	-	1m19.814s	-	1m18.780s	C3
16	Max Verstappen	Red Bull-Honda RB15	1m19.426s	-	1m18.787s	-	C3
17	Pietro Fittipaldi	Haas-Ferrari VF-19	-	1m21.849s	1m19.249s	-	C4
18	Lance Stroll	Racing Point-Mercedes RP19	-	1m20.433s	-	1m19.664s	C2
19	Sergio Perez	Racing Point-Mercedes RP19	1m19.944s	-	1m20.202s	-	C3
20	George Russell	Williams-Mercedes FW42	-	-	1m25.625s	1m20.997s	C3
21	Robert Kubica	Williams-Mercedes FW42	-	-	-	1m21.542s	C2

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

DRIVER	LAPS COMPLETED	TEAM	LAPS COMPLETED
Hamilton	307	Mercedes	610
Bottas	303	Ferrari	598
Vettel	303	Alfa Romeo	507
Leclerc	295	Toro Rosso	482
Albon	268	Red Bull	475
Giovinazzi	255	McLaren	445
Raikkonen	252	Renault	433
Hulkenberg	247	Haas	384
Gasly	238	Racing Point	248
Verstappen	237	Williams	88
Norris	236		
Kvyat	214	ENGINE	LAPS COMPLETED
Sainz	209	Ferrari	1489
Grosjean	198	Honda	957
Ricciardo	186	Mercedes	946
Stroll	151	Renault	878
Magnussen	125		
Perez	97		
Fittipaldi	61		
Kubica	48		
Russell	40		

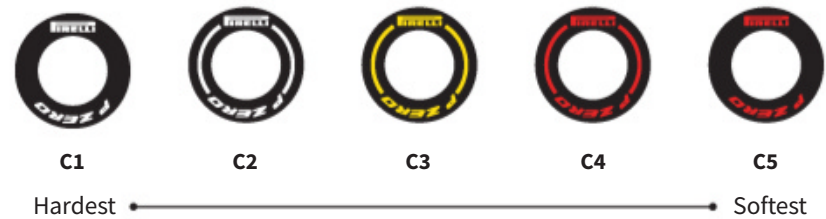
TOTAL LAPS COMPLETED BY ALL CARS

4270

RED FLAGS

12

TYRE GUIDE



P22 F1 TESTING TECH

SPEED TRAP (ENGINES)

Renault	204.3mph
Honda	202.7mph
Ferrari	202.6mph
Mercedes	200.4mph

NEXT TEST
26 FEBRUARY-1 MARCH



F1
2019

How teams are reclaiming the lost ground

Even within the confines of the first Barcelona test, Formula 1's relentless technical development charge unfolded at dizzying speed last week

JAKE BOXALL-LEGGE AND GIORGIO PIOLA



The first Formula 1 test always offers plenty of pre-season intrigue, and the opening quartet of days at Barcelona was no exception as the world got its first proper glimpse of the cars in 2019 specification.

New rules aimed at reducing downforce and the outwash function of the front wings has given each team a great deal of work to do over the winter to reclaim performance.

Although the launches offered some indication of how each team approached the design process, there were still many changes ahead of the first test. Understandably, some teams hadn't shown their full hands before the engines were ready to fire.

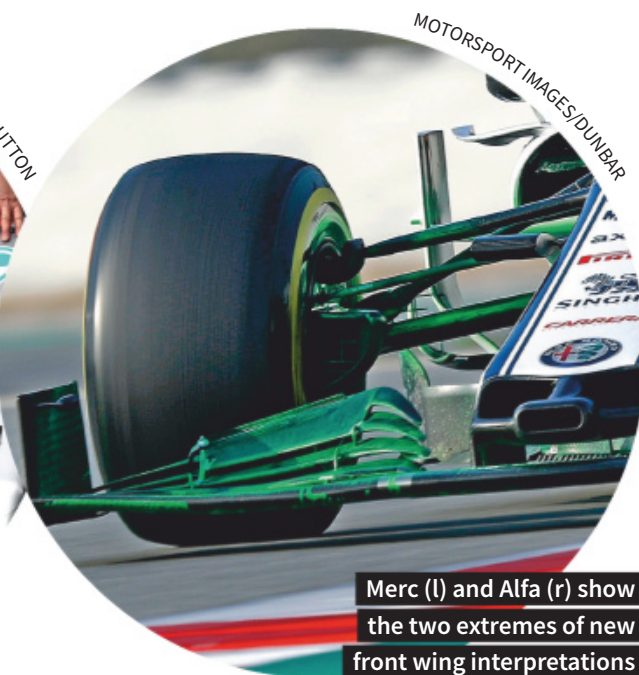


TWO ENDS OF THE SPECTRUM

Throughout launch season, the new front wing formula prompted many different design approaches to reclaim a smidgen of the outwash lost. Of the different varieties seen over the past fortnight, Mercedes and Alfa Romeo have arguably created the most extreme variants.

Mercedes' wing arguably satisfies the spirit of the regulations the most, using a large total chord in order to create a large amount of front-end downforce. Each side shows a tiny amount of sag in the middle, resembling two spoon shapes, as the outboard ends of the wing elements lift up slightly. At this point, the enlarged space between the wing and the floor can house a vortex, which develops from the bottom of the endplate. This can be sent outboard, around the front tyres.

The team's initial approach to endplate design seemed to be at odds with that, because in week one the top corner of the trailing edge curled inwards. Our understanding of this was that it would work in concert with the front wing flap adjuster, which is deliberately angled to promote a little bit of further outwash. The purpose could have been for these two to pair up and create a tighter vortex, which has more energy and moves around the front wheel with more speed. But on day one of the second test, as Autosport closed



Merc (l) and Alfa (r) show the two extremes of new front wing interpretations

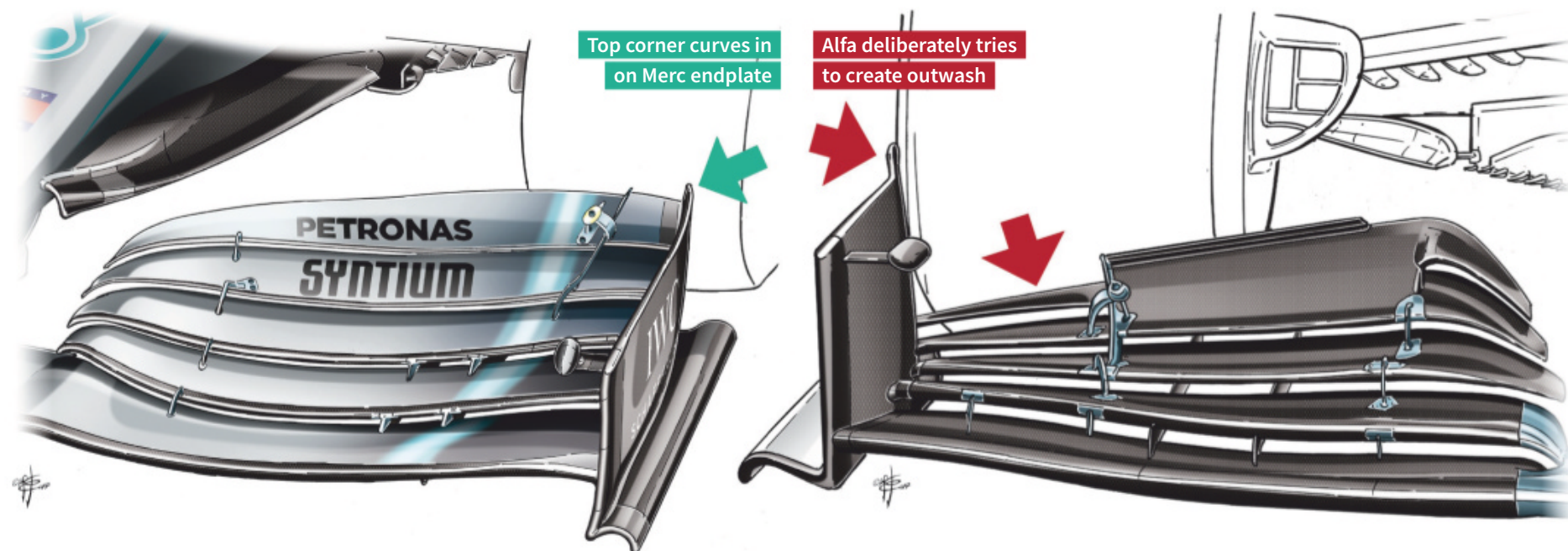
for press, Mercedes unveiled a revised design in which the endplate no longer points inwards.

Alfa's wing is a lot more deliberate in creating outwash, featuring four flaps with a minimal angle of attack at the outboard section of the wing. This is bounded by the flap adjuster and the endplate, situated as low down as possible to control airflow and bring it away from the front face of the tyre.

The flap adjuster and endplate are shaped to contribute to this; although the net result of this geometry is reduced front-end downforce, that's

alleviated by the shape of the main top flap, formed by conjoining the top two elements to offer a greater useable wing chord. Although a more draggy option, the inboard ends are separated to reduce that, as well as to control the vortex produced here below the suspension components.

The remainder of the field slot between these very different approaches, and it will be interesting to see which is more widely adopted. Ferrari and Toro Rosso have both opted for designs similar to Alfa's, while Red Bull is more like Mercedes.



RENAULT'S SERRATED EDGE

It's a big season for Renault. After a few building years and heavy investment to return the Enstone facilities to their former glory, the team now boasts a top-line driver pairing in Daniel Ricciardo and Nico Hulkenberg. It must keep up that investment if it's to crash the big three's monopoly at the sharp end of the grid.

Having launched with a conservative-looking evolution of last year's RS18, Renault emerged in testing with a number of new developments, most notably around the bargeboard area. But there was also a neat addition to the rear wing endplates, picking up the sawtooth overhanging strakes design seen sporadically over the past couple of seasons.

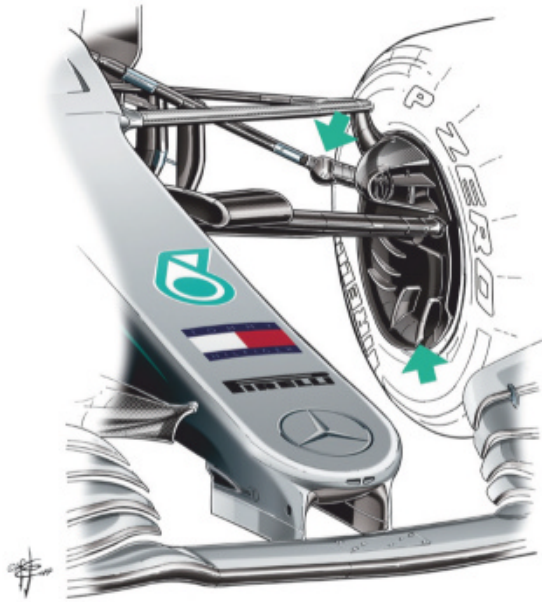
Although the behaviour and effectiveness of these designs was open to debate last season, it seems as though the new regulatory regime

has wrought sufficient change at the front of the cars to make it worthwhile evaluating such concepts again. Put simply, the strakes are able to manage some of the airflow thrown upwards by the rear wheels, but also develop a vortex that rolls up along the inside, increasing the magnitude of the low-pressure zone of the wing at its mountings.

This increases the suction at the outside extremities of the wing. But Renault has spaced out its serrations, leaving four points to retain the structure of the endplate. From these, with suitably careful shaping, the team can derive a bit of extra downforce.



Sawtooth overhang on Renault follows McLaren design from 2018



CLEARING THE BLOCKAGE

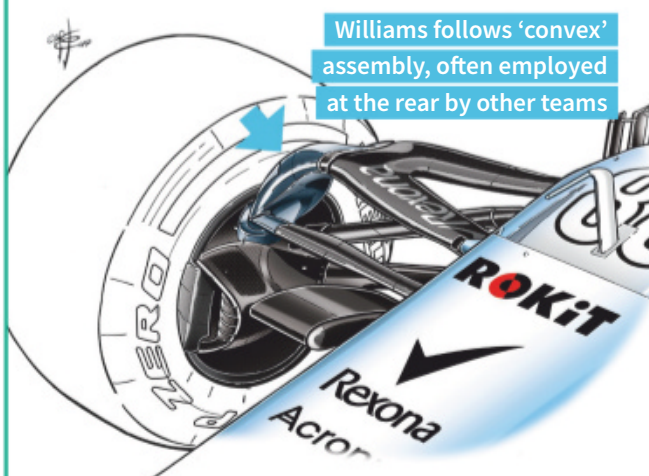
Over the past two seasons, Mercedes has used a small horn attachment to the front uprights, upon which it mounts the top wishbone. Doing so enables the team to mount the suspension components as high as possible, limiting the blockage produced when picking up airflow off of the front wing.

Mercedes has positioned its brake duct as high up as possible, just ahead of the horn, to minimise the frontal area of the car. The duct area, slashed for this season to fit within the bounds of the wheel rim area, features a number of small turning fins to collect airflow from the front wing and throw it towards the bargeboard area.

Mercedes' pushrod also features a small bulbous bracket (upper arrow, above) mounted to the upright. This appears to allow for a small amount of curvature in the pushrod end, producing the correct suspension travel, and it also serves an aerodynamic purpose because the attachment can be wholly tucked behind the brake duct aperture.

Williams has also created something along these lines, using a similar philosophy in its attachment point. It's more similar in design to what a collection of teams employ at the rear end, using a 'convex' extension rather than the Mercedes' 'concave' horn.

The wishbone is carefully shaped to minimise the blockage to the sidepod inlet downstream. When attached like this, there's also an effect on the suspension kinematics, and the load paths from the wishbone being angled downwards should work the front tyres a bit harder.



Williams follows 'convex' assembly, often employed at the rear by other teams



SF90 offers complexity straight out of the box

FERRARI'S HIGH WAISTLINE

Proving to be fleet-footed straight out of the stable, the Ferrari SF90 featured a number of curiosities around the sidepod area. The team is continuing its development of the highly positioned cooling apertures it has pioneered over the past couple of years.

The rear halo mounting point features a small channel next to it, and is fed by the inboard section of the sidepod-mounted turning vane, which is curved to form a pair of vortex tunnels. Together, these drive airflow

with greater energy around the top of the sidepod, linking up with the duct positioned behind the halo mounting point. Here a low pressure zone is created, and this develops an area of suction that can be exploited.

Using the corner of the sidepod inlet, airflow can be drawn out, ensuring that there's minimal separation with the flow shed from the halo geometry. This is something that the likes of Mercedes and Williams experimented with last season, and hence Ferrari has decided to throw its lot in with it.

Since the teams have focused on getting acquainted with their new cars in the first week, expect plenty more developments during the second – especially as each outfit begins to chase performance ahead of the season opener in Australia.



Turning vane forces airflow over top of the sidepod with greater energy



youtube.com/AUTOSPORTdotcom



Head over to the Autosport YouTube channel, where technical experts Jake Boxall-Legge and Gary Anderson have been analysing the first raft of developments brought by the teams in pre-season testing.

PLUS Keep up to date with all the action from Barcelona via our daily videos. Go to <http://bit.ly/test1tech>

F1
2019

HARDER | BETTER | FASTER STRONGER

*Hamilton has come back
to Formula 1 in the best
physical form possible*

SCOTT MITCHELL

PHOTOGRAPHY
 **motorsport**
IMAGES

2KG

Driver weight gain

F1 drivers have
been bulking up
over winter in
response to
new rule

Lewis Hamilton's quest for a sixth Formula 1 title did not start in emphatic fashion, given Ferrari appeared to strike the first blow in the phoney war that is pre-season testing. Mercedes has work to do, and the two teams' performance levels should be clearer by the end of this week's second Barcelona test.

But the partial lottery of a rules change — particularly an aerodynamic one in the case of this year's shake-up — was always going to put a question mark over whether the Mercedes would be good enough to win for an unprecedented sixth straight season. After Hamilton reached a new peak in 2018, the big unknown for him as an individual was how he would raise his game again.

Motivation and standards can slip during a run of success, and Hamilton has won four of the past five drivers' titles. Last year, against Mercedes' toughest challenge yet, he matched his personal-best haul of 11 wins in a season, psychologically bested Ferrari's Sebastian Vettel again, and produced some

activities from surfing to martial arts. He described it as wanting to explore "different disciplines, different challenges that use different parts of the body". Having switched to a plant-based diet two years ago, which he has credited before for helping win back-to-back titles in 2017 and 2018, he worked with multiple training partners, including a life-long vegan.

The result was that he arrived at Barcelona for pre-season testing last week with his weight still fluctuating.

"Body fat is going down, which is great, and you target more defined, more efficient muscle," said Hamilton. "I'm not trying to be The Hulk. Naturally it takes a long time to put on muscle, and in the right way as well. It's just been great to eat as much as I want to, and bigger portions."

It's more than just a physical thing, though. Wolff says Hamilton is in "a super mental state, the best I've seen so far". The days of missing meals to hit a strict weight limit led to occasional lapses of energy, and an unhealthier state. Now, Hamilton says he is sleeping

New rules have brought uncertainty

Hamilton has won five drivers' titles

Mercedes has been dominant since 2014

immense performances along the way.

The difficulty for Hamilton to reset and go again should not be underestimated, especially knowing that young guns such as Charles Leclerc — Vettel's new team-mate at Ferrari — and Red Bull-Honda's leading driver Max Verstappen would offer new, energetic challenges. And yet Hamilton's arrival in the Barcelona paddock last week fired an early warning shot that suggests he has not been found wanting by that increased difficulty.

F1 has introduced an 80kg minimum for drivers within the overall weight limit of the car, with lighter drivers allowed ballast in the immediate cockpit area rather than having it placed elsewhere in the car to improve its balance. This will reduce the disadvantage faced by taller and heavier competitors, and the need to have an aggressive diet to save weight.

Hamilton said last year that he was relishing the chance to use the new rules to bulk up. He pledged to become a "different athlete" — and it looks like he has done exactly that. Mercedes team boss Toto Wolff said "he came back stronger and more muscly than before", and that testimony proved correct when Hamilton arrived at the circuit last week. Put simply, he's filled out.

Hamilton's increased muscle mass is visible. He proudly said his improvement was "a lot more than that" when informed by Autosport that several other drivers have reported a 1-2kg gain in muscle mass over the winter.

"But I'm still within the limit, so I'm good," the smiling Hamilton added. "Every year the fundamentals are the same, trying to reach a similar target every year, so to have that bar lifted and to really dig deep into other elements of training has been quite an exciting challenge."

"Every year when you get back into training, it's painful. But I tried different methods, and worked with several different people for once. I don't have a trainer but I've gone to work with people I know of, or got in touch with, to try different things throughout the weeks. And I get to take that throughout the year. Deep-rooted, core-wise, I feel stronger than I've been in a long time."

Hamilton was a busy man in the off-season, trying a range of

"EVERY YEAR WHEN YOU GET BACK INTO TRAINING, IT'S PAINFUL. BUT I TRIED SEVERAL DIFFERENT METHODS"

better, has more energy and is "definitely happier" — and Hamilton is at his very best when he's happy. Combine that with an awareness of the emerging threats and he seems about as protected against complacency as a driver can be.

"It is an exciting year, particularly with the drivers moving around — and you have a lot of young drivers moving around," he said. "I am definitely interested to see their progression and the pitfalls that they happen to come across, which every driver does, and how they spring back from it. And naturally I get to race against some of them as well. I feel stronger and fitter than I have ever been, all round, so hopefully that reflects in my driving."

If it does, and the new car is good enough, Mercedes may become the first team to win six titles in a row. Hamilton says he will not let that be a distraction, though. Instead, he wants Mercedes to attack as if it's still aiming to seize its first championship.

"By no means will it be, 'Oh yeah, we're going for the sixth,' like it's a relaxed thing," he said. "It's not like that. I'm not even focusing on that. It's a new season, a new year, a new chapter. We have to approach it like it's our first. We're going for number one. That's how I approach it."

When Hamilton aimed for number one with Mercedes the first time around, in 2014, he achieved exactly that and won 11 races. Ferrari's strong start, an apparently revitalised Vettel and the possible threat of Verstappen's Red Bull means nobody is expecting that to be repeated this year.

But Hamilton and Mercedes are F1's benchmark partnership for a reason. One half of that looks more ready for a title fight than ever. *W*

WILLIAMS FW42

GARY ANDERSON AND JAKE BOXALL-LEGGE

THE 2019 WILLIAMS FINALLY CREPT onto the track for the first time just after lunch last Wednesday (20 February), when it completed a series of shakedown laps. We are all disappointed the team had to delay testing to finish the car, but there will be no one more disappointed than the team itself.

From here on, Williams just has to bite the bullet, condense its test programme to fit the five days of testing it has, and just hope reliability and the weather are on its side. Now is not the time for recriminations; now is the time to recover from a bad situation.

Williams has pushed the boat out in a few areas. Firstly, there's the front suspension, which, without knowing the geometry detail, looks promising. If someone gets

this approach right, it will improve the grip level from the front tyres.

The top wishbone has been lifted, and Williams has the top wishbone pick-up just inside the wheel and tyre in a similar way to Mercedes. But the connection between the two is more faired in, making it almost invisible.

The lower wishbone has also been raised, and the combination of these means that Williams can have a fairly conventional suspension geometry that induces some negative camber when the car is compressed with the aerodynamic loads and also when the car is loaded up mid-corner.

This will give more stability from the front tyre in high-speed corners and also increase

the tyre contact patch at low speed, improving the mechanical tyre grip when the aerodynamics are at their least beneficial.

With all of this comes a reduced-angle pushrod. This will increase the loads in the bottom wishbone, but this should have been taken into account as it's only a question of maths.

The engine cover looks a little bulbous but that could be because the sidepod sides and top are drawn starting from the front of the radiator ducts, and the central section of the bodywork is drawn from the rear radiator exits. Where they meet up, they have been connected and that looks a little strange as it is also where the halo blends downwards into the body line.

REAR WING

A conventional rear wing features twin mountings, and small bulges in the mounting pylons could suggest the addition of a monkey seat here in the future. Strakes at the bottom of the endplates offer a final gambit in cleaning up flow from the rear of the car, while the flared section suggests an attempt to add a little more upwash, perhaps looking to find some extra downforce.

BODYWORK

There's a big attempt at sculpting the bodywork at the rear, resembling Mercedes' geometry from last season, in which flow washes down as the bodywork begins to taper inwards to build a little more pressure differential in the floor at the point at which the diffuser begins to open.

It's very tight, with plenty of free air afforded to the suspension components as the bodywork is kept from flaring out too dramatically.

Slots in the floor have been included, and are very large and prominent, working as much airflow away from the rear wheels as possible.



BARGEBOARDS

The bargeboards appear to be quite basic – the main area comprising two large, interlinked panels with another mounted behind – but there are a number of additions that keep it interesting. There's a gaggle of closely mounted horizontal fins at the leading edge, carefully guiding the airflow around the front face, while the floor section features a collection of slots to straighten up everything moving towards the underside.

The sidepod turning vanes are also interesting, featuring a number of slats, with the middle pair extended below the ones behind to manage the flow over the sidepods and undercut. Also in that area is quite possibly the strangest set of mirrors on the grid; almost completely flat. They curl around and are bound by a hood over the top, almost to assist the rest of the area with outwashing airflow.



FRONT END

The nose design is very much similar to last year's, with slots featuring in the mounting pylons to slip some extra airflow under the car. There's also an S-duct positioned similarly to last season's version, opening up where the suspension wishbones begin, which bring their own curious design cues.

Those upper wishbones mount in a similar fashion to Mercedes' 'horn' attachment, although Williams's interpretation seems to be mounted higher, presumably opening up the space in between the suspension elements – the steering arm appears down the centre between the wishbones. These are kept from creating a blockage to the sidepod inlets, which are another example of the highly positioned apertures prevalent on this year's grid.

There's also a Mercedes-style cape under the nose, just to mitigate the effects of lift at the underside and tighten up airflow ahead of the bargeboards.

FRONT WING

Aerodynamically, the FW42 doesn't have the same level of complexity as its rivals; the front wing probably fits into the 'conventional' camp, featuring the mandatory five elements without the same level of curvature as its counterparts. Each flap is of largely the same span, so there's going to be plenty of consistency with airflow attachment – the top two in particular resemble large machetes, presumably in an effort to hack their way through the field.

But there's no curvature at the inboard portion of the wing to manage the vortex at the neutral section, meaning it's up to the final three flaps to work with that. What's interesting is that the flap adjuster part of the wing is aggressively angled to poke flow outward around the tyres, with a small square cutout at the top corner of the endplate to further assist with that. That, coupled with the outwardly curved endplate, contributes to a reasonably rudimentary focus on developing outwash.



MOTORSPORT IMAGES/SUTTON



TIME FOR THE BIG CAT TO SHOW ITS CLAWS

*Now into its third season of Formula E competition,
Jaguar is facing mounting pressure to perform*

ANDREW VAN DE BURGT

PHOTOGRAPHY  **motorsport
IMAGES**



Right now, as you read this, in some shiny office somewhere in the world, a group of people are sitting around a table gazing at a Powerpoint presentation and 'blue-sky thinking' their brand essence. Outside experts, on eye-watering retainers, will be telling them what the values are behind the products they make as they attempt to distil some sense of passion and character from inanimate objects, all with the overall aim of making sure that you buy some more of it.

And while there's no doubt that countless numbers of these meetings have taken place at Jaguar (probably on a diarised basis), to a core group of people – racing fans – it will forever be a brand associated with motorsport success, not least the C- and D-types of the 1950s and the monstrous Tom Walkinshaw Racing-built cars of the late 1980s and early 1990s.

But you either have to be of a certain age or prepared to indulge in the rich history of motor racing to grasp this. If you're a member of the group all brands are desperate to reach – millennials (although a lot of the time, what they actually mean is Gen Z, but we digress) – the Jaguar Racing programme



you'll be most likely to recall was a Formula 1 project that promised much, but ultimately delivered little (although what might have happened had Bobby Rahal's approach to Adrian Newey been successful is a different story...).

Given the history, both ancient and recent, Jaguar's decision to become ABB FIA Formula E's first true manufacturer team understandably caused a huge stir. To the traditionalists it was heresy: the marque of six-litre V12s going all-electric was bound >>





Jaguar made progress with the Gen1 car, but is still waiting for its first win

to trigger some Jurassic response but, as the subsequent influx of manufacturers has shown, it was very much on point.

Jaguar's FE programme was announced during the second season of the all-electric series (2015-16). At the time, the teams weren't much more than ambitious GP2-sized squads, although Renault's relationship with e.dams had raised the bar both in terms of budgets and technical resource (the S2 gearbox was designed at Enstone). But the arrival of a full works team sent shivers down the pitlane, especially as Williams – which had built the original battery through its Advanced Engineering division – was effectively running the cars.

But those fears were unfounded. For its first race – the 2016 Hong Kong E-Prix – Mitch Evans and Adam Carroll lined up 15th and 17th on the grid. In the race Evans retired and Carroll came home 12th. Indeed, it took until the chaos of the fourth round in Mexico City for the team to score a point, and it ended the season 10th out of 10 in the teams' standings.

Was this just a case of expectations simply being set too high? "I think absolutely, in the sense that we were brand new back into motorsport," says Jaguar Racing team principal James Barclay. "It wasn't like we had our own motorsport activities like some of our competitors do, and we weren't involved in any other category – we had to completely start again with a blank sheet of paper. And that



F1 programme of the early 2000s did not bring the desired results

“IT'S AN UNPRECEDENTED TIME SO WE ARE MAKING FUNDAMENTAL CHANGES TO PROTECT OUR FUTURE”

was bringing in everything – personnel, putting the race operations together and creating a team that gelled. For those that really understood the sport they could see that we had a lot to do and we were always very pragmatic. The first year was always about learning, the second year was about being in the points in every race – and we achieved that in all but two – and this year is all about driving for the podium. With a brand like Jaguar there is obviously always high expectation, and we are here to try to make it a success and get ourselves on the podium.”

As Barclay points out, the team took a significant step forward in the fourth season (2017-18). With the series' inaugural champion Nelson Piquet Jr on board in place of Carroll, the campaign started with a top-three finish for Evans in Hong Kong. Mexico City once again yielded the best overall reward, with Piquet fourth and Evans sixth. Evans bagged the team's first pole position in Zurich, but in a fraught race slipped to seventh in the results.

So does that mean Jaguar is happy with the performance to date? “We are, but what I would say is that last year we felt as a team we didn't capitalise on our potential,” claims Barclay. “Rome, Zurich and Punta del Este stand out as races where ultimately I think we were capable of being on the podium. But again we were only in our second year racing, so we've been on the steepest curve of everyone. But now in our third season, we are operating as a team that has that experience and is able to make calls based on that experience. I think that, while we are positive, we do feel that we have to capitalise on our opportunities this year.”

This is where things start to look tricky. A Jaguar has been in the top 10 of every race so far this season, but Evans's fourth in the season opener in Ad Diriyah is the closest it has come to a

KEEPING COSTS UNDER CONTROL

AS WELL AS OVERSEEING Jaguar's ABB FIA Formula E programme, James Barclay also plays a leading role in FETAMA – the teams' and manufacturers' association. It was founded during the first season of FE racing and deals with a wide range of issues, most of which ultimately boil down to keeping the costs of the series under control while allowing enough technological freedom for the manufacturers to showcase their electric vehicle credentials and justify their involvement.

Barclay is relatively new to the role, which he took over from Andretti director of motorsport development Roger Griffiths. "It's started well, we obviously have an exciting time ahead looking to the future, and with new manufacturers coming in

everyone's aligned to the key focus, which is around good cost control for the championship," he says.

"It's about maintaining what we have here around Formula E, which is a championship that has a real equality and any number of teams can win. We want that variability to remain and everyone appreciates that. We have really good alignment between the teams and manufacturers on direction and we are working well with the FIA and FEO (Formula E Operations) on the future as well. It's amazing that we are looking at Gen3 [cars] already – it's a really exciting time for the sport and we are all working well together."

One of the big hot potatoes being juggled in FE at the moment is the concept of data transfer and remote control centres. Teams are

strictly limited on the number of personnel they can bring trackside, which has led to the creation of offices back at base where all the trackside data is monitored, something that is vital in the energy-management world of FE, as was demonstrated to dramatic effect on the final lap of the Mexico City E-Prix earlier this month.

"It can be a very complex discussion," says Barclay. "On one hand, it might look like it's driving down costs but you have to be careful that it doesn't drive up costs. What on paper looks like a cost save could result in a cost increase, if you are not careful. And that's why the best way to work is having an open dialogue with teams, the FIA and manufacturers to find the best solution that looks after the long-term sustainability and ensures costs are under control."

podium. Part of the problem stems from the team's one-lap pace. Evans's fifth on the grid in Marrakech is the best spot a Jaguar has managed so far. Given how tight qualifying tends to be in FE – 0.862 seconds covered the top 19 cars in qualifying in Mexico City last time out – the drivers are starting on the back foot.

When Jaguar entered FE it was on the crest of a wave. It was first among its rivals to showcase an all-electric SUV – the iPace – and the Jaguar Land Rover group spoke in buoyant terms about its global outlook and new model plans.

Since then a combination of the collapse in the demand for diesels, a slowing of the Chinese market and Brexit uncertainty have changed the landscape for car makers, especially those based in the UK. Jaguar has temporarily closed some of its factories and has had to make redundancies.

With this in the background, it must elevate the pressure to succeed. "It's really an unprecedented time for the car industry, so we are having to make some fundamental changes to protect and safeguard our future," confirms Barclay. "The future is very much focused around electrification."

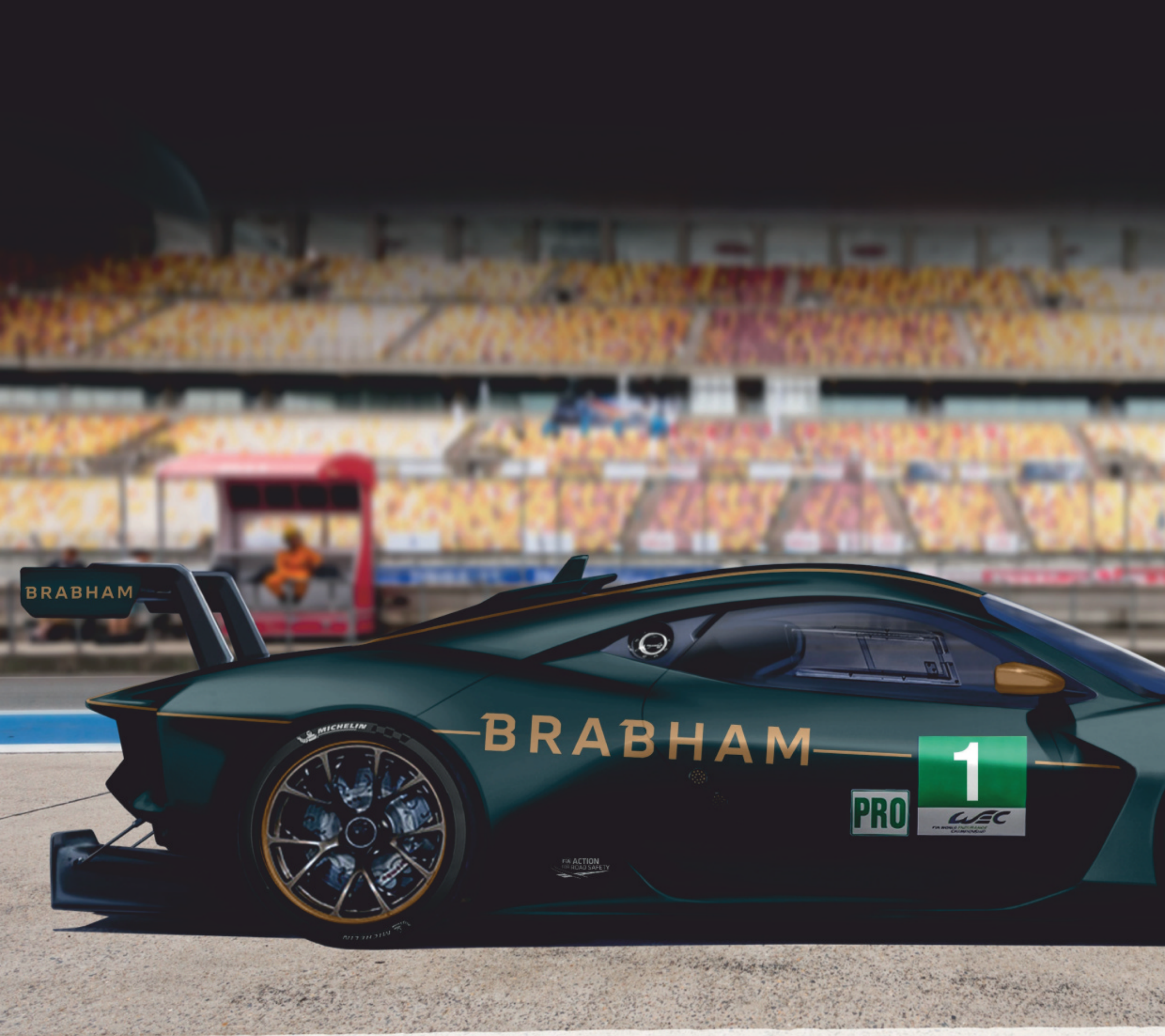
"We recently announced that we will be building our own batteries from a facility in Birmingham, so that shines a big spotlight on the future. We'll also be building electric drive units in Wolverhampton. Electrification is key and Formula E is ultimately our platform to tell the world and showcase our expertise, and also to take technology from track to the road. So this programme is really important to the business. As a team that just drives us on even more, because we want to as a business be the positive effect that we can be, and as a race team we want to do well for everyone back in the UK."

While things have been tough for Jaguar, FE's fortunes have been in the ascendancy. The move to the dramatic-looking Gen2 car, the removal of the need for the mid-race car swap, and a focus on keeping the racing on free-to-air TV (or exploiting digital rights) has resulted in much greater exposure for the series than had previously been the case.

This makes the case for Jaguar's involvement stronger, reckons Barclay: "We do a lot of analysis around not only what we see on track but also what we see in engagement with fans on social media. What we've seen is that the perception of our brand and products, particularly around our expertise in electrification, has a very positive rub. Firstly Jaguar being back in motorsport has been very positively received, and the effects around that of technology and innovation is all very positive. We have an amazing brand, an amazing company and huge support."

But no matter how tough the challenge is now, it's only going to be tougher over the next few seasons. Porsche and Mercedes join the championship next season and there are manufacturers queuing up to get involved and showcase their electric expertise as the road car market takes a fundamental shift (a recent report showed how internal combustion engine car sales in China have now peaked, with the switch to electric cars driving this change).

With this in mind, this is surely Jaguar's time to pounce. "I think Formula E is now the most competitive form of motorsport in the world," Barclay says. "The manufacturer involvement, the professionalism of the teams, a fully professional driver line-up, the gaps are so close. If you are two to three tenths off you can be five or six positions down the road, so you have to optimise everything. We're at that point where we are all very hungry for it now." ❧



BRABHAM

DAVID FIGHTS GOLIATH

The battle has lasted over a decade to get one of racing's storied names back on track. And now David Brabham wants to take on the manufacturers at Le Mans

GARY WATKINS



Upcoming BT63 will provide basis for 2022 Le Mans challenger



The BT62 is a track-day car, but it will be raced this year

BRABHAM IS BACK. Finally, and perhaps belatedly. More pertinently for racing fans, the revived marque is on course to return to competition for the first time since the disappearance of the Formula 1 team that bore the name. It's been a long road, one involving a lengthy and expensive court case, false starts and blind alleys, penury, and even the involvement of a private investigator.

There is already a new car bearing an emotive 'BT' type number in existence. It's not a racing car per se — the BT62 is a track day machine. But the next one in line bearing the initials of founders Sir Jack Brabham and Ron Tauranac is intended to put the famous name on the grid at the Le Mans 24 Hours in 2022, at the end of a 2021-22 World Endurance Championship campaign. The BT63 will be a road-going sportscar out of which a GTE racer for the WEC and beyond can be developed.

Yet it would be wrong to say that Le Mans and sportscar racing were the targets for David Brabham when he decided more than a dozen years ago that the family name borne by four championship-winning F1 cars had lain dormant for too long. He didn't really have a plan back then, nor for much of the intervening period. Nor could he, because there were too many hurdles to clear.

The rocky road that led to the formation of Brabham Automotive and development of the BT62 launched last May started in the winter of 2005-06. 'Brabs' knew he wanted to do something with a name that doesn't just encompass Brabham as both a team and a constructor, and the driving successes of him and his late father — there are also the careers of brothers Geoff, a four-time IMSA >>



Brabham is continuing the legacy started by his father Sir Jack

TRIENITZ
motorsport
IMAGES

title winner, and Gary to consider. "I started thinking about how I could create a legacy for the family," says the youngest of the three racing Brabham brothers. "I wanted to create something around the name, though I wasn't entirely sure what."

Brabham's motives weren't entirely altruistic. He was coming up to 40 years old – though yet to crown his career with victory at Le Mans in 2009 – and casting an eye beyond the end of his racing career: "I started to think about what I'd be doing when I was 50."

The problem was that when 'Brabs' tried to trademark the name in the European Union he found that someone else had registered the rights to 'Brabham' and 'Brabham Racing'. They hadn't acquired them at the messy end of Brabham in F1, just simply applied for them. No one had been using them, so they were up for grabs.

That's where the private investigator comes into Brabham's story. A German businessman called Michael Trick had registered the trademarks, but wasn't doing anything with them. "I even hired

"I SPENT HALF THE TRIP TO LE MANS SHOUTING AT LAWYERS. I WASN'T AS FAST AS I SHOULD HAVE BEEN"

a private investigator to try to find out as much as possible," says Brabham. The new – and short-lived, as it turned out – Brabham Racing unveiled a hot BMW M3 dubbed the BT92 in 2008. "They launched the car at the Essen Motor Show at the end of that year proclaiming 'Brabham Racing, the legend returns,'" explains Brabham. "They were selling T-shirts with Dad's face on them. I told Dad that these people were pretending to be us and if we were going to do anything with the name, we had to get it back first."

The protracted legal battle wasn't a happy period for Brabham. He now reveals that the pressure took the edge off his driving in the year he won Le Mans. His pace in the winning Peugeot 908 HDi shared with Alex Wurz and Marc Gené came under scrutiny at the time and he's now prepared to admit, perhaps in something of an overstatement, that he wasn't on top form that weekend: "It wasn't that I drove like a wanker, but I wasn't far off it."

Brabham believes that he hit his peak as a driver in 2008 during an American Le Mans Series campaign with the Highcroft Racing Acura team that pitched him and team-mate Scott Sharp against the might of Audi and the Penske Porsche squad. The Acura duo won a race outright, but also beat the Porsche RS Spyders to LMP2 victory a further three times. "In 2008 I hit a purple patch – all the ingredients were right in an ultra-competitive scenario," he says. "In 2009 I was only at 70% of that level. The pressure of the court case played a part in that: I spent half the trip down to Le Mans shouting at lawyers. I wasn't as fast as I should have been."

The case wasn't resolved until the beginning of 2013. The victory took its toll on Brabham financially, as well as emotionally. There was no application for costs, and Brabham was left, he says, "with 300 quid in my bank account" at a time when he had no full-season drive for the coming year. "We got the judgement, but we didn't go after costs," he explains. "My lawyer told me quite frankly that we'd never get them. I had the name, but no money and only a vague idea of what to do with Brabham. I knew I wanted to turn an iconic racing name into a brand, but didn't know how to it."

Brabham says he went down any number of "blind alleys" in that quest. "I was taken down so many roads," he recalls. "More often than not I was talking to people who weren't right for us, so I'd trip up, dust myself down and start looking again. That happened for several years."

Brabham needed funding to get his ideas off the ground. That resulted in a crowd-funding scheme, launched in September 2014, under the Project Brabham banner. The new scheme had the target of an LMP2 entry in the WEC. Crowd-funding was hit upon as a means of establishing the foundation of what is still planned as >>

BT62, in classic Parmalat livery, goes for a sprint at Adelaide festival



Brabham (on podium, right) wasn't at his best for 2009 Le Mans win





BRABHAM AUTOMOTIVE



Brabham (in action, left pic) joined Modena in 1990 F1 line-up

BRABHAM AUTOMOTIVE



WOOD

motorsport IMAGES



Damon Hill gave Brabham its F1 swansong in 1990

motorsport IMAGES

WHATEVER HAPPENED TO THE BT61?

Brabham Automotive is historically correct to call its first creation the BT62, even though the final Brabham to grace the race track prior to the relaunch of the marque was the 1992 BT60B Formula 1 car. There was a BT61, although it never made it off the drawing board.

The unbuilt car was the work of Bicester-based Galmer Engineering, which had been contracted to design a new Brabham for 1993 by a British group that had taken over the assets of the team after its late-season collapse in 1992. Founder Alan Mertens reckons that the chassis design was some way down the line when the project ground to a halt.

There were a couple of reasons for that. The new owner, RM Motorsport, couldn't tell the designers what engine the car was going to use, nor could it start paying the fee that had been agreed.

"If someone comes to you and says they are going to pay you to design an F1 car, you think Christmas has come early," recalls Mertens, whose G92 chassis had won that year's Indy 500. "We took them at face value because we were so excited about the project."

That enthusiasm dissipated with a lack of payment and news about the engine, and Mertens stopped work on the new Brabham in late December. And there was no Brabham team on the F1 entry list published at the end of the following month.

The entries were prepared, though. Sportscar team

"THE PREMISES WERE SO IMPRESSIVE THAT THERE WAS A TREE IN THE FOYER"

manager David Prewitt had been engaged by RM to put the team together, and had done the paperwork and moved the fledgling operation into impressive premises in Milton Keynes. So impressive, he says, that there was "a tree in the foyer".

Prewitt doesn't know if the paperwork was ever submitted. He just recalls that the project "appeared to fizzle out" after an initial deposit had been paid to the receivers controlling Brabham's assets.

And in case you were wondering, RM Motorsport was the same group headed by Alan Randall that had been planning a multi-car assault on the 1992 Sportscar World Championship. It had ordered no fewer than nine Jaguars from TWR, but failed to put a single one on the grid.

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BRABHAM AUTOMOTIVE

BT62 set an unofficial record at Mount Panorama with Luke Youlden driving

an open-source initiative for drivers, engineers and fans. More than £300,000 was raised – a record at the time for crowd funding in the sporting arena – but the investment required to turn Project Brabham into reality remained elusive. Then came the first contact with the group behind Brabham Automotive.

Fusion Capital is an investment company whose portfolio includes Precision Components, which was a supplier to all the manufacturers building road cars in Australia. But with General Motors brand Holden, Ford and Toyota all closing down their down under manufacturing facilities, it was looking for new opportunities.

“I was put in touch by a mutual contact, who told me that Fusion was looking to diversify,” explains Brabham. “It was an obvious link-up really. They were looking for a halo project and we could offer that with our name. What better way to get Brabham back racing than building sportscars and having an automotive company behind it? All my plans started to come together.”

A high-end track-day car, imbued with racing DNA, as the first Brabham Automotive project made sense too. It allowed the fledgling marque to arrive with a bang. The BT62 was developed – and, remarkably, tested – in near secrecy. A car that was already up and running was presented on the launch of the company at Australia House in London last spring. “We didn’t want to show some kind of rendering, to say this is what we are going to do,” explains Brabham. “For credibility reasons we decided to show a real car – and video of it testing.”

Brabham made it clear at the launch of the million-pound BT62, of which 70 are scheduled to be built, that racing was very much on the agenda. “Racing is what Brabham is all about,” he says. “It would be inconceivable that we wouldn’t want to race the cars we build.”

The carbon-chassis BT62 wasn’t conceived for racing, but it is fully compliant with all FIA safety specifications and has already proved its speed on track – and in public – with an unofficial lap record for a GT car on the Mount Panorama

“RACING IS WHAT BRABHAM IS ALL ABOUT. IT WOULD BE INCONCEIVABLE NOT TO WANT TO RACE OUR CARS”

circuit at Bathurst, set earlier this month. That is a prelude to the car beginning its racing career on an invitational basis some time later this year. Brabham is keeping potential series in which the car might appear close to his chest, but he insists that it is important to get a car with a BT type number racing again as a lead-in to a WEC entry.

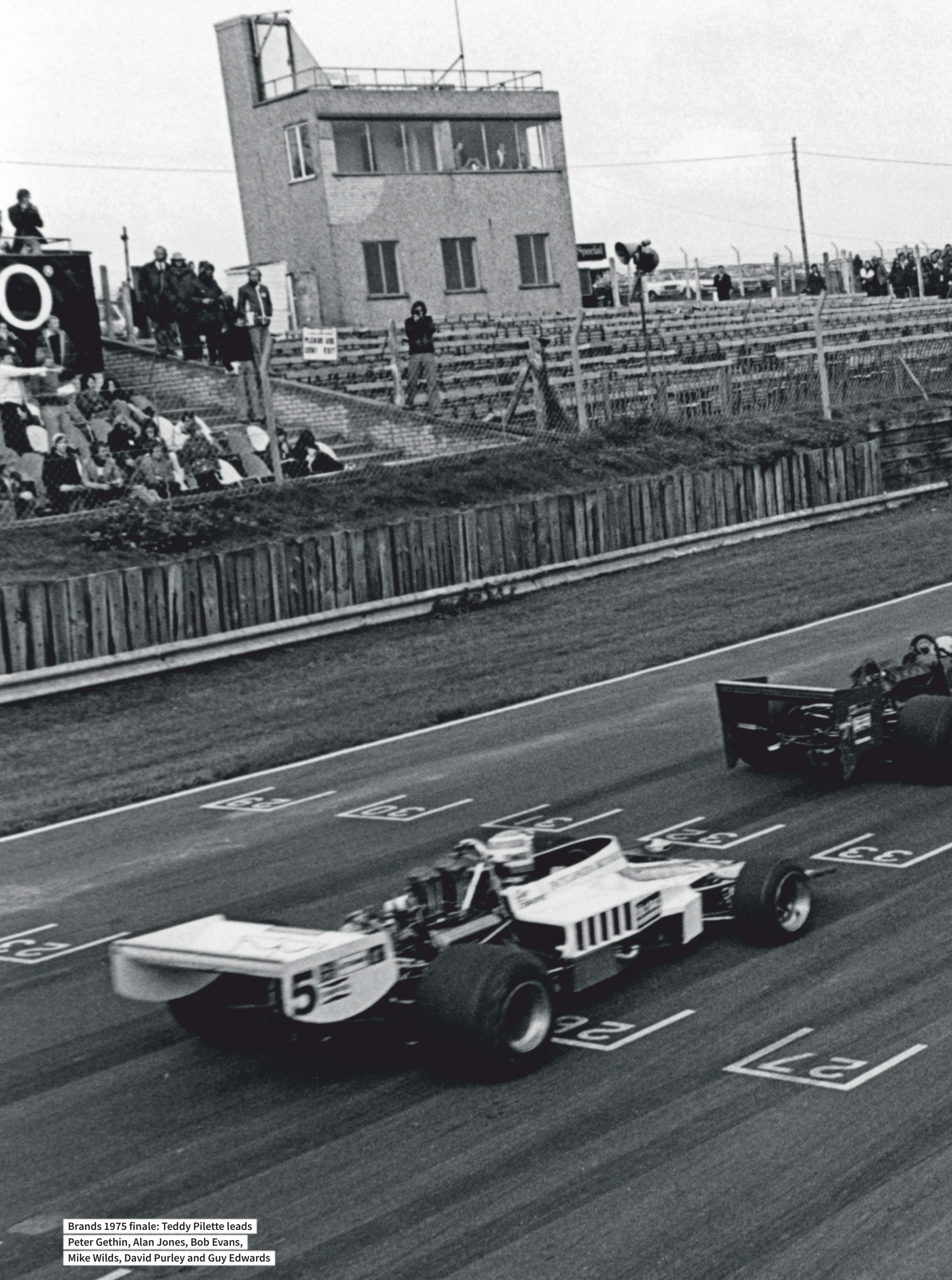
The announcement of the Le Mans plans in January is more a statement of intent than anything. Brabham acknowledges that there are still a lot of hoops through which to jump. FIA homologation will be one. The distinction between large and small manufacturers that was part of the GTE rulebook before 2015 has disappeared. Brabham would, as the rules stand, have to produce 100 road cars by the end of its first WEC campaign. “What we are saying is that we are setting out on the road to Le Mans,” says Brabham. “There had been a lot of speculation about where we might end up racing and we felt it was important to say where we were headed.”

Brabham talks about setting out on a “journey”. But the reality is that he has been on one for years in his bid to restore the sheen to a legend. ❧

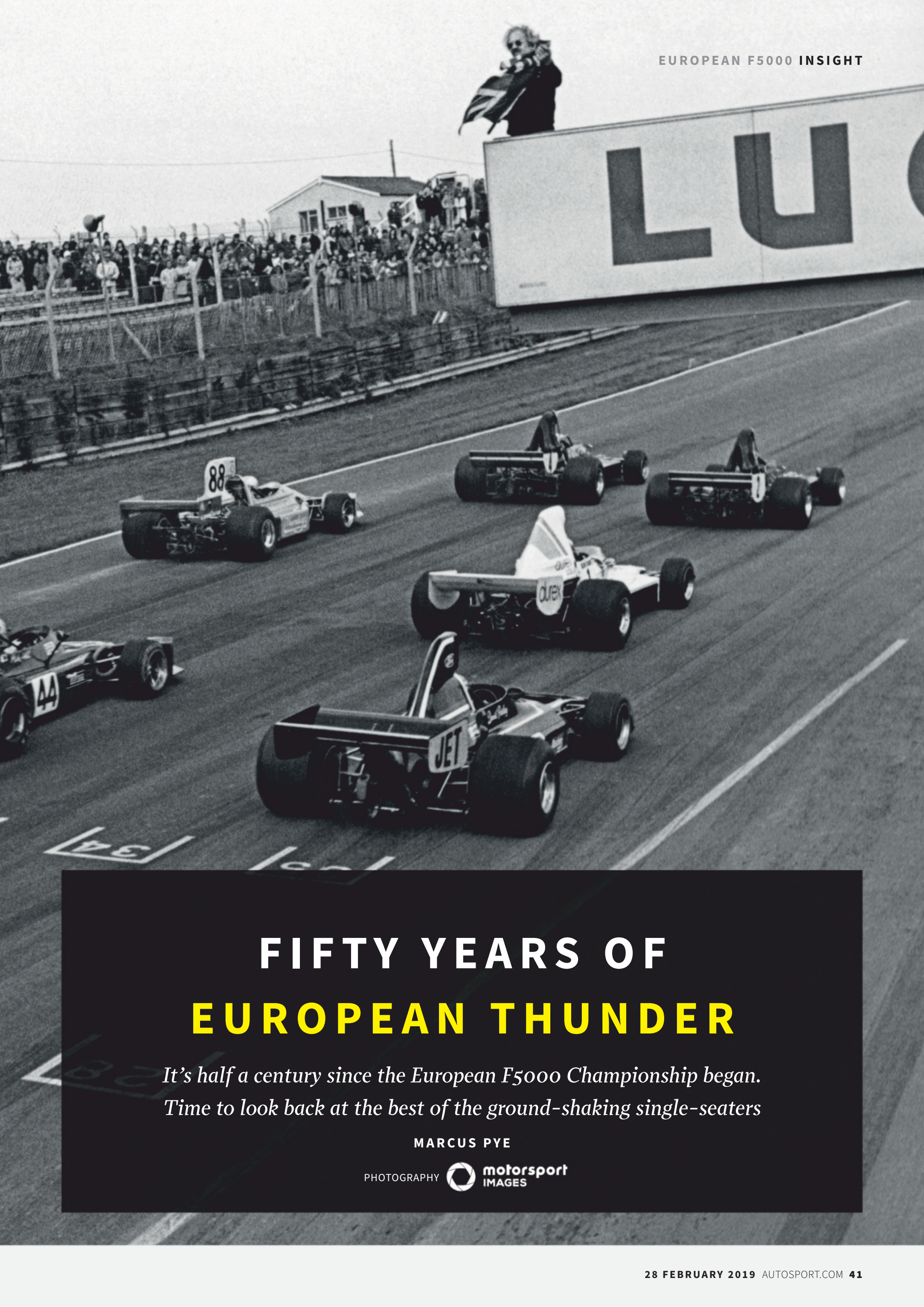
NEXT WEEK

INDYCAR PREVIEW 7 MARCH ISSUE

Apart from our bumper F1 preview, we’ll be looking ahead to the IndyCar season opener, coming up fast on the streets of St Petersburg in Florida.



Brands 1975 finale: Teddy Pilette leads
Peter Gethin, Alan Jones, Bob Evans,
Mike Wilds, David Purley and Guy Edwards



FIFTY YEARS OF EUROPEAN THUNDER

*It's half a century since the European F5000 Championship began.
Time to look back at the best of the ground-shaking single-seaters*

MARCUS PYE

PHOTOGRAPHY  **motorsport
IMAGES**

High-powered and high-winged – for the first four races, after which the suspension-mounted appendages were universally banned, thunderous Formula 5000 was never going to be an easy ride. Ground-shaking stock-block V8-engined cars accelerated from 0-100mph in four seconds and enabled the best up-and-coming drivers to match Formula 1 lap times for a fraction of the running costs of pan-European 1600cc F2 in 1969.

The Sports Car Club of America had sown the seeds in 1968, transforming Formula A, its premier single-seater racing category, by admitting the US motor industry’s omnipresent pushrod powerplants of up to five litres capacity (305cu in). By pre-social-media standards word spread like wildfire. Motor Circuit Developments’ influential boss John Webb and charismatic BRSCC chief Nick Syrett championed the easier-to-comprehend F5000 equivalent and underpinned it, as had become the norm, with cigarette brand backing.

The concept was simple. Cars had to meet a minimum weight of 1250lb (566kg) less fuel and water, 70kg more than a contemporary three-litre F1. In Europe, engine builders had to use standard cylinder head castings (an Achilles’ heel), and tune the V8s to run on pump petrol. Chevrolet’s iron block ‘302’ proved the vast majority’s choice, the strongest early example – in Peter Gethin’s McLaren M10A – developing perhaps 480bhp, although most made considerably less and were unreliable under stress. Tyre choice was free.

The brash, noisy, machines were popular with aspiring F1 drivers – mentored by pecunious team owners including nightclub owner Sid Taylor, wine merchant Alan McKechnie and Belgian Stella Artois brewing baron Count Rudi van der Straten – and intrepid privateers. They also drew in the crowds. More than 40,000 spectators were claimed to have witnessed Gethin win the first European Formula 5000 Championship race at Oulton Park on

4 April 1969, in his papaya-hued quasi-works McLaren-Chevrolet M10A, from David Hobbs’s factory Surtees TS5 and independent Keith Holland in former saloon car entrant Alan Fraser’s Lola T142.

Jockey-sized Gethin was the class master, dominating its first two seasons despite running only partial campaigns in McLarens alongside US, F1 and Can-Am commitments. Although he is perhaps more widely remembered for defeating F1 opposition in Brands Hatch’s 1973 Race of Champions, in a Chevron B24, ‘Peter Perfect’s’ astonishing record of 21 F5000 round victories across five of its seven years far outweighed closest rival Graham McRae’s 10 and Brian Redman’s and Frank Gardner’s eight apiece.

On reflection, as spectacular as it could be, F5000 underperformed in its early days in Europe, lacking the depth of field and razzmatazz of its cash-rich US parallel that took on the moniker and saw champions David Hobbs, Graham McRae, Jody Scheckter and three-time champion Redman slugging it out with aces of the calibre of Mark Donohue, Mario Andretti, Al Unser Sr and, fleetingly, young Tony Brise.

In Europe, many weekend warriors in obsolete chassis limped home behind surviving stars, engines spluttering a cylinder or two light, or merely overgeared for longevity in the hope of claiming transient kudos and a few quid. The culprit for defused races was often cracked heads but, with so much torque being produced, transmission and rear suspension failures were also commonplace. Increased prize funds brought more quality cars and drivers to the fray. Engineering advances and experience enabled them to run harder and faster, improving the show.

Over Formula 5000’s 112 championship events, 53 of which were decided on the aggregate of two heat results, 26 drivers won rounds. Nineteen had competed, or went on to compete, in F1 championship races. Gethin and Alan Jones – twice a winner in 1975 with the wailing 3.4-litre 450bhp Ford GAA V6 engine, more than a match >>

EUROPEAN F5000 YEAR BY YEAR



1969 GUARDS CHAMPION
PETER GETHIN (GBR)

A bizarre NASCAR-esque scoring system saw Peter Gethin extend an enormous points lead with four straight victories in the sole McLaren M10A run by Derek Bell’s stepfather Bernard Hender’s Church Farm Racing Team, before heading to the US. When Gethin returned, having missed five races, his points advantage remained. Young Mike Walker, in Alan McKechnie’s Lola T142, and David Hobbs (works Surtees TS5) both scored before Hobbo’s team-mate, Lotus F1 veteran Trevor Taylor, put mechanical dramas behind him to bag four on the trot, a sequence Walker ended at Oulton Park. Mathematically able to win the title, Taylor dug deep at Brands Hatch’s finale, indeed was narrowly leading Gethin when they crashed lapping a backmarker. Nine-time world motorcycle racing champion Mike Hailwood (Lola) won the race.

	DRIVER	POINTS
1	Peter Gethin (McLaren M10A)	2365
2	Trevor Taylor (Surtees TS5)	2170
3	Mike Hailwood (Lola T142)	2045
4	Keith Holland (Lola T142)	2000
5	Alan Rollinson (Brabham BT36 & Lola T142)	1920
6	Mike Walker (Lola T142)	1842



1970 GUARDS CHAMPION
PETER GETHIN (GBR)

With revised F1-style 9-6-4-3-2-1 scoring and two of the 20 races with GP cars, this was another split-season for Gethin. Beaten by Mike Walker in McKechnie’s emerald green McLaren M10B at Oulton’s opener, Gethin built an unassailable lead by winning seven of the next 10 in Sid Taylor’s similar car. Derek Bell subbed for Gethin (contesting the Dutch GP following Bruce McLaren’s death) at Monza, winning heat one before piston failure handed Walker aggregate gold. Swedish F3 ace Reine Wisell’s hat-trick in the car protected Gethin’s cushion. Hailwood won twice but wrecked his works Lola T190 at Mondello Park (where Trevor Taylor scored for Surtees), then Frank Gardner took up the cudgels with a development T190. New Zealanders Howden Ganley and Graham McRae (M10Bs) merited their late wins.

	DRIVER	POINTS
1	Peter Gethin (McLaren M10B)	90
2	Howden Ganley (McLaren M10B)	61
3	Frank Gardner (Lola T190)	52
4	Mike Hailwood (Lola T190 & T192)	50
5	Mike Walker (McLaren M10B)	42
6	Graham McRae (McLaren M10B)	36



Nifty Ford Capri pace car heads Gardner (Lola), Walker (McLaren), Taylor (Lola) and McRae (McLaren) at Brands in 1970

F5000 ROUND WINNERS	
DRIVER	WINS
Peter Gethin (GBR)	21
Graham McRae (NZL)	10
Frank Gardner (AUS)	8
Brian Redman (GBR)	8
Mike Hailwood (GBR)	7
Bob Evans (GBR)	6
Teddy Pilette (BEL)	6
Ian Ashley (GBR)	5
Trevor Taylor (GBR)	5
David Hobbs (GBR)	4
Alan Rollinson (GBR)	4
Mike Walker (GBR)	4
Guy Edwards (GBR)	3
Reine Wisell (SWE)	3
Keith Holland (GBR)	2
Alan Jones (AUS)	2
Gijs van Lennep (NLD)	2
Brett Lunger (USA)	2
David Purley (GBR)	2
Steve Thompson (GBR)	2
ONE-TIME WINNERS	
Tom Belso (DNK)	
Tony Dean (GBR)	
Howden Ganley (NZL)	
Vern Schuppan (AUS)	
Richard Scott (GBR)	
Gordon Spice (GBR)	



1971 ROTHMANS CHAMPION

FRANK GARDNER (AUS)

Two of F5000's quickest tamers, versatile Australian Gardner for Eric Broadley's Lola and 'Mike the Bike' Hailwood, under John Surtees's wing, characterised year three. Seven poles apiece left scraps for F1-bound Gethin – BRM's extraordinary Italian GP winner – and Redman. Hailwood won Mallory Park's opener, then Redman urged Sid Taylor's ungainly McLaren M18 ahead before his fiery Targa Florio Porsche 908 crash. Gardner went top again, but Hailwood closed in before Lola's F2 T240-based T300 arrived and won thrice with Gardner at the wheel. Reliability issues for Hailwood's TS8 also swayed the balance in Gardner's favour. Alan Rollinson (McKechnie Surtees) scored twice, leapfrogging Brands GP winner Redman and triple victor Graham McRae (M10B), but failed to rob Mike Walker (Lola) of third.

DRIVER	POINTS
1 Frank Gardner (Lola T192 & T300)	95
2 Mike Hailwood (Surtees TS8)	58
3 Mike Walker (Lola T192)	40
4 Alan Rollinson (Surtees TS8)	35
5 Brian Redman (McLaren M18)	34
6 Graham McRae (McLaren M10B)	33



1972 ROTHMANS CHAMPION

GIJS VAN LENNEP (NLD)

Redman won two rounds in Taylor's second McLaren M10B before the Chevron B24 – which marque founder Derek Bennett built at his behest in 10 weeks – arrived. The combo won on the car's debut at Oulton Park, but racing on both sides of the Atlantic cost Brian the European championship. Having missed five rounds, he returned for Brands Hatch's double-points finale 16 points behind leader Gijs van Lennep – the Dutchman twice a winner in Jackie Epstein's Speed International Surtees TS11 – and, like Alan Rollinson and Graham McRae, with the possibility of winning it! Shadowed by McRae's eponymous GM1 (evolved from the Leda LT27), Redman won the GP circuit thriller, with Gardner third in the prototype Lola T330. Fourth was enough for van Lennep, rewarding John Surtees's marque.

DRIVER	POINTS
1 Gijs van Lennep (Surtees TS11 & McLaren M18)	65
2 Brian Redman (McLaren M10B & Chevron B24)	61
3 Graham McRae (Leda LT27 & McRae GM1)	57
4 Alan Rollinson (Lola T300 & Kitchmac)	51
5 Teddy Pilette (McLaren M18 & M22)	25
6 Ray Allen (McLaren M18 & Surtees TS11)	23



Away day at Nivelles in 1972,
John Cannon's March-Oldsmobile
leading Graham McRae's Leda

EUROPEAN F5000 YEAR BY YEAR



1973 ROTHMANS CHAMPION

TEDDY PILETTE (BEL)

Seven winners from seven rounds – Gethin, McRae, Hobbs (in Carl Hogan’s Lola T330, which had rendered the hairy T300s antediluvian), American Brett Lunger (Trojan T101), Steve Thompson, Teddy Pilette and Keith Holland, representing four chassis marques – made it an unusually open start. Ian Ashley and sportscar graduate Guy Edwards (Lolas) and Bob Evans (Trojan) joined the podium toppers, making it 10 from 15. Having switched from VDS’s obsolete McLaren M18 to its Chevron B24 (#33, above), Belgian Pilette came on strongly, bookending a trio of Trojan victories with golds at Oulton and Brands Hatch’s Club circuit. They put him atop the table, where he held on, narrowly defeating fellow Chevron racer Tony Dean. Holland shone once in the F2 McLaren M21-based Trojan prototype, claiming third overall.

	DRIVER	POINTS
1	Teddy Pilette (McLaren M18 & Chevron B24)	136
2	Tony Dean (Chevron B24)	134
3	Keith Holland (Lola T190 & Trojan T101)	116
4	Steve Thompson (Chevron B24)	114
5	Guy Edwards (Lola T330)	102
6	Tom Belso (Lola T330)	97



1974 ROTHMANS CHAMPION

BOB EVANS (GBR)

Confidence buoyed by a breakthrough win in McKechnie’s Trojan in late 1973, Bob Evans was re-equipped with a Lola T332 and capitalised. Boosted by a mid-season hat-trick, Evans scored four wins. He and the stalwart team richly deserved the crown. Despite also taking four wins, Gethin’s VDS Chevron B28 (a longer, wider B24) struggled against hordes of wieldier Lolas. Hobbs (T330) and Redman – running in Sid Taylor’s T332 – won two apiece before heading Stateside. Ever-bold Ian Ashley (T330) was the other repeat winner, but there were victories for veteran Tony Dean (B24), Dane Tom Belso (T330), sponsorship guru Guy Edwards (T332) and Aussie Vern Schuppan, who made the most of VDS’s spare ex-Chris Craft Chevron B24/28 (his third car of the season) at the last round.

	DRIVER	POINTS
1	Bob Evans (Lola T332)	193
2	Peter Gethin (Chevron B28)	183
3	Ian Ashley (Lola T330)	152
4	Teddy Pilette (Chevron B28)	108
5	Lella Lombardi (Lola T330)	88
6	David Hobbs (Lola T330)	81

for the deep-throated Chevy V8 sluggers on some circuits – won world championship grands prix. Few saw it coming, but inside five years Australian Jones had played to his strengths and won the F1 world championship in style with Frank Williams’s team.

Although the European Formula 5000 Championship was discontinued at the end of 1975, the cars were still welcomed in its successor, the MCD-promoted ShellSport International Group 8 series in which they competed against three-litre F1, two-litre F2 and 1600cc Atlantic machinery in 1976 and 1977. David Purley won the 1976 Gp8 title in his Chevron-Ford GAA B30. Damien Magee (March-GAA 75A), Jones (Lola-Chevrolet T332) and Holland (Lola-Chevrolet T400) won races.

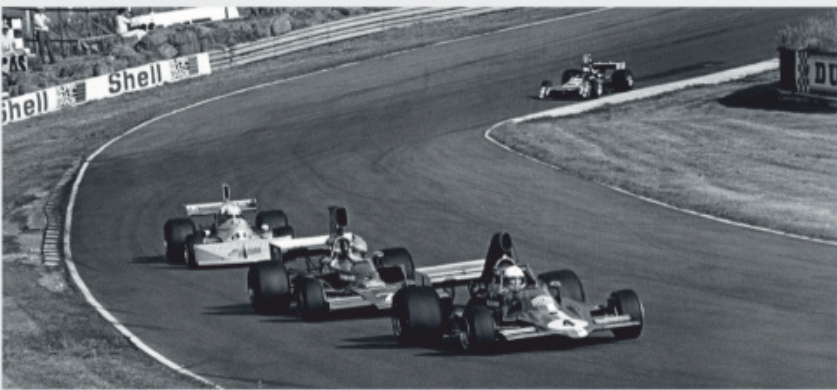
F5000 cars had long been successful in the RAC British Hillclimb Championship. David Hepworth – whose four-wheel-drive Hepworth-GM started the inaugural F5000 race at Oulton Park – won the 1969 title and set a trend. Sir Nicholas Williamson (McLaren M10A) followed suit in 1970, while Roy Lane (McRae GM1) landed back-to-back crowns in 1975-76.

Formula 5000 remains a popular category in historic racing the world over. See the cars racing in the Historic Sports Car Club’s rebranded XL Aurora series at Silverstone GP (18-19 May), Brands Hatch GP (29-30 June), Anglesey (13-14 July) and Silverstone National Circuit (19-20 October) this season.

F5000 KING: BRIAN REDMAN

Racing on both sides of the Atlantic, Redman was already on his way to racking up eight European Formula 5000 round wins in Sid Taylor’s machines when he refocused and became king of the hill in the States, as 17 race victories over five seasons, culminating in three championships, attest.

“I loved winning and F5000 enabled me to do that in a comparatively relaxed atmosphere,” recalls Redman, now 81.



1975 SHELLSPORT CHAMPION

TEDDY PILETTE (BEL)

Despite US customers abandoning Lola’s T400, with its tricky rising-rate suspension geometry, VDS wrung the best from it. As the fourth winner in as many rounds – after Ashley, Gordon Spice (at snowy Oulton!) and David Purley in his Ford GAA V6-powered Chevron – Richard Scott bagged the T400’s first success in the Durex car. When VDS got into its stride, Gethin’s back-to-back Zolder and Zandvoort wins began turning the tide. Evans and Pilette joined the winners before the wailing 3.4-litre Ford V6s enjoyed a three-race purple patch – including a one-two at Silverstone – with Alan Jones (March 751) and Purley. Pilette’s second brace of victories edged a second title his way, but classily Gethin won the era’s final event at Brands from pole, with Pilette as tailgunner.

	DRIVER	POINTS
1	Teddy Pilette (Lola T400)	174
2	Peter Gethin (Lola T400)	133
3	Guy Edwards (Lola T332)	122
4	Ian Ashley (Lola T330 & T400)	101
5	David Purley (Chevron-Ford V6 B30)	98
6	Richard Scott (Lola T400)	85

“The cars were as fast as F1s, but more fun to drive with all that torque. Those Chevrolet V8s pulled strongly from 6000-8000rpm, even 5000rpm sometimes. They were fabulous.”

The McLaren M18 was outmoded in 1971, yet the Lancastrian won in it twice at Brands Hatch.

“When Sid replaced it with an older M10B for 1972 [in which he bagged another pair] I asked my friend Derek Bennett if he could build me a Chevron,” adds Redman.

“He said he could and 10 weeks later, having broken the lap record in testing, we won on its debut at Oulton Park. We took it straight to Watkins Glen and had the \$20,000 winner’s prize in the bag when the battery went flat.”

The B24 carried Redman to his first US F5000 win at Riverside, and fourth in the L&M championship, then an end-of-term victory at Brands.

“In 1974 at Oulton in Sid’s Lola T332 I was leading David Hobbs comfortably when, approaching the old Knickerbrook at 170mph, it snapped sideways,” says Redman. “The wing had broken but, while David started the last lap on my tail, he couldn’t get past. Those T332s were fantastic, the ultimate F5000 cars. Despite winning five races in the previous T330 I missed two rounds [to drive for Ferrari] and the L&M championship. But the Carl Haas/Jim Hall T332s were absolutely key to me winning the titles in 1974, ’75 and ’76.”

MIKE WALKER ON TRYING TO BEAT GETHIN

Mike Walker was 23 when he landed an F5000 deal for 1969 after a few late F2 starts in 1968 mitigated a “disastrous” second 1000cc F3 term with the Chequered Flag’s McLaren M4s. “Alan McKechnie, a wealthy enthusiast, threw me a lifeline,” remembers Walker. “F5000 appealed to him because the races were mainly in Britain.

“There was only one McLaren and Surtees was running works cars, so our only option was Lola’s spaceframe T142. Based on the 1968 T140 it was the backbone of the championship, but not really competitive. After F3 it was a bit of a handful, but we won at Silverstone and Oulton Park, and finished sixth in the championship.”

Alan McKechnie Racing switched to a McLaren for the second year of the European championship and Walker was again a contender: “The difference between the Lola and 1970’s McLaren M10B was like night and day. The McLaren was a lovely car in all respects, it was beautifully made and great to drive. Nearly all the others were on Goodyear tyres but we used Firestones, because they paid better bonus money! Winning Oulton’s opener and the Monza Lotteria – the biggest-money race of the season – was fantastic, but disappointingly we were only fifth in the points.

“We learned later that Peter’s [Gethin] and Howden Ganley’s M10Bs were built at McLaren’s factory, with lowered engine mountings and subtle tweaks. Trojan made the rest. Peter was a polished act whose cars were superbly turned out, so he was always going to be difficult to beat.

“My final F5000 year was frustrating. Doug Hardwick’s Henley Forklift Lola T192 wasn’t brilliant. I finished on the podium three times, but didn’t put a scratch on it and ended up third in the table! I loved F5000, but decided to step back into F3 to rescue my career – which almost worked. Amazingly, 48 years later, I’m racing a Historic Formula Junior Bond and hopefully an F3 Brabham BT21 like the one I raced in 1967!”

F5000 ROUND WINNERS

CONSTRUCTORS	WINS
Lola	43
McLaren	26
Chevron	15
Surtees	15
Trojan	5
Leda	3
McRae	3
March	2

NEXT WEEK

FORMULA 1
SEASON PREVIEW
7 MARCH ISSUE

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Keselowski tops Penske winners' list

NASCAR CUP
ATLANTA (USA)
FEBRUARY 24
ROUND 2/36

Brad Keselowski became Team Penske's most successful driver in terms of race wins by claiming victory in the NASCAR Cup race at Atlanta Motor Speedway.

The 2012 champion has now won 60 times for the team, eclipsing Mark Donohue's record. But the landmark victory very nearly had to wait, with Keselowski sidelined for much of the weekend with a stomach bug. Nevertheless, he pushed through and held off a hard-charging Martin Truex Jr to claim the first win for Ford's new Mustang.

Keselowski passed team-mate Joey

Logano for the lead on lap 293 of 325 and remained out front until the chequered flag, despite Truex carving chunks out of his advantage during the final few laps.

Truex, who switched to Joe Gibbs Racing this season, crossed the line just two tenths back from Keselowski, but was hindered by lapped traffic, putting an end to any chance of a win for the Toyota driver.

Kurt Busch finished his 650th NASCAR Cup race in third, one spot ahead of Kevin Harvick, who led 45 laps and won the second stage but had to contend with handling issues, which dropped him back.

Clint Bowyer rounded out the top five, ahead of Kyle Busch who, like his brother, was also taking part in a milestone race: his 500th. Erik Jones, polesitter Aric Almirola,

Chris Buescher and Daniel Suarez completed the top 10 with Daytona 500 winner Denny Hamlin in 11th.

Kyle Larson won the first stage and led a race-high 142 laps, but could only finish 12th after being held up in the pits in stage two.

Larson's plight was much like Ryan Blaney's. He led 41 laps but finished down in 22nd after overshooting his pit box while stopping during the final caution period.

Blaney finished one spot ahead of Logano who, after losing the lead, pitted on lap 303 complaining of a loose wheel.

The race was halted by just one proper caution period, caused by Ryan Preece colliding with Brian Jeffrey McLeod in the pits during the final stage.

DOMINIK WILDE

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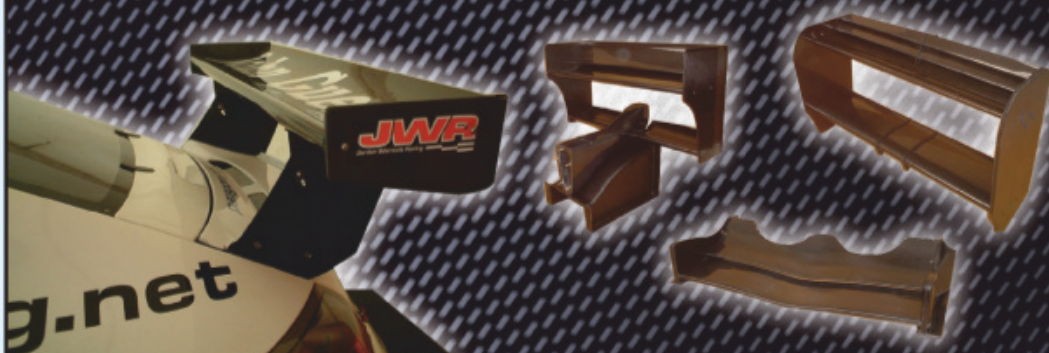
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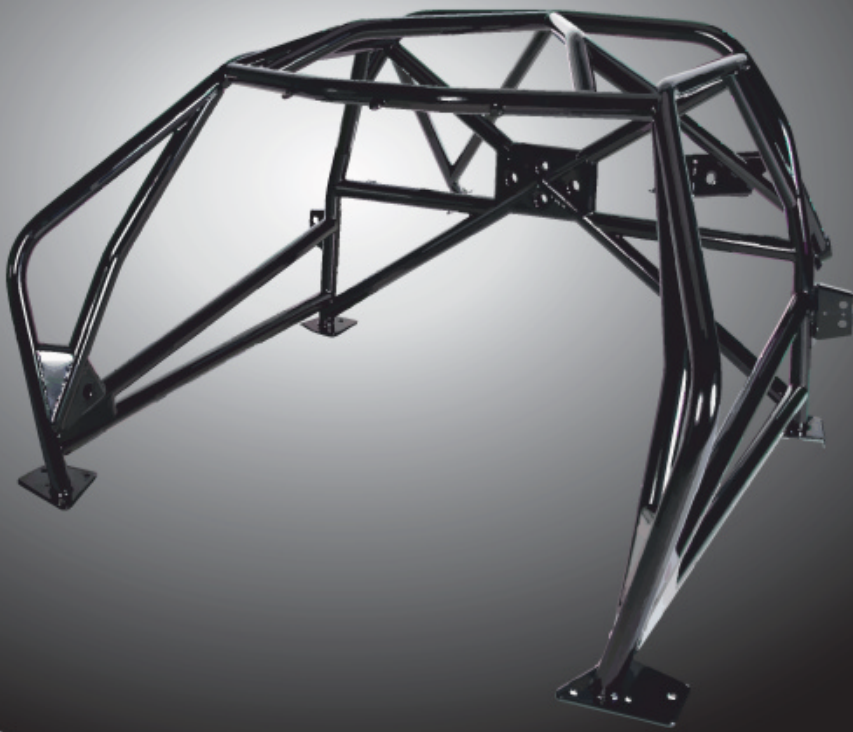


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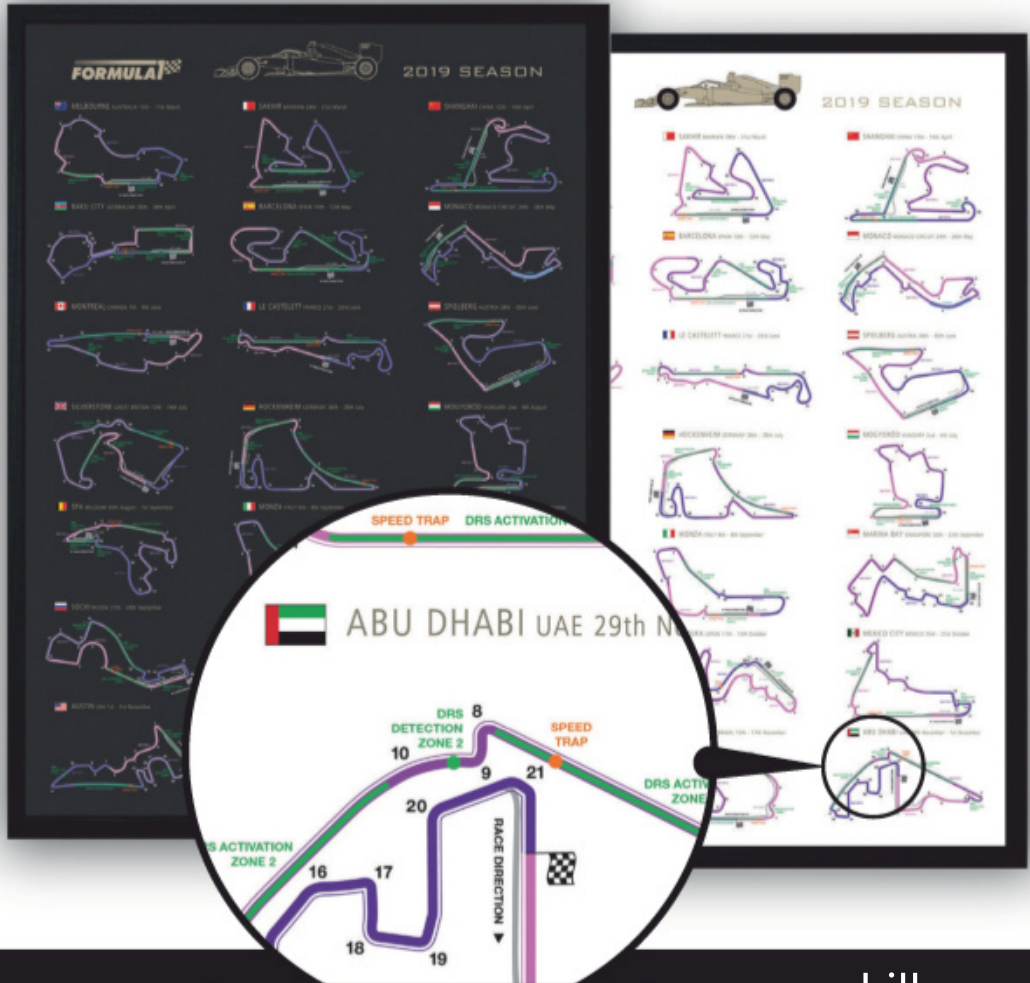


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New Cayman is expected to be major step forward on previous model



ZAMPARELLI TO RACE NEW CAYMAN GT4 IN BRITISH GT

BRITISH GT

Serial Porsche Carrera Cup GB contender Dino Zamparelli will switch to British GT this season, spearheading GT Marques' assault on the championship in a new Porsche 718 Cayman GT4 Clubsport.

Zamparelli, Carrera Cup runner-up for the past three seasons, previously raced for the High Wycombe-based team in 2016. He will share the Cayman with GT Cup graduate Christopher Car in the Pro-Am class.

"I got to the point where I felt like I achieved everything I needed to achieve and a change was needed," said Zamparelli. "I'm excited about this new chapter working with Chris. I've been particularly impressed with his natural speed – as an amateur I think he'll be strong.

"We knew that the new Porsche was coming out this year and it's just developed from there. It's quite an exciting prospect to develop the car in the UK."

The team had yet to take delivery of the car when Autosport closed for press, but team owner Paul Mace, whose squad will also contest the Carrera Cup GB, says it will run for the first time at the media day next week before a decision is taken on its participation in the first round at Oulton Park in April.

The new-for-2019 Cayman, the first of its kind in the UK, replaces the previous Clubsport MR model that was campaigned unsuccessfully in 2016 and 2017 by Scott Malvern and Nick Jones.

Given the shortened preparation time, Zamparelli says he is "not putting any pressure on" ahead of the season. But Mace, who has exclusively run Porsches since 2000, is optimistic that the new car will be an improvement on its predecessor, which had a weight and power disadvantage relative to the competition, and is targeting Pro-Am podiums by the end of the year.

"We're starting with a 100-yard penalty in a sprint race, as it were," said Mace. "We've

G-Cat to run GT3 Porsche

BRITISH GT

G-Cat Racing will become the first team to enter a Porsche in the GT3 class of British GT since 2015, with all-amateur pairing Shamus Jennings and Greg Caton set to share the squad's 2019-spec 911 GT3-R.

Jennings, who finished fifth in the Porsche Carrera Cup GB Am class last season with G-Cat, combines with team owner and fellow Porsche regular Caton to become the first all-amateur pairing in GT3 since Martin Short and Richard Neary.

"British GT represents an exciting next step for G-Cat Racing, and doing so with Porsche makes it even more special," said Caton.

"We have an excellent relationship with Porsche from our time in the Carrera Cup and their latest evolution of the 911 GT3-R is a fantastic piece of engineering. The high standard



is exactly what we've come to expect from Porsche.

"This year will be a learning curve for Shamus, myself and the team, but once we get some mileage under our belts with the car we are confident the results will follow."

JAMES NEWBOLD

Second Century BMW GT3

BRITISH GT

Century Motorsport will campaign a second BMW M6 GT3 in British GT this season, retaining GT4 runner-up Ben Green and adding LMP3 Cup racer Dominic Paul to its roster.

Nathan Freke's team had already announced reigning GT4 champion Jack Mitchell and Adrian Willmott in the first M6, which will make its UK championship debut this year, in addition to a GT4 programme for Angus Fender and Andrew Gordon-Colebrooke in an M4 GT4.

Both drivers of the second GT3 car are well known to the team. Green has raced with Century since

2017, when he finished second to Callum Pointon in the Ginetta GT4 Supercup. Paul, meanwhile, has raced for Century at the Dubai 24 Hours in each of the past two seasons, and took 14 class wins on his way to the GT Cup Group A title in a Ginetta G55 in 2017.

"After the announcement of the first M6, it generated a huge amount of interest and putting the deal together with Dom and Ben is fantastic," said Freke.

"Both drivers are incredibly committed, focused and have a great racing pedigree. I am sure this will be a very strong driver pairing and a very enjoyable one to work with."

JAMES NEWBOLD





Rare Sauber-Mercedes C8 returns to the track

HISTORICS

A rare ex-Henri Pescarolo and Mike Thackwell Kouro's Sauber-Mercedes C8 returned to the track for the first time in over 30 years last week at Donington Park.

First raced in 1985, the C8 was Sauber's first car developed in partnership with Mercedes, which provided the twin-turbo V8 engine. In 1986 the team changed its name to Kouro's Racing in deference to its sponsor, and it was during this season

that the C8 achieved its only victory, in the Nurburgring 1000Km.

Historics regular Aaron Scott gave a recently rebuilt C8 a shakedown at Donington ahead of a planned campaign in the Peter Auto Group C championship.

"The car is run by Xtec Engineering and it came from a museum," said Scott, who will race in the European Le Mans Series again this year. "Xtec look after some engines for some of my customers and they asked me to do the initial shakedown.

"It was amazing. I've got a reasonable amount of experience with Group C cars and it's a lot of power, with a really nice engine. That's a real monster and it produces over 700bhp.

"The car ran like a dream and didn't have any mechanical issues – it was just about getting a baseline set-up for the new driver."

It is planned that the car will race in the opening round of the Peter Auto Group C season at Barcelona at the start of April.

STEPHEN LICKORISH

Winfield finalist Bradshaw praised by Trulli

VOLANT WINFIELD

Leicester teenager Callum Bradshaw reached the final four of the Volant Winfield at Paul Ricard last weekend, earning rave reviews from ex-Formula 1 driver Jarno Trulli in the process.

The 17-year-old karter had only completed a single day of F4 testing ahead of the three-day event organised by the Winfield Racing School. But he impressed a judging panel featuring 2004 Monaco Grand Prix winner Trulli,

former McLaren sporting director Eric Boullier and Winfield founder Mike Knight, who upped the final intake from three to four.

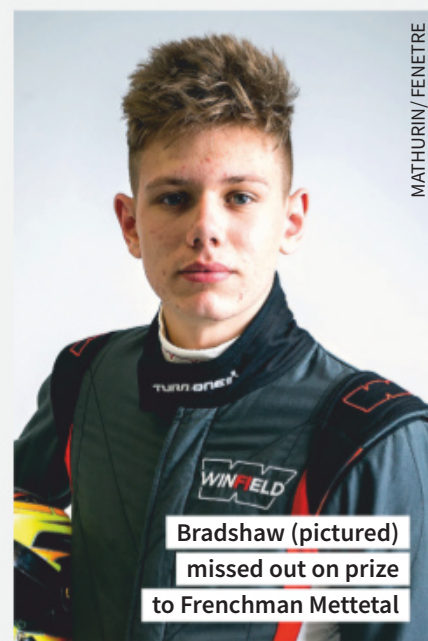
While Bradshaw missed out on the prize of a fully funded seat in French F4 to 16-year-old Frenchman Jules Mettetal after flat-spotting his tyres early on in the final, Trulli told Autosport that he had made a strong impression.

"Most of them I have watched racing in karting, and before seeing anything I knew I would expect something

good from Bradshaw – the only downside was he didn't have experience in the car," said Trulli, whose son Enzo competes in karts. "Despite that I was impressed, because he was up to speed and getting stronger and stronger.

"Unfortunately he made a mistake in the final by flat-spotting his tyres straight in the first run so you cannot give a prize to him, but everyone was impressed and from the outside you could see good things."

JAMES NEWBOLD



Bradshaw (pictured) missed out on prize to Frenchman Mettetal

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British F4 ace Hoggard to stay with Fortec as he steps up to F3

BRDC BRITISH F3

British Formula 4 frontrunner Johnathan Hoggard will move up into the BRDC British Formula 3 Championship with Fortec Motorsports this season.

The teenager finished third in the F4 standings last year, behind champion Kiern Jewiss and Ayrton Simmons, but took eight wins during the campaign – more than both Jewiss and Simmons. Like them, Hoggard will graduate to British F3 and remains with the Fortec squad for which he has driven since 2017.

“I declined multiple strong offers to race in European championships and BRDC British F3 was always my preferred option

given its history, stability and the thrill when driving the British F3 car,” he said.

Hoggard will be joined at Fortec by 24-year-old American Kris Wright, who was a podium finisher in the LMP2 class of this year’s Daytona 24 Hours.

Wright is just one of several drivers crossing the Atlantic to race in British F3. Frontrunning squad Carlin has agreed a deal with US\$2000 driver Kaylen Frederick. Another US-based racer to join the field is Dane Benjamin Pedersen, a winner in US F4, who will partner Jewiss at Douglas Motorsport.

Singaporean Pavan Ravishankar will remain with Double R, taking the number of confirmed drivers in British F3 to 11.

STEFAN MACKLEY

GINETTA PROLOGUE DELAYED TO BECOME AN ‘EPILOGUE’

GINETTA G40s

W2R Motorsport’s planned Ginetta Prologue next month has been postponed to the end of the season to make for “a bigger and better event”.

The 24-hour Prologue – open to Ginetta Junior, GT5 Challenge and G40 Cup-spec G40s – was due to take place on 1-3 March at the Guadix track in Spain, but organisers have decided to delay the event to the end of the year in a bid to secure more entries.

“It was a tough decision but I think overall everyone would rather more cars on the grid,” said W2R boss Ben Hyland. “It’s good from Ginetta’s angle as we can open it to year-one GRDC drivers so the pool of drivers goes up by about 20.

“It will be a nice end-of-year event at

a time when the weather should be good. We could’ve just about made it work [in March] but it would’ve been a lot of time and effort for those attending.

“The general buzz about the event was massive – we’ve struck a chord with people with it; it’s just getting the timing [of the event] right for everyone.”

● W2R Motorsport has decided not to run any cars in the GT5 Challenge this year and instead contest additional series with its G55. “We’ve a big asset sat there so we’re changing tack a little bit this year,” explained Hyland. “We’re planning to continue with the G40 Cup and GRDC entry-level stuff alongside doing some GT Cup and Club Enduro.”

STEPHEN LICKORISH

IN THE HEADLINES

GINETTA JUNIOR RECRUITS

Ginetta Junior racer Gus Burton will contest a full campaign with Douglas Motorsport this season. Burton took a best finish of sixth in a part-campaign last year after moving from the Renault UK Clio Cup Junior series. Joining him at Douglas will be Swiss-born British karter Bailey Voisin. Also competing in Ginetta Junior this year will be Winter Series rookie stars Roman Bilinski (In2Racing) and Theo Edgerton (TCR).

MELROSE IN GT SWITCH

Scottish Formula Ford 1600 runner-up Sebastian Melrose will make his GT debut this season after joining Walkenhorst Motorsport to race a BMW M240i GT in the Nurburgring Nordschleife-based VLN. “This opportunity to take my hobby and now make it a fully professional career is a huge step in my life,” Melrose said.

FULLER BACK TO VW CUP

TCR UK racer and former BTCC driver Howard Fuller will return to the Volkswagen Racing Cup this year with Team Hard. Fuller will be joined by Mark Wakefield in a pair of Golfs, and the team is expected to run up to eight cars. “Team Hard has always felt like home and it’s great to be back with a full championship package confirmed so early on,” said Fuller.

TEAM HARD’S GT4 CREW

Britcar Endurance runner-up Tom Barley (below) will be one of three drivers to contest their first full season of the Ginetta GT4 Supercup this year with Team Hard. Fellow Britcar driver Darron Lewis – who was fourth last year – will run in the Am class. Multiple VAG Trophy and 2006 Volkswagen Racing Cup champion Paul Taylor will also join the Am category. Elsewhere, Carl Shield will stay with the AK Motorsport team.



Albi replaces Combe
on calendar – but GTSCC
will be back in 2020



GTSCC to visit French Albi circuit for the first time

HISTORICS

The historic circuit of Albi in southern France will host the GT & Sports Car Cup series for the first time this year.

The HVM-organised 75th GP d'Albi on 14-16 June replaces Castle Combe's Autumn Classic on the four-round GTSCC calendar and balances its British and continental components. But the series is likely to return to the Wiltshire venue in 2020 as part of Castle Combe's 70th anniversary celebrations.

Formula 1 champions Jim Clark, Jack Brabham, Graham Hill and Jackie Stewart all won F2 races at Albi in the 1960s, and Emerson Fittipaldi won the first of the venue's three European F2 counters in 1971.

Promoted by Vanessa and Flavien Marcais,

the GTSCC caters for Pre-1966 GT and Pre-'63 sports racing cars up to two litres. It kicks off again at the Donington Historic Festival, revisits the HSCC's Silverstone International Trophy event in May, and returns to Portugal's Algarve Classic Festival.

"We've raced at Castle Combe for the past two seasons, but competitors asked us to give them a change of scenery and another European venue," said Flavien Marcais.

"Dominated by a spectacular cathedral, Albi is a beautiful medieval town, the track is exciting, HVM puts on a good event and the south of France in June is appealing.

"Everybody who enjoyed Combe will be delighted that we're invited back for its 70th anniversary celebrations in 2020."

MARCUS PYE

Border Reivers name returns

FF1600

The historic Border Reivers name will return as a new team in National Formula Ford 1600 this year, running a single car.

Border Reivers' latest iteration has been co-founded by two-time Scottish Fford champion Stuart Thorburn, a revival of the team name synonymous with Jim Clark's early sportscar successes before he scaled the single-seater heights.

Thorburn's son Jamie is set to drive the team's sole Ray GR18 on a part-time basis in 2019. The younger Thorburn

finished fourth overall in National FF1600 in 2017 with Cliff Dempsey Racing, remaining with the team last year.

He skipped last year's National season finale, the Festival and Walter Hayes Trophy, and had given up hopes of racing full-time in 2019 due to university commitments, but has now reversed the decision.

Thorburn will miss the opening round at Snetterton, and may skip the follow-up at Oulton Park, but confirmed the plan is to compete in every race from round three at Anglesey, plus the Festival and WHT.

ALASDAIR LINDSAY

IN THE HEADLINES

THUNDERSPORTS NAME BACK

The Thundersports title will return to UK racing after the Historic Sports Car Club announced fresh branding for its pre-'80 Endurance Series. The title will evoke memories of the popular 1980s Thundersports series, which was created by John Webb at Brands Hatch and was open to a wide range of sports and sports-racing cars. Webb, now 88, said: "I'll be absolutely delighted to see the Thundersports name in use again."

LUDWIG CHEVRON'S RETURN

The Chevron B40 Formula 2 car raced by Klaus Ludwig at the end of 1977 is set to return to racing this year after a major restoration. Three-time Le Mans winner Ludwig raced the car at Donington Park in October 1977, and it has been restored in its period colours. It is now for sale and will be used in the Historic F2 Championship this year.

SHARP, CLARKE IN FORD

British Formula 4 driver Jamie Sharp will contest the National Formula Ford 1600 series this year with the frontrunning Team Dolan squad. Sharp made his FF1600 debut at Anglesey at the end of last year, taking a podium. Ex-Junior Saloons and Clubmans star James Clarke will also contest a full season in the series with the Cliff Dempsey Racing squad after driving for the team at the end of 2018.

TOURING CAR ACES HONOURED

Touring car aces Tom Walkinshaw, Tim Harvey and David Leslie will be celebrated in the Dunlop Saloon Car Cup (below) this year. The Tom Walkinshaw Trophy for Group 1 cars pays tribute to the driver and team boss, who died in 2010. The Tim Harvey Trophy will be for the Group A cars of the 1980s, while Super Touring cars will contest the David Leslie Cup.



The best club series for beginners

In a few weeks' time we're going to take an in-depth look at how to get started in motorsport – but before that, our writers debate the best way in



Citroen C1 Challenge
STEFAN MACKLEY

A grid of 110 cars. That's how many Citroen C1s are expected to be at the 24-hour race at Silverstone this April – and on the Grand Prix layout, no less.

Since it was created in 2017, the Citroen C1 Challenge has grown to a level beyond what even its creators could have dreamed of. To give you an idea of how big it is, the two 24-hour races at Rockingham last year both held shorter 'overflow' races, such was the demand for places.

It's the perfect formula for getting into racing. It's cheap, or as cheap as racing is ever going to be, and the cost of building a car is around the £3500 mark. That's very affordable. You can split the cost and driving duties with several team-mates as the endurance events range from four to 24 hours. So it's cost-effective and you get plenty of seat time for your money.

The car is also good fun to drive. I should know, as my first – and to date only – race was last year in the second

24-hour contest at Rockingham. So yes, I am a little biased when it comes to this debate, but I've also experienced first-hand just how good a series it is for a complete beginner.

The spread of abilities is massive, which is great since it means you're always likely to be battling someone – and by racing with quicker people you can improve as well. Since it's a one-make series and the rules are tightly policed, the racing is close and getting the most out of the car comes down to you. Which is exactly how racing should be.

I'll admit, though, that it may not be for everyone. Apart from changes to the suspension and driveshaft, performance-wise it's still fundamentally a road car. It's certainly not the quickest thing and for a little bit more money you could probably buy something faster. Due to its overwhelming popularity the price of C1s has started to creep up in recent months too. But since it was created, this series has allowed dozens of people who would otherwise not have been able to afford to go racing to get out on track.

If you want to get into racing with a few mates, and want plenty of seat time for not a lot of money, believe me, this is the series for you.

“The Citroen C1 Challenge is as cheap as racing is ever going to be”



Caterham Academy
STEPHEN LICKORISH

As Caterham motorsport director Simon Lambert puts it: “Racing is hard to get into as a complete novice, and whichever series you jump into you will be on the back foot in terms of knowledge.”

He may be biased, but you can't help but agree with him. And that's what makes the Caterham Academy the perfect place for novice drivers to begin their racing careers.

Everyone taking part is also a complete beginner as Caterham has a strict policy to make sure nobody with any previous experience sneaks in. And it's reassuring that you don't have to worry about some British Touring Car Championship racer turning up in a guest outing, as has happened with the Citroen C1s.

“Everyone entering is of a similar level and they build up camaraderie because they go through the process together,” says Lambert. “We think the paddock is pretty different to others – there's a thriving community around the Academy.”

Now, it's not cheap. For an entry-level series, the £26,495 price tag sounds very steep, but that includes a wealth of support – with everything from advice on what equipment to buy to help with passing your ARDS test – as well as a car that suffers from little depreciation. Racing a C1 may be much cheaper, but doesn't bring this dedicated support.

“Over 1000 drivers have gone through the Caterham Academy”

Also, the endurance races that make up the C1 calendar may be a little daunting to the novice. There's also the pressure that, should you make a mistake, you will have ruined your team-mates' race and not just your own. But there are none of these problems in the Caterham Academy.

There's also a logical path to progress upwards. Drivers can move up the Caterham ladder without having to buy a new car each time – again, something you can't do with a C1. It's a popular move too, since 43 of last year's 50 Caterham Academy drivers are progressing to the next-level Roadsport championship for 2019.

Over 1000 drivers have passed through the Caterham Academy since it was founded back in 1995. And that incredible popularity suggests Caterham must be doing something right.

● *But what do you think? Let us know where you think is the best place for beginners to start.* ✎



THE TOCA RACER ENABLING BIG-SCREEN DREAMS

Alongside a move into the BTCC-supporting Porsche Carrera Cup GB this season, Tom Roche lets the public follow in the wheeltracks of their movie heroes

MATT KEW

As Tom Roche embarks upon a two-year stint in the Porsche Carrera Cup GB with Rob Boston Racing this season, the 32-year-old will have far more than just 16 races to contend with. Away from treading his own path in motorsport, he's helped dozens of others to forge theirs via his Blendini Motorsport squad. And beyond that, he's enabling the public to fulfil their American muscle and supercar-driving fantasies.

Over the course of a decade Roche cut his teeth in karts before moving into car racing in Mazda MX-5s, racking up multiple titles in Mk1 and Mk3 machinery. That success garnered attention from within the paddock.

"When we moved out of karting it was just me and my dad," Roche says. "He'd look after the Mazda, but I started winning almost straight away and people would come up to me and offer money to set their car up or tell them what to do. I quite

liked that! Blendini came from there."

The team started in 2008 and ran between 10 and 12 MX-5s per season. Roche, in turn, moved on to bigger projects. The most high-profile of those came in 2013 when he shared an Audi R8 LMS alongside Dom Evans in British GT.

"It was a bit of a change from the MX-5!" Roche adds. "I raced in a Lotus Elise for a year but it was pretty much straight out of an MX-5 [into the R8]. I was driving with Dom and helping his son in MX-5s. Dom said, 'I'm looking at British GT, do you want to drive with me?'"

"I found it pretty frustrating because our car was out of date from when we got going. It was cool to be on the grid, but ultimately our car was three years old. I would be saying, 'What can we do to go faster?', but the answer was to spend a shitload of money updating it. It was a weird feeling turning up and knowing you had no chance of winning."

Roche and Evans contested six of the 10 races in 2013 but failed to score a point. That led Roche back into MX-5s, where he finished runner-up in the 2014 and 2017 Supercup standings. But in that time, he embarked on an all-new adventure for Blendini Motorsport: Car Chase Heroes.

Having worked as an instructor for supercar experience-day companies, Roche spotted a gap in the market. While there are countless opportunities for people to pay to lap a Ferrari or a Lamborghini, getting behind the wheel of a Dodge Charger that starred as The General Lee in the TV series *The Dukes of Hazzard* (and has its bootlid signed by the cast) was a far harder proposition.

"I looked at the scene and thought, 'What do I think people would like to drive?' and there was nowhere at the time offering it," Roche says. "We started Car Chase Heroes at the end of 2015. We had five cars and we've got 34 now so it's grown really well."

That success has resulted in a 112-date calendar for Car Chase





Roche scored three Ginetta GT4 Supercup victories last season



“I STARTED WINNING STRAIGHT AWAY AND PEOPLE WOULD OFFER MONEY FOR ME TO SET THEIR CAR UP”

Heroes in 2019, meaning it's become Blendini's full-time programme. And, while any good business is customer-led, it's not solely popular demand that dictates the garage's growth. As Roche adds: "I've got to like the car to buy it." That's why Marty McFly fans won't find a lethargic DeLorean, but they will find a 7.5-litre 1971 Lincoln Town Car dressed up as the original Batmobile and eight star cars from the *Fast & Furious* franchise. Even a Peterbilt 379, better known as Optimus Prime, features.

Among the fleet is a Ford Mustang GT350 that Roche drove in the 2014 Silverstone Classic. Over the two Mustang Celebration Trophy encounters he twice finished third and was the top Mustang driver – oddly, the top two were Ford Falcons – beating the likes of Gordon Shedden and Jackie Oliver.

"If my dad ever took me to watch racing it would always be



classics," Roche says of his love for American muscle cars. "I just like the idea of more power than grip and brakes. The Mustang is completely different to drive, but I think all the basics are the same no matter what car you're in.

"In many ways, quicker cars are easier because they get you out of trouble. If you mess a corner up, well you've got 500bhp the other side to get up to speed again."

More recently, Roche earned fourth in the Ginetta GT4 Supercup standings last year, having racked up three wins. A chequered reliability record meant he didn't deliver on the promise of 2017 – two victories in six outings made him a title favourite for a full campaign a year later. But as he steps into the Carrera Cup this year for the country's fastest one-marque championship, he's intent on renewing his title-winning credentials. 🏆

THE BRSCC'S ROADSTER RISK

A year since the BRSCC split its Mk1 and Mk3 MX-5 championships, and created the Super Series, the competitors and teams have their say on the new format

MATT KEW



BRSCC Supercup

Mazda's MX-5 is synonymous with national racing in Britain. Now four generations old, it enjoys dedicated competition with the 750 Motor Club, British Automobile Racing Club and the British Racing & Sports Car Club.

But in 2018 the BRSCC changed a tried-and-tested format by launching a third series for the roadster. To accompany the MX-5 Championship for Mk1s and the Supercup, it started the Super Series – which, like the Supercup, catered for Mk3s.

It was created to fill a vacancy left by the Supercup, which used to share race meetings with the Mk1s, but which moved last year to join the support package for TCR UK's maiden season. That led to a spike in entry fees concomitant with the greater exposure the promoter anticipated.

The non-points-scoring Super Series was viewed as both a replacement partner for the Mk1s and a more affordable alternative to the Supercup. Autosport rated the inaugural year of the Super Series four out of five stars in our 3 January issue. But some of those who race and run the cars are less generous.

WHY THE BRSCC MADE THE SPLIT

Mandy Andrew presides over all three BRSCC MX-5 competitions, and explains the original gap in the market. "It was a gamble at the time [to launch Super Series] but what I recognised is that not every Mk3 driver wanted to go on a high-profile Supercup weekend," she says. "Super Series is not a championship so drivers aren't pressured into doing every weekend if they have other commitments.

"The more people that are in TCR, the more people that will be in the support races. It'll be a stepping stone, the same as they have in Ginettas on the British Touring Car package."

HOW IT HAS IMPACTED COMPETITORS

For the final Super Series meeting of 2018 at Donington Park, Supercup regular Garry Townsend joined the field and so can directly compare the two. "Doing the Supercup is not as good as it used to be because we're on our own with the TCR lot, whereas when it was the Mazdas all together there was a lot more camaraderie," he says.

Fellow Supercup racer Ray Worley, whose daughter Jude competes in Super Series, views the creation of the latter as a necessary solution for when the Supercup became a victim of its own success. "It was the right thing to do because you've got to keep freshening up," he says. "What we found with Supercup is that there were too many entries at one point. People were having to go on the reserve list."



Super Series eased strain on bumper Supercup grids

STYLES



BRSCC MX-5 Championship

STYLES

AVERAGE 2018 GRID SIZES

CHAMPIONSHIP	GRID SIZE
BRSCC MX-5 Championship (Mk1s)	45
BRSCC Supercup (Mk3s)	24
BRSCC Super Series (Mk3s)	15
BARC MaX5 Championship (all)	12
750MC MX-5 Cup (Mk1s)	15



BRSCC Super Series

STYLES



BARC MaX5 Championship

JONES



750MC MX-5 Cup

JONES

HOW IT HAS AFFECTED TEAMS

Without question, it's those running the cars who are the least impressed by the new arrangements. Blendini Motorsport, co-founded by multiple MX-5 champion Tom Roche, won't be running a Mk1 or Mk3 in 2019, despite having fielded a dozen per year for the past decade.

"It was a great atmosphere and even if you're racing Mk3s you always knew everyone in the Mk1s and would go and watch their races," Roche says. "This season would have been a nightmare – twice the amount of time away, half the cars out on the weekend. It just didn't make any sense for us."

"When I started, if you wanted to go MX-5 racing there was one championship and there were 60 cars. It was awesome. Now we've got three or four different championships to choose from and different cars. It's too confusing for people."

Sharing a package with TCR UK has created a further headache. While MX-5 specialist Paul Sheard praises a Super Series that has "ticked every box", news of what he describes as the Supercup's "almost random" calendar left him "gobsmacked".

THE RIVALS' RESPONSE

Alyn Robson founded 5 Club Racing, which coordinates the 750MC's MX-5 Cup for Mk1s. He's expecting packed

grids this season, in part aided by competitors deciding to shift their allegiance from the BRSCC.

"This year we've got in excess of 35 registrations so we're going to have good numbers," he says. "We've got people talking about coming back from the BRSCC. I don't think putting the Supercup where they have was a good move."

"We've got teams that run Mk1s with us and they'd rather leave their Mk3s in the garage because they don't want to be pulled from pillar to post. If I'd had enough finance behind me to set up an opposition [Mk3] series at that point I would have done."

Although less direct, the BARC has taken steps to reduce entry fees for its MaX5 Championship. This plus the absence of high levels of body contact – a criticism frequently levelled at the ultra-close Supercup – is likely to bolster grids there.

THE VERDICT

So long as numbers for both the Supercup and Super Series remain strong then there's a valid case for the two to co-exist. No doubt it's upset teams who could run cars in two separate series at the same circuit but now find themselves expected to be in multiple places at once. But to the BRSCC's credit the TCR UK slot only resulted in a £95 entry fee rise, which can be stomached.

Two clear issues remain, however. TCR UK's poor grids meant it didn't deliver an uplift in exposure for the Supercup – the very basis on which the move was built.

What's more, unlike the TOCA package where Renault Clios realistically lead into BTCC, it's wrong to sell the Mk3 MX-5 as a genuine feeder into TCR UK. The jump from a rear-driven roadster that costs in the region of £14,000 into a front-wheel-drive hatchback that retails for up to £115,000 is vast. ❧

"IF YOU WANTED TO GO MX-5 RACING THERE USED TO BE ONE SERIES WITH 60 CARS. NOW IT'S TOO CONFUSING"



THE VIRTUAL RACE TO THE

Could Esports ever feature in the Olympics? Frank Sagnier, the CEO of game developer Codemasters, emphatically believes so. While many may find it hard to imagine a gamer winning a gold medal and parading it around on an open-top bus in the same vein as Mo Farah and company, there's no denying that Esports is growing at a colossal rate.

That's why Codemasters – the company behind the DiRT, GRID and official Formula 1 console games – has announced a new partnership with Autosport parent company Motorsport Network, which was the founding partner of the Le Mans Esports Series and provides the platform for the eNASCAR Heat Pro League. The aim of the tie-up is to attract mass participation and launch a series of global competitions.

As Sagnier explains: “Both of [Codemasters and Motorsport Network] share a passion for racing, share a passion for cars. Working with like-minded people is obviously very important to start with.”

The venture will continue through Codemasters' future games, but begins with the launch of DiRT Rally 2.0, the publisher's latest mud-oriented title in a series that can trace its roots back to the release of Colin McRae Rally in 1998. That wildly successful title, based on a tie-in with Britain's biggest rallying export at the time, is just one of the 52 games produced in Codemaster's 32-year history. That's not a strike rate to be sniffed at.

But of course, Esports isn't a nostalgia business. While DiRT Rally 2.0 will let you loose on a rally stage in a Renault 5 Turbo (pictured above) or allow you to take an MG Metro 6R4 into rallycross battle, Codemasters and Sagnier are firmly focused on the nuts and bolts of making each iteration of the game better than the last.

“We've got a long way to go, but I think the reason [Codemasters is] doing well is because we make quality games,” says Sagnier. “We do not



“ESPORTS IS ATTRACTING GAMERS BUT ALSO ATTRACTING REAL DRIVERS, WHICH IS BLURRING THE LINES BETWEEN THE VIRTUAL AND REAL”

compromise. Our games are highly rated by the press, but more importantly highly rated by consumers. It's not always easy but there's a challenge and a reward at the back of it.”

Through Esports, that reward can be so much more than just a blistering stage time. There's a good reason why double F1 champion Fernando Alonso has fielded a team in the DiRT World Championships, since it offers a platform to launch professional driving careers that may otherwise be unattainable for almost all competitors.

“If you're really good at driving a rally game you're bound to be quite good at driving a real car,” Sagnier explains. “That is very, very special. You do not get to be a great footballer just if you're good at a football game. You



DiRT Rally 2.0
heads up a global
Esports push for
Codemasters

OLYMPICS

CODEMASTERS



...and is now
competing in a
Ford Fiesta R5

CODEMASTERS

can go from gamer to racer in a way that you couldn't with other Esports.

"There's no reason that a great gamer couldn't become a rally driver. Obviously maybe not on day one, but it's a great way to find new talent and it doesn't cost that much money to be driving from your bedroom on your TV – certainly not as much as it would to buy the real car."

Jon Armstrong is proof enough of that. Last year he beat thousands of entries to win the World Rally Championship Esports season three title, held over the Rally Germany weekend. While he had competed at WRC2 level previously, a lack of budget curtailed his progress. But through the profile of Esports, he's back campaigning a Ford Fiesta R5 – with a DiRT Rally 2.0 livery.

As Sagnier concludes: "You're attracting gamers but you're attracting real drivers, which is blurring the lines between the virtual and real. We've seen that more and more – we've seen it in every category actually."

Whether Esports will reach the heights of the Olympics remains to be seen. But it's strong enough now to have its own audience and can comfortably exist independently of other sports. Don't expect that trend to end any time soon.

MATT KEW

FINISHING STRAIGHT



[autosport.com/podcast](https://www.autosport.com/podcast)



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Catch up with the action from the second Formula 1 pre-season test by listening to Autosport's daily round-up podcast. Technical analyst Gary Anderson joins Edd Straw to assess which teams have already shown their hand, and who might be sandbagging. **Go to** <https://www.autosport.com/podcast>

WHAT'S ON

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Australian Supercars

Round 1/15

Adelaide, South Australia,
Australia

March 2-3

NASCAR Cup

Round 3/36

Las Vegas, Nevada, USA

March 3

TV Live Premier Sports, Sunday 2000

MOTORSPORT IMAGES/HARRELSON



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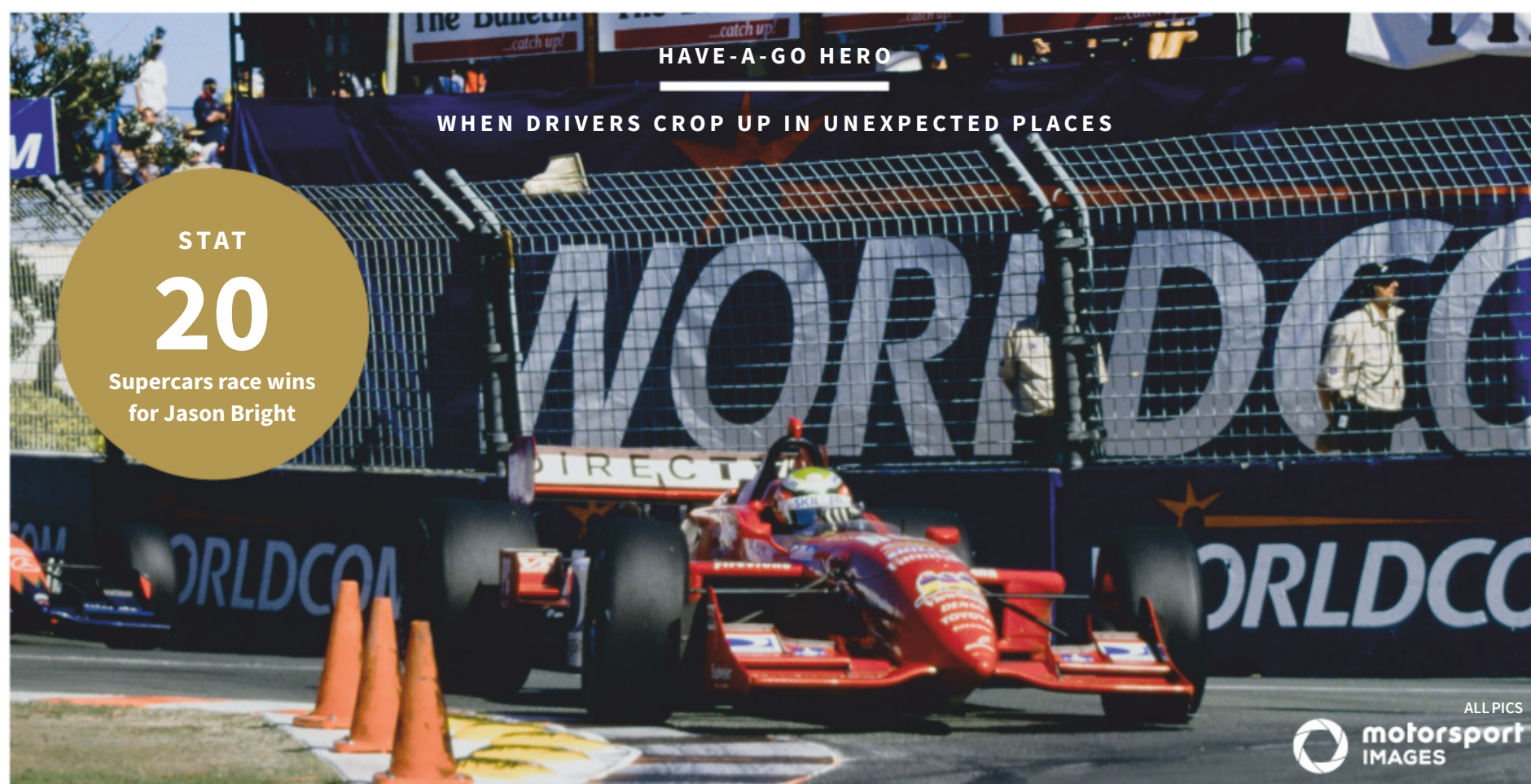
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JASON BRIGHT

The Australian risked it all in the pursuit of a home-soil 'American' dream

MITCHELL ADAM

A far cry from Will Power's 2018 Indianapolis 500 victory, Australians racing in the nation's Indycar event between 1991 and 2008 were largely footnotes.

In 2000, Jason Bright became just the second of six local starters, after Gary Brabham in 1993 and 1994, in a Della Penna Motorsports Reynard-Toyota.

Bright established himself as a Supercars star in two seasons with Stone Brothers Racing, including winning Bathurst in 1998, but put it all on hold in 2000 to head to the US.

In Indy Lights with Doricott Racing, Bright finished second on his debut at Long Beach, won at Portland and challenged eventual champion Scott Dixon before fading to sixth in the points.

That campaign, and his whole year, was built around a childhood dream of contesting CART's Gold Coast 300.

"I pitched it to the Gold Coast organisers that, to take that event to the next level, it really needed an Aussie," Bright recalls.

"To be in that position I had to go over and do Indy Lights, and even then the Gold Coast deal hinged on funding; we had to raise AU\$900,000 (£510,000).

"It looked a little bit shaky for a while, but to do it was pretty special."

After a single test and practice in

the wet, the rookie qualified 24th out of the 25-car field, 4.7 seconds off Juan Pablo Montoya's pole lap time.

"The Toyota I was in had close to 900 horsepower and I remember at the end of the straight, the top speed turning into the braking area was 193mph," Bright says.

"They were seriously fast cars with lots of power. It was cool to be there when the series was still very strong."

Strategy had Bright fifth with 15 laps remaining, when he was caught up in an incident triggered by Roberto Moreno spinning coming to a restart.

"It was disappointing," he admits. "We'd stayed out of trouble and everything fell into our hands a little, strategy-wise."

"Staying fifth would have been tough, but finishing would've been pretty satisfying, particularly if we had've snagged a few points."

Bright had "reasonable offers" to race in CART in 2001, and a pre-contract with the Holden Racing Team to go home and replace the Ford-bound Craig Lowndes. That's what he ended up doing, racing full-time in Supercars until the end of 2017.

"Had it been a couple of years later when we had an Australian team owner and a Team Australia car [from 2005], it might've been a little bit easier," Bright says. "It was still out of our reach, unfortunately." ❦



FINISHING STRAIGHT



FROM THE ARCHIVE

Standing room only... Fans pack a general-admission viewing area at Silverstone during the 1973 British Grand Prix. The race, remembered

most for its massive first-lap pile-up, was won after a long-delayed restart by Peter Revson (McLaren-Ford M23) ahead of Ronnie Peterson (Lotus-Ford 72D) and Revson's team-mate Denny Hulme.



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QUIZ

WHO, WHAT, WHERE, WHEN?



WHO IS THIS?

Though small in stature, this gallic rose would be a giant of his era.

A princely drive initially brought him to prominence, but a move up the ranks failed to live up to expectations. This prompted a return home and a change of tack.

When the lion came calling he answered its roar, which set him up for a stellar patch at home and abroad, while there was even time for a maiden win as he raced around the clock.

A change of brand and a change of scene kept the titles rolling. But when he was left high and dry by an impromptu departure, he was forced to take a gamble on an ambitious amateur that would eventually run rings around the opposition.

There was a disappointing coda in a general motor that led to him taking to the waves and indulging in spinning the wheels of steel instead.

LAST WEEK'S ANSWERS Who, what, where, when? Silvio Moser, Bellasi-Ford, Monza, September 5 1971. Who is this? Clay Regazzoni. On this day 1) Ronnie Peterson. 2) Toyota. 3) Dave Marcis. 4) Matt Kenseth. 5) Neel Jani. Name the helmet Helmut Marko.

ON THIS DAY

1 Sebastien Bourdais is 40 today. How many IndyCar Series (not Champ Car) races has he won?

2 It's Brazilian Stock Car legend Ingo Hoffmann's birthday. With which team did he make three F1 starts?

3 Today is Mario Andretti's birthday. He famously won the Indy 500 only once. In which year did his victory come?

4 The first NASCAR race to be held outside the United States took place on this day in 1988. Where?

5 It's Nicolas Minassian's birthday. Which championship did he win in 2002?

NAME THE HELMET



IN NEXT WEEK'S ISSUE

Old order or new stars? Full 60-page F1 season preview



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